# ABSTRACTS

The Gerontological Society of America
63rd Annual Scientific Meeting
November 19–23, 2010
New Orleans, LA

Abstracts are arranged numerically by session and in the order of presentation within each session.

## SESSION 5 (PAPER)

## CAREGIVER HEALTH AND BURDEN

### CAREGIVING AND CLINICALLY-ASSESSED BIOLOGICAL RISK FACTORS: EVIDENCE FROM MIDUS II

S. Kang[1,2], N. Marks[1,2], *1. University of Wisconsin-Madison, Madison, Wisconsin, 2. UW Institute on Aging, Madison, Wisconsin*

Guided by a life course perspective and biopsychosocial approach to health, this study aimed to add to a population perspective on caregiving and health-related biological risks of family caregiving by (1) examining how providing caregiving for a child, spouse, parent, or parent-in-law due to their illness or disability (in contrast to not providing caregiving for any kin or nonkin) is linked to allostatic load (a 15-item composite measure of biological risk) and three subscales of allostatic load (metabolic dysfunction, inflammatory dysfunction, hypothalamic-pituitary-adrenal axis/sympathetic nervous system [HPA/SNS] dysfunction) among midlife and older adults, and (2) evaluating how gender might moderate the link between caregiving and health-related biological risks. Data from a subsample of MIDUS II (Midlife in the U. S., 2005) respondents ages 34 to 83 that were recruited for additional clinical and biological assessment (N = 1054) were used to estimate multivariate models that also adjusted for numerous sociodemographic factors. Results revealed that providing caregiving for a spouse was associated with a greater risk in metabolic dysfunction. Models evaluating moderation of caregiving risks to biological health by gender revealed that women who were providing caregiving for a parent-in-law reported higher levels of allostatic load and its subscale indicators of inflammatory dysfunction than their men peers. Overall, results suggest that caring for a spouse is linked to important biological health risk for women and men, and caring for a parent-in-law is linked to important biological health risk for women.

### CAREGIVING TO ADVANCED CHRONIC ILLNESS (CHF/COPD) PATIENTS

A. Wilkinson[1], S. Berry[2], *1. School of Nursing, Midwifery and Postgraduate Medicine, Edith Cowan University, Joondalup, Western Australia, Australia, 2. Rand Corporation, Santa Monica, California*

Background. The cost and responsibility for much of the care of seriously ill, elderly persons living in the community with advanced, eventually fatal, chronic illness has been shifted onto family members. Chronic organ system failure presents a distinct illness trajectory with an erratic and unpredictable course characterized by episodes of acute illness and periods of relative stability set against a background of gradual, progressive disability. Current caregiving research has not yet described the challenges, stresses, and rewards that accompany caregiving for individuals with advanced chronic organ system failure. This project sought to describe the factors that influence caregiver outcomes in caregiving to advanced CHF and COPD patients. Methods: We conducted a series of 9 focus groups (8-10 adults each), 18 years or older, who were currently providing care for a patient with advanced chronic CHF or COPD. Focus group discussion topics were identified from the literature Initial analysis resulted in a classification system for major topics derived from the material and a second analysis by both researchers determined a final set of themes. 65Results: Five major themes were identified: (1) how caregivers describe their experience, (2) prognosis/uncertainty impacts, (3) objective burden (tasks), (4) role conflict/reversal, and (5) subjective burden. Findings from this exploratory work suggest that interventions should provide information about topics of specific relevance to CHF/COPD caregivers (e.g., disease processes, prognosis, what to expect, symptom and self-management, and should address caregiver/patient social isolation. Details and implications for future research and intervention policy will be discussed.

### BEHAVIORAL PROBLEM SUBTYPES IN DEMENTIA AND EFFECTS ON INFORMAL CAREGIVER HEALTH, HEALTH BEHAVIORS, AND SERVICE USE

J.M. Thorpe[1], C. Thorpe[2], *1. School of Pharmacy, University of Wisconsin - Madison, Madison, Wisconsin, 2. School of Medicine & Public Health, University of Wisconsin - Madison, Madison, Wisconsin*

METHODS: Data were drawn from the Resources for Enhancing Alzheimer's Caregiver's Health, a sample of 1,222 family caregivers. Latent class analysis (LCA) was applied to the Revised Memory and Behavior Problems Checklist to identify patient subtypes with similar behavioral symptoms. We used multivariate regression to assess associations between behavioral problem subtype and caregiver depressive symptoms, unhealthy behaviors, health service use, and use of in-home services for the dementia patient. RESULTS: LCA revealed four behavioral-problem subtypes: "minimally symptomatic" (23.4% of patients; reference group in multivariate analyses); "memory problems only" (32.1%); "depression problems only" (23.0%); problems with memory, depression, and disruptive behavior, "severely symptomatic" (21.5%). In multivariate analyses, caregivers of patients in all three behavioral problem subtypes had significantly greater depressive symptoms and more doctor visits, and were more likely to visit the emergency room or a mental health provider and use antidepressants. Caregivers of patients with "memory problems only" and "severely-symptomatic" patients were 1.5 times more likely to have gained 10+ pounds; the latter group was also 1.9 times more likely to eat < 2 meals per day. Caregivers of patients in the "severely-symptomatic" group were less likely obtain in-home nursing or home health aid. CONCLUSION: All subtypes of behavioral problems in dementia patients negatively affected caregiver health, but caregivers facing the most varied and severe behavior problems were particularly vulnerable and were less likely to use in-home supportive services. Results suggest that increased attention to behavioral problems in dementia patients could reduce negative health effects, unhealthy caregiver behaviors, and healthcare resource use in the caregiver.

### A DIMENSIONAL ANALYSIS OF CAREGIVER BURDEN AMONG SPOUSES AND ADULT-CHILDREN

M.Y. Savundranayagam[1], R. Montgomery[1], K. Kosloski[2], *1. Helen Bader School of Social Welfare, University of Wisconsin-Milwaukee, Milwaukee, Wisconsin, 2. University of Nebraska - Omaha, Omaha, Nebraska*

Caregiver burden is a multidimensional construct that addresses tension and anxiety (stress burden), changes in dyadic relationships (relationship burden), and time infringements (objective burden) resulting from caregiving. The goals of this study were to (a) assess whether the dimensions of burden were the same for caregiving spouses and adult-children, (b) examine the role of assisting with problem behaviors and activities of daily living as predictors of different dimensions of burden, (c) investigate the role of each type of burden on outcomes such as caregiver health and intention to institutionalize the care receiver, and d) assess whether the relationships between predictors and outcomes of the different dimensions of caregiver burden differ the for the two groups of caregivers. This study included 280 spouse/partner and 243 adult-child caregivers of persons with chronic illnesses. Analysis using two-group structural equation modeling showed that the factor structure of burden was the same for spouses and adult-children. For both groups, assisting with caregiving tasks was directly related with objective burden, whereas problem behaviors were directly related to all three types of burden. Stress burden was the only predictor of caregiver health for both groups. Group differences were observed for factors that were linked with intent to place. Relationship burden and problem behavior were significant predictors of intent to place among children, whereas stress was a significant predictor among spouses. Objective burden was not a significant predictor of caregiver health or intent to place for both groups. Implications regarding the differing needs of spouses and adult-children are discussed.

### SALUTOGENIC MODEL OF HEALTH EXPLAINS 24-HR BP IN AFRICAN AMERICAN CAREGIVERS AND NONCAREGIVERS

S. Picot[1], J.A. Zauszniewski[2], M. Wykle[3,1], S.M. Debanne[4,1], *1. School of Nursing, University of Maryland, Baltimore, Maryland, 2. Case University, Cleveland, Ohio, 3. Case University, Cleveland, Ohio, 4. Case University, Cleveland, Ohio*

Background. People strive to attain, maintain, and regain resources to combat stress and remain healthy. The salutogenic model of health proposes a link between six generalized resistance resources (GRRs) and stress reduction indicators [e.g., blood pressure (BP)]. Objective. Individual and combined effects of six GRRs on BPs were tested in a random sample of African American (AA) caregivers (CGs) and noncaregivers (NCGs). Sample. 202 CGs and 205 NCGs with Age (M = 56/55) CGs/NCGs, Majority (79%) had > HS diploma; Income (Mdn = 15,000-19,999/ $20,000 - 29,999) CGs/NCGs; Married 48%(n = 97)/ 58% (n = 119), CGs/NCGs. CGs and NCGs differed on income (X2 = 24.28, p <.01) and married (X2 = 4.11, p <.05). Measures: Resources: age, lack of exercise, alcohol intake; Hollingshead's SES, Daily Hassles Scale, learned resourcefulness- Self-Control Schedule; Inventory of Socially Supportive Behavior Revised, and use of prayer and was 24-hour mean systolic BP. Procedure: face-to-face interviews and ambulatory BP monitors. Analyses: 24-hr SBP was regressed on the six resources at once for CGs/NCGs separately. Results:CGs, F(8,191) = 7.30, p <.001 and R2 =23.4%; NCGs, F(8,195) = 8.70, p <.001 and 26.3%. Specifically, CGs: age (b = 0.40, p < .001), learned resourcefulness (b = -0.18, p < .01), daily hassles (b = 0.14, p < .05), exercise (b = -0.16, p < .05), and quality of social support (b = 0.12, p < .08); NGGs: age (b = 0.45, p < .001), use of prayer (b = -0.18, p < .01), and alcohol intake (b = 0.23, p < .001). Implications: Except for SES, the salutogenic model can serve as a basis for theory guided interventions to reduce stress among AA CGs/NCGs.

# SESSION 10 (PAPER)

## LONELINESS

### SOCIAL SUPPORT DECREASES RISK FOR MORTALITY IN DEPRESSIVE OLDER PEOPLE

T. Lyyra[1], T.M. Tormakangas[1], T. Van Tilburg[2], M. Aartsen[2], H.C. Comijs[2], M. Huisman[2], D.J. Deeg[2], *1. University of Jyväskylä, Jyväskylä, Finland, 2. VU Univerity and VU University medical centre, Amsterdam, Netherlands*

Background: It is well known that social support is related to the health of older people, but the mechanisms remain unclear. One of the theories proposes a stress-buffering mechanism, which we wanted to test by investigating the relationship between depression and mortality risk in those older people being emotionally lonely and those who are not. Material and methods: Data are from the Longitudinal Aging Study Amsterdam (LASA), a population based study, including 2013 subjects aged 65 and older at baseline in 1992/1993. Measures included the Center of Epidemiologic Studies Depression Scale (CES-D) and the de Jong Gierveld Loneliness Scale. Results: 32 % of the respondents reported feelings of emotional loneliness indicating their lack of social support. Depressive symptoms (CES-D>16) were found in 16 % of the sample. After 16-years follow-up, 13 % of the depressed group had died, and 24 of emotionally lonely group. Depressed older people perceiving emotional loneliness had a 1.3 times higher risk for dying (HR 1.32; 95% CI 1.09, 1.60) compared to those who were not depressed, adjusted for socio-demographics, physical and cognitive functioning and chronic illnesses. No association between depression and mortality was found among those without emotional loneliness. Conclusions: These findings suggest that absence of emotional loneliness, i.e., when people perceive to be socially supported and embedded, buffers against the risk for mortality in depressed older people. Depressed older people are a risk group and their need for social support should be taken into account in order to maintain their health and well-being.

### INFLUENCE OF SOCIAL ENVIRONMENT ON LONELINESS IN OLDER ADULTS: MODERATION BY POLYMORPHISM IN THE CRHR1A

K. Chou, *University of Hong Kong, Hong Kong, Hong Kong*

Both adverse social environments and genetic factors contribute to loneliness in old age. Mixed findings between the social relation with children and loneliness among older adults suggested that a gene x social environment interaction may be operating. We examine whether the effects of infrequent contact with children and/or low perceived social support from children on loneliness in older adults are moderated by two candidate single nucleotide polymorphisms (SNPs, namely rs1876831 and rs242938) in the corticotrophin releasing hormone receptor 1 (CRHR1) gene. To test this hypothesis, we focus on a sample of 1734 community-dwelling older adults aged 65 and above, interviewed in both 2003-2004 and 2006-2007 assessments of the English Longitudinal Study of Aging (ELSA). Our main outcome measure is loneliness which was assessed by four items extracted from ULCA loneliness scale. Compared with older adults carrying the CT/TT genotypes, individuals homozygous for the C allele of rs1876831 reported higher levels of loneliness in the context of infrequent social contact with children and low levels of perceived social support from children. No gene X social environment interactions were found for loneliness between rs242938 and adverse social environment related to children. This study provides the first evidence in humans that the CRHR1 gene interacts with exposure to a negative social environment to predict loneliness in older adults.

### DEPRESSION AND LONELINESS AMONG CHINESE OLDER ADULTS: FINDINGS FROM A CHINESE COMMUNITY NEEDS ASSESSMENT

E. Chang[1], M.A. Simon[2], E. Wong[3], B. Wong[3], X. Dong[1], *1. Rush Institute for Healthy Aging, Rush University Medical Center, Chicago, Illinois, 2. Northwestern University Medical Center, Chicago, Illinois, 3. Chinese American Service League, Chicago, Illinois*

Background: Despite an increased understanding on minority health in recent years, little is known about the health status among Chinese population, one of the fastest growing ethnic populations in the U.S. Vast knowledge gaps exist in assessing the psychological needs of Chinese immigrant elders. Methods: This cross-sectional study is part of the NIH-funded Partnering in Research project that explored depression and loneliness among older Chinese adults, aged 60 and over who reside in the Chinese community. Community-based participatory research approach was utilized to partner with key stakeholders in the Chicago Chinese community. Results: Among surveyed participants (N=78), the mean age was 74.8 and fifty-three percent was female. Mean education level was 10.7 years of schooling. With respect to depressive syndromes, 17% of participants often felt being bored, 21% of participants often felt helpless, 12% of participants reported dis-satisfied with life, 28% of participant preferred to stay home and 17% of participants reported feeling of worthless. With respect to loneliness, 42% of participants reported feelings of lacking companionship, 35% of participants felt being left of life and 30% of participants reported of feeling isolated. Conclusion: Symptoms of depression and loneliness are common in urban Chinese population. Future studies are needed to explore social and cultural context of these findings. Larger population-based study of risk and protective factors are needed to inform future prevention and intervention studies to improve the psychological well-being of this population.

### A CURRENT STATE OF THE SCIENCE ON LONELINESS AND THE HEALTH OF OLDER ADULTS

L.A. Theeke, *Health Restoration, WVU School of Nursing, Morgantown, West Virginia*

This paper presents an interdisciplinary perspective on the phenomenon of loneliness as it relates to the health of older adults. Loneliness is a prevalent negative experience, and a consistent predictor of physical symptoms, lower quality of life, psychological distress, and depression. Primary research studies from nursing, medicine, sociology, psychology, community health, and gerontology that examined loneliness and included older, community-dwelling adults in the study sample are included in this review. Fifty-four quantitative and five qualitative studies were analyzed to seek commonalities/differences in conceptualization of loneliness, measurement of loneliness, and health-related findings. Reviewed studies clearly came from each discipline's unique perspective but there were commonalities throughout the review. Prevalence of loneliness ranged from 12% to 38%. Loneliness consistently correlated with advancing age, poor perceived health, physical widowhood, poverty, low education, fewer social contacts, domestic violence, substance use, and lack of religious affiliation. Poor health, poor functional status, marital status, and social factors were predictive of loneliness. Outcomes associated with loneliness varied by age and culture. Loneliness has been primarily measured through the use of four instruments, The UCLA Loneliness Scale, The DeJong-Gierveld Scale, The Loneliness Questionnaire, and single-item self-report. The lack of consistency in measuring loneliness limits the ability to draw conclusions. Only six studies tested interventions aimed at diminishing loneliness, indicating a gap for evidence-based practice. Each discipline brings a unique perspective that may be important in designing and evaluating interventions for loneliness, further indicating that developing multidisciplinary teams to test interventions may advance the knowledge base related to loneliness.

### A META-ANALYSIS OF INTERVENTIONS TO REDUCE LONELINESS

C. Masi, H. Chen, L. Hawkley, J.T. Cacioppo, *University of Chicago, Chicago, Illinois*

Social and demographic trends are placing an increasing number of adults at risk for loneliness, which is associated with myriad health problems, including hypertension, diminished immunity, depressive symptoms, cognitive decline, and mortality. The growing costs associated with loneliness have led to a number of loneliness reduction interventions and several qualitative reviews have been published. These reviews have identified four primary intervention types: social skills training, enhancing social support, increasing access to social opportunities, and addressing maladaptive social cognition. A consensus exists that loneliness can be reduced using one or more of these intervention techniques. However, this perception has never been assessed quantitatively. Using Medline and PsycINFO, we searched the literature for intervention studies which measured loneliness quantitatively and were published in peer-reviewed journals between 1970 and 2009. Standard meta-analytical procedures were used to calculate mean effect sizes and to perform moderator analysis. A random-effects model was used due to the variety of interventions identified. Of the 928 studies originally identified, 50 met our inclusion criteria. Of these, intervention studies with less rigorous designs (e.g., single group pre-post analysis and non-randomized group comparisons) demonstrated greater mean effect sizes (-0.367, 95% C.I. -0.55, -0.18 and -0.459, 95% C.I. -0.72, -0.20, respectively) compared to the more rigorous randomized group comparisons (-0.198, 95% C.I. -0.32, -0.08). Moderator analysis of the randomized group comparisons revealed that interventions which addressed maladaptive social cognition were the most successful. These results have implications for future interventions, especially given our current understanding regarding the etiology and nature of loneliness.

## SESSION 15 (SYMPOSIUM)

### OLDER ADULTS' COGNITIVE BELIEFS AS SOCIAL-PSYCHOLOGICAL ANTECEDENTS OF SUBJECTIVE HEALTH

Chair: *P.S. Fry, Graduate Psychology, Trinity Western University, Langley, British Columbia, Canada*
Discussant: *P. Martin, Iowa State University, Ames, Iowa*

To date, one of the most understudied etiologies of older adults' well-being has been the role of their cognitive beliefs and worldviews that interact with their functional capacity to maintain or diminish a consistent sense of self and well-being. Given what we already know about factors contributing to older adults' vulnerability, the aim of the present proposal is to investigate a selective set of older adults' cognitive beliefs that are hypothesized to offset threats to their well-being,and are linked to maintaining a stable sense of subjective well-being in relation to daily functioning and to strengthening the pursuit of self-enhancement activity. Thus, for example, Fry & Debats' longitudinal research findings demonstrate that older adults' strong cognitive "beliefs in a just world" are correlated positively with feelings of competence and optimism about the future. Cox regression analyses show that "beliefs in a just world" are a psychological predictor of longevity. Similarly, Silton et al.'s research findings show the significant role of beliefs about forgiveness in the context of daily functioning. Overall, forgiveness appeared to have an indirect salutary effect on subjective health through its negative association with hostility. Findings support the notion that forgiveness may serve an indirect health benefit by reducing hostility. Jopp et al.'s study demonstrates the positive influence of older adults' beliefs about personal control on subjective health. Collectively the papers highlight the role of cognitive beliefs and self-beliefs as social-psychological antecedents that possibly reduce threat to age-related decline, and are linked with older adults' increased subjective well-being.

### OLD ADULT'S BELIEF IN A JUST WORLD AS A PREDICTOR OF HEALTHY LONGEVITY: A LONGITUDINAL ANALYSIS

P.S. Fry[1], D.L. Debats[2], *1. Graduate Psychology, Trinity Western University, Langley, British Columbia, Canada, 2. Private clinical practitioner, Groningen, Netherlands*

One of the most understudied etiologies concerning the well-being of older adults has been the contribution of individuals' cognitive beliefs to maintaining or diminishing a stable sense of subjective well-being and health. The aim of this study was to determine the extent to which older adults' self-sustained cognitive belief in a just world is related to their self-rated health and long-term subjective well-being and longevity. The theoretical premise is that individuals' with a strong belief in a just world are able to deal more resiliently with negative life-events that may threaten their well-being. After baseline assessment of health, subjective well-being and cognitive belief in a just world, 450 older adults were followed longitudinally over 7.5 years. A major hypothesis was that individuals' strength of belief in a just world is an early and predictive indicator of healthy longevity. Cox regression analyses confirmed the hypothesis. Implications for healthy longevity are discussed.

### CONTROL BELIEFS IN OLDER AGE: TRAJECTORIES AND PREDICTIVE VALIDITY

D.S. Jopp[1], M. Schmitt[2], *1. Psychology, Fordham University, Bronx, New York, 2. Dortmund University, Dortmund, Germany*

The study investigates trajectories of control beliefs in older individuals and their links to well-being and health. We assessed 501 older adults (mean age = 62) at two measurement occasions 11 years apart. Internal control beliefs regarding positive events remained stable as did chance beliefs. Internal control over negative events decreased, but beliefs about powerful others increased. Regressions included control scales at both measurement points, objective health, perceived age-related changes and an auto-regressive term. Life satisfaction (T2) was predicted by internal control over negative events at T1, objective health and life satisfaction at T1: Higher responsibility for negative events went along with lower life satisfaction. Subjective health was predicted by powerful others (T1) and internal control over positive events (T2), objective health, age-related changes and subjective health (T1). In sum, findings suggest long-term effects of control beliefs on successful aging outcomes with differential effects for life satisfaction and subjective health.

### FORGIVENESS, HOSTILITY, AND SUBJECTIVE HEALTH

N.R. Silton, K.J. Flannelly, K. Galek, L.T. Flannelly, *Healthcare Chaplaincy, New York, New York*

The relationships among age, forgiveness, hostility and subjective health were examined in a sample of 1327 U.S. adults who completed a web-based survey sponsored by Spirituality and Health magazine. Participants responded to questions pertaining to (a) age, (b) forgiveness towards those who hurt you, (c) a hostility scale related to engaging in specific behaviors, and (d) a four-item general health scale from the Short-Form 36. A structural equation model revealed that older participants were more likely to forgive those who hurt them ($p<.001$) and to have lower subjective health ($p<.001$). The model indicated an inverse relationship between forgiveness and hostility ($p<.01$) and a strong inverse relationship between hostility and subjective health ($p<.001$). Overall, forgiveness appeared to have an indirect salutary effect on subjective health through its negative association with hostility ($p<.001$). The findings thus support the notion that forgiveness may serve an indirect health benefit by reducing hostility.

## SESSION 20 (SYMPOSIUM)

### RESILIENCE AND POSITIVE ADAPTATION ACROSS THE LIFESPAN

Chair: *C.M. Aldwin, Oregon State University, Corvallis, Oregon*
Co-Chair: *M. Ardelt, Sociology and Criminology & Law, University of Florida, Gainesville, Florida*
Discussant: *A. Spiro, Boston University, Boston, Massachusetts*

Adaptation of positive psychology constructs to adult development and aging has provided interesting insights into optimal aging. The present symposium addresses four of those constructs, resilience, wisdom, stress-related growth (SRG), and social support, in samples ranging from adolescence through late life. The first two papers address wisdom. Ardelt and her colleagues found that generativity was related to positive psychological outcomes only among individuals with high combat exposure in WWII, suggesting the SRG combines with adult development in mid-life to promote wisdom and well-being in late life. The article by Lee et al. examines cross-cultural differences in wisdom, and found that age is not related to self-transcendent wisdom in a US sample, but was positively related in a Korean sample, suggesting that culture may also influence the course of adult development. The paper by Bi and her colleagues found that age was not directly related to SRG, but was indirectly related through stressor characteristics. Middle-aged adults were more likely to experience chronic stress and use positive action coping than younger adults, which in turn were related to increases in SRG over time. The last two studies focused on social support. The paper by Trask-Tate and her colleagues found that resilience among African American adolescents was influenced by parental social support, and Toyokawa and her colleagues found that being married was a strong predictor of the maintenance of social connectivity in late life. Thus, adult development and well-being is influenced by the sociocultural context and by how well individuals cope with stress.

### THE LONG-TERM EFFECTS OF WWII COMBAT ON LATER LIFE WISDOM AND WELL-BEING MODERATED BY GENERATIVITY

M. Ardelt[1], S.D. Landes[1], G.E. Vaillant[2], *1. Sociology and Criminology & Law, University of Florida, Gainesville, Florida, 2. Brigham and Women's Hospital, Boston, Massachusetts*

According to theories of stress-related growth, coping with traumatic events can lead to greater psychosocial maturity in resilient individuals or psychosocial maladjustment in less resilient individuals. Using a sample of 217 World War II veterans of the 60-year longitudinal Study of Adult Development, the research examined the long-term effects of high, low, and no combat exposure among Harvard educated white men who either achieved or failed to achieve Erikson's psychosocial developmental stage of generativity at midlife. Findings revealed that the effect of generativity on physical health, psychological distress, wisdom, and well-being in midlife and old age differed by level of combat exposure during WWII. Although combat exposure was unrelated to the outcome variables, only among veterans with high combat exposure was generativity consistently positively related to physical and psychological health, wisdom, and well-being. The results indicate a resiliency effect for men with high combat exposure who experienced subsequent psychosocial growth.

### CROSS-CULTURAL COMPARISON OF SELF-TRANSCENDENCE AND ALIENATION IN UNITED STATES AND KOREAN SAMPLES

S. Lee, S. Choun, M. Levenson, *Human Develoment and Family Sciences, Oregon State University, Corvallis, Oregon*

We compared self-transcendence and alienation in the United States and Korea. Our analyses utilized two samples, one from the United States (N = 348) and another from Korea (N = 872). Self-transcendence and alienation were measured with the Adult Self-Transcendence Inventory (Levenson, Jennings, Aldwin, & Shiraishi, 2005). Regression analysis demonstrated that self-transcendence was significantly related to age, gender, and religion in the Korean sample while alienation was significantly related negatively to religion in the US sample. Results from ANCOVA suggested that self-transcendence in the Korean sample was significantly higher than in the US sample, and adults over age 40 were higher than younger adults (20 to 39). Interaction of the age and culture was significant; self-transcendence was significantly related to age in the Korean sample whereas not related to age in the US sample. These findings suggest that age is differently related with self-transcendence between the two cultures.

### AGE AND SEX AS PREDICTORS OF CHANGE IN STRESS-RELATED GROWTH: FINDINGS FROM THE DAVIS LONGITUDINAL STUDY

X. Bi, A.L. Taylor, D.L. Romo, *Oregon State University, Corvallis, Oregon*

Stress-related growth (SRG; Park, 2009) is characterized by changes in values, mastery, coping skills, spirituality, and resources (Tedeschi & Calhoun, 2004), similar to some models of adult development (Aldwin et al., 2007). However, the developmental aspects of SRG have received little empirical investigation. Data from the Davis Longitudinal Study (1996 and 2001) were used to examine whether age, sex, and SRG at 1996 predicted stressor characteristics and SRG at 2001 among 621 college alumni (Mage=44.36, SD=7.11, 45.97% male). SEM analysis indicated that age in 1996 had no direct effects on SRG, but positive indirect effects on change in SRG via duration of stressor and positive coping. Older individuals experienced more chronic stress and used more positive coping, which led to higher SRG levels. Women were more likely to report SRG at both time points. Developmental change in adulthood depends on both stressor and personal characteristics, as well as coping efforts.

### THE IMPORTANCE OF FAMILY: THE IMPACT OF SOCIAL SUPPORT ON PSYCHOLOGICAL DISTRESS IN AFRICAN AMERICAN ADOLESCENTS

A. Trask-Tate, M. Cunningham, L. Lang-Degrange, *Department of Psychology, Tulane University, New Orleans, Louisiana*

The study examines social support and ego resiliency as buffers for the development of psychological distress in a population of urban African American female adolescents. The participants were 136 high school students ranging from 14 – 19 years of age (M = 16.02 years, SD = 1.10) who resided in a large southern city. Students completed measures examining negative life events, social support, ego resiliency, and depressive symptoms. While the perceptions of social support from mothers were highest of all domains of support, girls with lower levels of ego resiliency experienced fewer depressive symptoms when perceptions of social support from fathers were high. Additionally, the results indicate that resilience in African American female adolescents is associated with the combination of supportive family relationships as well as the ability to adjust to new and challenging environmental demands.

### DOES MARITAL STATUS AFFECT CHANGE IN SOCIAL RELATIONS IN LATER LIFE? FINDINGS FROM THE NORMATIVE AGING STUDY

N. Toyokawa[1], S. Kang[1], A. Spiro[2], C.M. Aldwin[1], *1. Oregon State University, Corvallis, Oregon, 2. Boston University, Boston, Massachusetts*

Socioemotional selectivity theory (Carstensen et al., 2006) hypothesizes that there is a normative decline in network size and frequency of contact, but this theory has rarely been tested longitudinally, nor have individual differences been examined. 842 Normative Aging Study men (Mage=60.59, SD=7.52, range 41-86) were surveyed in 1985, 1988, and 1991. A repeated measures ANOVA revealed significant effects of time, marital status, and age group for frequency of contact with family and close friends. Men older than sixty and unmarried men did have less social contact. None of the interaction effects with time reached significance in the multivariate model. However, contrasts showed that the time effect was quadratic, $F(1, 838) = 3.91$, $p < .05$ (an inverted U), with a marginal status * time effect, $F(1,838) = 3,69$, $p = .055$. Married men were more likely to decline in frequency of contact. Results suggest both period and individual differences effects.

## SESSION 25 (SYMPOSIUM)

### SPOUSAL INTERRELATIONS IN COGNITION, HEALTH, AND WELLBEING IN OLD AGE: EVIDENCE FROM DAILY TIME-SAMPLES AND LONG-TERM LONGITUDINAL STUDIES

Chair: *C. Hoppmann, University of British Columbia, Vancouver, British Columbia, Canada*

Co-Chair: *D. Gerstorf, The Pennsylvania State University, College Park, Pennsylvania*

Discussant: *M. Luszcz, Flinders University, Adelaide, Western Australia, Australia*

Development takes place in the context of close others such as marital partners. This may be particularly true in old age when network size typically decreases and spouses share a long history of joint experiences. This symposium examines spousal interrelations in three domains of functioning that are key for successful aging: Cognition, health, and wellbeing. Specifically, it brings together couple research examining the dynamic interplay between spousal functioning using daily-process approaches and long-term longitudinal methods. Berg and colleagues investigate the relationship between problem anticipation, negative affect, and problem solving effectiveness using daily-diary information from couples where one spouse is diagnosed with prostate cancer. They draw attention to dynamic associations in daily-life processes across domains of functioning. Hoppmann and colleagues examine the interplay between spousal well-being and health trajectories using long-term longitudinal couple data from the national sample in the AHEAD study. They show that well-being and health in old age influence and are influenced considerably by the respective spouse. Windsor and colleagues examine spousal associations in life-satisfaction trajectories in three groups of couples in the national Australian HILDA study. Their findings indicate that relationship history is differentially associated with spousal interrelations in life satisfaction trajectories in young as compared to older couples. Martin and colleagues use data from several dyadic data collection paradigms to demonstrate the adaptive value of dissimilarities between spousal partners. The discussion by Mary Luszcz focuses on the potentials of examining socially interrelated aging trajectories in the context of marital relationships and addresses the challenges that this line of research has to confront.

### PROBLEM ANTICIPATION AND DAILY ADJUSTMENT IN COUPLES COPING WITH PROSTATE CANCER

C.A. Berg[1], D.J. Wiebe[2], J. Butner[1], *1. Psychology, University of Utah, Salt Lake City, Utah, 2. University of Texas Southwestern Medical Center, Dallas, Texas*

The ability to predict daily stressful events among couples dealing with prostate cancer was examined and whether problem anticipation related to daily adjustment. Fifty-nine husbands and wives completed diaries for 14 days reporting stressful events, whether they anticipated those events, controllability of the events, negative affect, and efficacy in dealing with the event. Hierarchical Linear Modeling revealed that greater problem anticipation was associated with lower same day negative affect and greater efficacy to deal with events, by both husbands and wives, even when controlling for problem controllability and stressfulness of the event. Although there were same day associations between husband and wife problem anticipation (on days when husbands anticipated problems, wives were more likely to anticipate problems), problem anticipation by one spouse did not predict adjustment in the other spouse. The results show that although daily experiences with stressors are linked within couples, such links do not always predict cross-spouse adjustment.

### SPOUSAL INTERRELATIONS IN DEPRESSIVE SYMPTOMS AND FUNCTIONAL LIMITATIONS: LONGITUDINAL FINDINGS FROM THE STUDY OF ASSET AND HEALTH DYNAMICS AMONG THE OLDEST OLD (AHEAD)

C. Hoppmann[2], D. Gerstorf[1], A. Hibbert[2], *1. Department of Human Development and Family Studies, The Pennsylvania State University, University Park, Pennsylvania, 2. University of British Columbia, Vancouver, British Columbia, Canada*

This study extends previous research on wellbeing-health associations that use samples of unrelated individuals by examining spousal interrelations in aging trajectories across these key domains of functioning. We use 14-year longitudinal data on depressive symptoms and functional limitations from 1,704 couples in the AHEAD Study. Structural equation models corroborate previous individual-level findings that levels and changes in depressive symptoms and functional limitations are closely interrelated. Importantly, our results also highlight sizeable associations of levels and changes in depressive symptoms and functional limitations between spouses. For example, increases in depressive symptoms in one spouse were accompanied by increases in depressive symptoms and functional limitations in the other spouse. The associations found were not different between men and women and remained after controlling for potential covariates (age, education, cognition, length of marriage, number of children). Our findings support an interactive minds perspective, which proposes that aging is linked in social relationships.

### SPOUSAL INTERRELATIONS IN TRAJECTORIES OF LIFE SATISFACTION: A COMPARISON OF YOUNGER RECENTLY MARRIED, OLDER RECENTLY MARRIED, AND OLDER LONG-TERM MARRIED COUPLES

T. Windsor[1], D. Gerstorf[2], C. Hoppmann[3], P. Butterworth[1], *1. The Australian National University, Canberra, Australian Capital Territory, Australia, 2. The Pennsylvania State University, State College, Pennsylvania, 3. University of British Columbia, Vancouver, British Columbia, Canada*

Spousal relationships represent important social contexts for well being. This study considered age differences in social motivation, and shared experience linked to relationship duration, as mechanisms underlying spousal interrelations in life satisfaction. Spouses' trajectories of life satisfaction were modeled over a seven-year interval using population data from the Australian HILDA study. Analyses contrasted younger recently married couples (n = 826), older recently married couples (n = 93) and older long-term married couples (n = 1102). Unadjusted models showed spousal interrelations in initial levels and subsequent changes in life satisfaction were strongest among older, long-term married couples. Spousal similarities in life satisfaction were significant among younger recently married couples; however the association for initial level was weaker relative to the older long-term married group. Spouses' life satisfaction ratings were unrelated among the older recently married adults. Results are discussed in the context of implications for re-partnering in middle and older adulthood.

### IS BECOMING MORE DIFFERENT BETTER FOR BOTH: HOW INTRADYADIC DIFFERENCES ARE RELATED TO INDIVIDUAL DEVELOPMENT IN OLD AGE

M. Martin, M. Peter-Wight, R. Hornung, G. Bodenmann, *Psychology, University of Zurich, Zurich, Switzerland*

Several studies have demonstrated that our understanding of individual development in old age can be improved when considering how intradyadic adaptation processes may lead to an adaptive increase in differences between the partners. Counterintuitively it may be positive for goal achievement and autonomy if individuals within dyads reduce individual performance and autonomy. We present a conceptual model of dyadic development in old age suggesting how the intradyadic orchestration of individual development may stabilize quality of life despite individual losses of functioning. We present data from several longitudinal studies demonstrating the adaptive effects of increasing intradyadic differences. These include dyadic problem-solving, dyadic memory, dyadic personality differences, dyadic well-being, and dyadic adaptation to dementia.

## SESSION 30 (SYMPOSIUM)

### DIFFERENCES IN STROKE CARE SETTINGS: FINDINGS FROM THE PATIENT PREFERENCE FOR STROKE STUDY

Chair: *P. Gregory, Physical Medicine and Rehabilitation, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina*
Discussant: *A.C. Felix, Physical Medicine and Rehabilitation, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina*

Stroke is a catastrophic illness that involves a number of transitions in care during the recovery process. Maximizing recovery involves understanding a number of factors that influence the recovery process. These factors include both individual patient factors and institutional care delivery factors. The patient's level of pre-morbid physical activity will influence the risk for stroke as well as the potential for functional recovery. The available resources at the hospital they are admitted may influence their access to stroke care services. And the patients' personal preferences for stroke rehabilitation services will influence their treatment choices. The Patient Preferences for Stroke Study was an observational survey of 53 patients admitted to two hospitals, a primary stroke center (PSC) and a rural community hospital (RCH), in the stroke belt. Participants were surveyed during their acute stroke hospitalization, prior to discharge. Data collection included basic demographics, pre-morbid physical activity, and patient preferences for rehabilitation. "The Self-Reported Physical Activity of Patient Preferences Study Participants" will describe the physical activity of participants and factors associated with activity level. The "Hospital Differences in Stroke Care" compared the differences in available resources at the PSC and RCH in the Patient Preference for Stroke Study. "Treatment Preference for Initial Rehabilitation" describes the stroke patients' preference for initial rehabilitation therapy setting during the acute hospitalization. A better understanding of how stroke care differs at two separate institutions will help identify areas for interventions to improve access to stroke care.

### PHYSICAL ACTIVITY AS A RISK FACTOR FOR STROKE

P. Gregory, K.R. Faurot, D. Urlaub, P.E. Sweat, L. Edwards, *Physical Medicine and Rehabilitation, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina*

Physical activity is a risk factor for stoke and cardiovascular disease. The Behavioral Risk factor Surveillance System (BRFSS) reported the lowest levels of physical activity among minorities that historically have a greater prevalence and severity of stroke. Prior studies of physical activity among stroke patients studied predominantly white populations. We evaluated the self-reported physical activity levels among stroke patients enrolled in the Patient Preference for Stroke Study. This study evaluated the care at two hospitals a primary stroke center and a rural community hospital. Participants included a large percentage (47%) of minority patients. Results showed the mean physical activity of participants was 69.3 metabolic equivalents (METS). Participants with lower METS scores were more likely to be older Odds Ratio (OR) 8.24 95% Confidence Interval (95% CI) 2.02, 33.71, female OR 4.25 95% CI 1.10, 16.49, and hospitalized at the RCH OR 4.99 95% CI 1.07, 23.36.

### HOSPITAL DIFFERENCES IN STROKE CARE

K.R. Faurot, P. Gregory, D. Urlaub, P.E. Sweat, *Physical Medicine & Rehabilitation, UNC, Chapel Hill, North Carolina*

Although stroke often leads to long-term disability, early intensive rehabilitation can maximize functional recovery. However, access to rehabilitation therapies varies by hospital setting. Primary stroke centers (PSC), designated by JCAHO, provide evidence-based quality stroke care, but rural community hospitals (RCH) often have limited resources to provide stroke recovery services. This observational cross-sectional study compared rehabilitation services data from a PSC and an RCH. After controlling for possible confounders, results revealed that patients at the PSC had eight times the odds of receiving a speech and language pathology evaluation compared to the RCH: Odds Ratio (OR) 8.62 [95% Confidence Interval (95% CI) 1.91, 38.95]. Patients at the PSC were also less likely to be minority: OR 0.16 [95% CI 0.03, 0.74]. Results of this investigation identify areas of focus for interventions to increase stroke quality of care.

### PATIENT PREFERENCES FOR STROKE REHABILITATION

S.W. Williams, P. Gregory, K.R. Faurot, D. Urlaub, P.E. Sweat, *Physical Medicine and Rehabilitation, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina*

Stroke is often a chronic illness that involves transitions across different care settings, including acute, sub-acute, and chronic care settings. While stroke severity, patients' ability to participate in rehabilitation care, available local resources, and financial resources are associated with initial rehabilitation setting, the role of patient preferences has not been carefully evaluated in the acute care setting. Therefore, the Patient Preferences for Stroke Study evaluated the preferences of stroke patients for an initial rehabilitation setting. Overall, 85% of participants preferred their initial rehabilitation setting to be in their home. Preference for home was associated with an actual discharge destination to the patient's home (Odds Ratio 7.19 95% Confidence Interval 1.10, 46.89), after controlling for other factors. Since many factors influence rehabilitation discharge destination, understanding what patients prefer for rehabilitation settings may help guide providers who are coordinating care and counseling patients and families regarding the best options for stroke rehabilitation.

## SESSION 35 (SYMPOSIUM)

### INNOVATIVE STRATEGIES IN RESPONSE TO TRANSITIONAL HEALTH CARE NEEDS OF OLDER ADULTS

Chair: *S.Y. Hawkins, Yale University School of Nursing, New Haven, Connecticut*

Discussant: *D.K. Pastor, Molloy College, Rockville Centre, New York*

Older adults and their caregivers experience transitions of care throughout the continuum of health and behavioral health care. Often, these transitions occur when older adults require a necessary change in type of care or services due to their changing health care status. These changes may result from a newly-established diagnosis, need for different level of care, developmental changes, and/or accessibility challenges to health care. Innovative strategies are essential to make these transitions successful so that health and well-being are optimized with these older adults. Nurses play an integral role in improving health care outcomes of older adults by conducting research on these various needs or services, and testing their efficacy or effectiveness by incorporating evidence-based interventions into their practice. The purpose of this symposium is to explore research that utilizes innovative strategies when transitions occur in older adults to promote positive health outcomes. One presenter in this symposium will analyze a wellness program initiated with a group of nuns to facilitate their transition into older adulthood. Two other presenters will explore developing and delivering educational programs, one to older adults with diabetes in their homes and the other to nurse practitioners working in nursing homes, to enhance patient and provider knowledge respectively. Another presenter will examine the feasibility of using acupuncture for agitation behaviors in older adults with dementia. All of these papers represent research directly with older adults with implications for nursing practice that have been conducted by participants of the Hartford Institute for Geriatric Nursing Scholars Program.

### TRANSITIONING CARE: OLDER ADULTS USING VIDEOPHONES FOR DIABETES SELF-MANAGEMENT

S.Y. Hawkins, *Yale University School of Nursing, New Haven, Connecticut*

Aims: The purpose of this study was to evaluate whether a videophone motivational interviewing (MI) diabetes self-management education (DSME) intervention would improve glycemic control of rural older adults. Methods: This pilot study was a two-group pre-test, post-test design. A convenience sample of diabetic adults aged 60 years and over was enrolled. Experimental participants (n=34) received weekly, then monthly, videophone MI DSME calls while attentional control participants (n=32) received monthly healthy lifestyle education calls. Results: There were 66 participants in the study, average age 64.9 years. Both groups experienced a decreased HbA1c but there was a significant difference in the experimental group (p=.015) but not the control group (p=.086). The experimental group demonstrated significant increases in diabetes knowledge (p=.023), diabetes self-efficacy (p=.002), and stage of change (p=.040). Conclusions: Older adults can become motivated and empowered to perform diabetes self-management by using a videophone MI DSME intervention delivered into their homes.

### DEVELOPING AND DELIVERING ONLINE PALLIATIVE CARE EDUCATION FOR NPS IN NURSING HOME SETTINGS

M. Letizia, *Loyola University Chicago, Maywood, Illinois*

The nursing home is a major setting for death and dying in the United States, yet palliative care approaches are underused in these facilities. While Nurse Practitioners working in nursing homes are well-suited to provide this care, most have not received formal education about this specialty practice. This session describes the processes involved in developing and implementing an online Palliative Care course intended to better prepare Nurse Practitioners across the country to direct and deliver high-quality palliative care to patients and families in nursing home settings.

### PHYSICAL PERFORMANCE, HEALTH STATUS, MOOD, AND RESILIENCE IN OLDER NUNS

M. Wells, D. Avers, G. Brooks, *SUNY Upstate Medical University, Syracuse, New York*

Purpose: As Catholic nuns retire from active vocation, they often become less socially and physically active. A wellness program was initiated with a group of nuns to facilitate their transition into older adulthood. The aim of this analysis was to determine if there were relationships between physical performance and self-reported health indicators in nuns 55 years and older. Method: Cross-sectional data were collected from 58 nuns. Physical performance was measured with the Short Physical Performance Battery (SPPB). Self-reported measures included weekly aerobic activity, mood, physical and mental health status, and resilience. Spearman correlations assessed relationships among the outcomes measured. Findings: Physical performance was associated with mood and physical health status, but not with aerobic activity, resilience or mental health status. Conclusion: Nuns with higher physical performance scores also tended to have better self-reported mood and physical health. Amount of self-reported aerobic activity was not related to physical performance.

### THE USE OF ACUPUNCTURE TREATMENT FOR PEOPLE WITH DEMENTIA RELATED AGITATION BEHAVIORS

L. Struble, R. Harris, R. Sousley, *University of Michigan, Ann Arbor, Michigan*

Aims: In this pilot project we examined the effectiveness and feasibility of Chinese needle acupuncture treatments in people with dementia and agitation behaviors. After attending this session participants will be able to discuss the potential therapeutic applications of acupuncture treatments in this population. Methods: Seven subjects (average age 90) from one assisted living facility with a diagnosis of dementia (average MMSE score of 12) received 12 acupuncture treatments in 6 weeks and retained 14 needles for 20 minutes during each session. Results: There were no adverse side effects from the treatments; most participants expressed some level of enjoyment, satisfaction and/or relaxation with the procedure; small reduction in agitation behaviors was found. Conclusions: Acupuncture treatments are safe however future research is needed with a larger sample to determine whether this intervention can have an impact on this stressful dementia related behavioral issue.

## SESSION 40 (PAPER)

## DEMENTIA - SRPP PAPER SESSION

### THE SOCIAL CONSTRUCTION OF DEMENTIA: PERSPECTIVES FROM ELDERLY PEOPLE WITH DEMENTIA AND THEIR FORMAL AND INFORMAL CAREGIVERS

S. Torres, I. Hellstrom, *NISAL, Linkoping University, Norrkoping, Sweden*

Understandings the different perspectives that people may have on what dementia entails and how it affects everyday life are needed in gerontological practice. In order to advance the formulation of suitable interventions for people with dementia and their informal caregivers we need to understand how the social construction of dementia is shaped and the manner in which this construction relates to understandings of diminished everyday competence and dependency. This presentation departs from a project that aims to shed light on the variety of ways in which dementia can be understood. The data is constituted of 50 semi-structured qualitative interviews (21 with people with dementia, 22 with their informal caregivers and 7 with their formal caregivers) conducted on the basis of the emotionalist tradition. The analysis shows that – with the exception of the formal caregivers – most informants seem to compartmentalize their understandings of dementia in such a way as to allow them to draw attention to either the resources needed (as in the case of the informal caregivers) or to the resources they still have (as in the case of the patients). Alluding to dementia as single symptoms as opposed to an illness made it possible for the different informants interviewed to achieve contradictory goals. The analysis shows also that although the studied social constructions of dementia took for granted that future diminished everyday competence and increased dependency upon others were a given they were also characterized by an optimistic outlook on the future.

### JUSTIFICATION OF INVESTING IN ALZHEIMER'S RESEARCH

S. Shen, L. Alecxih, *The Lewin Group, Falls Church, Virginia*

Alzheimer's is a major cause of later life disability and requires unique efforts for care and transitions planning. As baby boomers age, Alzheimer's will become more prevalent and will become a painful burden for millions of families. In addition to no treatment to stop or delay development, scientific opportunities are stalled by minimal investment in the disease. One reason for minimal Alzheimer's scientific investment is that little has been done on the cost-saving impact of Alzheimer's research. The Alzheimer's Delay Impact 2050 model simulates this potential impact of treatment research through year 2050 on the number of individuals with Alzheimer's; healthcare expenditures; cost of drugs; and return on investment of treatment breakthroughs. Based on Census, Medicare Current Beneficiary Survey, and prevalence data, the model simulates number who die of or develop Alzheimer's; transitions in disease severity; and delay, costs, and savings of drug breakthroughs. Assuming a new treatment breakthrough in 2020 with a 25% take-up rate, the model predicts that Alzheimer's will affect 10% of older adults. Alzheimer's spending could total $702 billion in 2050 (2005 dollars), from $92 billion in 2005. However, a treatment breakthrough could result in $429 billion savings over 2020-2050. As Alzheimer's has serious consequences for individuals, families, and healthcare systems, projections under different scenarios are important for planning the future needs of the aging population. The Alzheimer's Delay Impact 2050 can help policymakers allocate research resources to biomedical and pharmaceutical projects and development of care transitions models and programs tailored for Alzheimer's patients and families.

### A COMPARATIVE ANALYSIS OF FAMILY CAREGIVERS OF PATIENTS WITH ALZHEIMER'S DISEASE AND SPINAL CORD INJURED SURVIVORS

D.M. Perdomo[1], S. Czaja[1], R. Schulz[2], *1. Center on Aging, University of Miami Miller School of Medicine, Miami, Florida, 2. Center for Social and Urban Research, University of Pittsburgh, Pittsburgh, Pennsylvania*

As Americans grow older their risk for functional impairments and chronic illnesses also increases, thus placing a greater burden on families. Because the caregiving experience is unique to each caregiver, it is important to examine the caregiving experience within the context of specific diseases and disabilities. This study examined the differences in care dynamics between family caregivers of Alzheimer's disease (AD) (N = 193) and spinal cord injured (SCI) persons (N = 96). The findings revealed differences in demographic characteristics, care experiences, psychological, physical and social functioning, religious/spiritual coping and risk factors between these two caregiver groups. Caregivers of AD patients were older, reported greater caregiving challenges, less social support, and were at greater risk for symptoms of depression and burden, health problems and being socially isolated than SCI caregivers. The implications of these findings for the design of caregiver intervention programs and for clinician training will be discussed.

### TRANSITIONS IN DEMENTIA CARE: REVIEW OF INTERNATIONAL POLICIES

M. Downs[1], R. Fortinsky[2], *1. University of Bradford, Bradford, United Kingdom, 2. Connecticut Centre on Aging, Farmington, Connecticut*

Background: Growth in the number of people with dementia is a worldwide phenomenon. Increasingly governments throughout the world are developing dementia–specific policies and strategies. Within the past decade, Australia, England, France, Netherlands, Norway and Scotland have developed dementia–specific strategic plans. Purpose: The purpose of this paper is to review similarities and differences in these plans in the extent to which they address transitions in care for people with dementia and their families. Method: A content analysis of dementia-specific strategic plans from Australia, England, France, Netherlands, Norway and Scotland was conducted. Results: There are many similarities across countries in their policies' broad principles and objectives. There are notable differences in the extent to which national dementia strategies address transitions in care. While all place significant emphasis on the initial transition to receiving a diagnosis of dementia, relatively few are concerned with addressing key transitions such as receipt of community-based services or entry in to long-term care. Discussion: As dementia knows no boundaries, there is a compelling argument for international cooperation and dialogue. 'International harmonization" of transitions in dementia care, analogous to "harmonization" of pharmacotherapy, is timely and rational to improve the practices of both dementia diagnosis and management worldwide. While some evidence is available to support these policy positions, much more evidence is needed to refine the ways in which transitions in dementia care might be coordinated.

### CULTURAL TRAUMA IN THE CONTEXT OF DEMENTIA: ADAPTATION AND RESISTANCE IN JEWISH AND INDIGENOUS COMMUNITIES

W. Hulko[1,2], L. Stern[2,3], *1. Social Work, Thompson Rivers University, Kamloops, British Columbia, Canada, 2. University of British Columbia, Vancouver, British Columbia, Canada, 3. The Louis Brier Home and Hospital, Vancouver, British Columbia, Canada*

There has been a growing interest over the past decade in the dementia experiences of individuals who belong to ethnic minority and racialized communities, as well as more recent efforts to conceptually clarify the cultural concept within dementia research. Cultural trauma is a neglected issue within this emerging body of work, however. Concerted attention to cultural trauma in relation to specific communities, such as Jewish and Indigenous peoples, can bring greater attention to people with dementia as members of and embedded within communities with distinct socio-cultural histories and shared experiences of cultural trauma. This paper draws on two separate qualitative research studies conducted in British Columbia, Canada: 1) sharing circles and interviews with Indigenous Elders from three communities belonging to the Secwepemc [Shuswap] Nation, and 2) Dementia Care Mapping, interviews and participant observation within a Jewish long-term facility. Cultural trauma has impacted these communities in both similar and different ways. The paper's analysis focuses on the ways in which both Jewish and Indigenous communities use adaptation and resistance as strategies to make sense of dementia and to access support and care services for community members living with dementia. The insights in this paper on cultural trauma can assist dementia care providers to adopt more culturally safe care practices, and encourage persons with dementia and their communities to make greater use of dementia care resources and services.

## SESSION 45 (SYMPOSIUM)

### THE SOCIAL WORK WORKFORCE IN NURSING HOMES: SETTINGS, ROLES, RESPONSIBILITIES AND SATISFACTION

Chair: *D. Gammonley, School of Social Work, University of Central Florida, Orlando, Florida*
Discussant: *P.D. Allen, Louisiana State University, Baton Rouge, Louisiana*

Recent scholarship has identified serious concerns related to the adequacy of social work staffing levels, provider qualifications, workload, and psychosocial care quality in nursing homes. This symposium reports on further progress made to identify key organizational and employee characteristics of the workforce. The first objective is to examine specific nursing home settings, roles and responsibilities as perceived by social workers and administrators, and factors contributing to job satisfaction. First, an organizational level analysis of staffing characteristics derived from institutional theory (DiMaggio & Powell, 1983) is applied to further understanding of the social work workforce in hospital-affiliated homes. The second study presents evidence illustrating how staffing, in addition to workplace relationships and perceived autonomy, contributes to job satisfaction among nursing home social workers. The perspectives of both nursing home social workers and administrators are reported in the next two papers which consider how administrators value social workers in nursing homes and how this affects work responsibilities as well as recruitment and retention. The final paper explores professionalization, specifically licensure as a social worker, and how it impacts roles, responsibilities, and satisfaction among gerontological social workers who work in nursing home and non-nursing home settings. As a second objective the discussant and panelists will address ways the findings from these workforce studies can be used to advocate for quality social services staffing in nursing homes, identify promising theoretical frameworks for research on improving the social work workforce in nursing homes.

### THE INFLUENCE OF HOSPITAL AFFILIATION AND PAYER STATUS ON SOCIAL SERVICES STAFFING IN NURSING HOMES

D. Gammonley[1], N.J. Zhang[2], S. Paek[2], M. Mason[2], *1. University of Central Florida, Orlando, Florida, 2. UCF Public Affairs Doctoral Program, Orlando, Florida*

Certified nursing homes must provide social services but vary in the employment of qualified staff. Discharge needs may lead hospital-affiliated facilities and homes serving more Medicare patients to have a different staffing profile. Guided by institutional theory we examined how status as a hospital-based facility and Medicare payer mix influenced qualified staffing. Using 2007 certified homes larger than 120 beds (N = 4,141) and Online Survey Certification and Reporting and Area Resource File data a retrospective, cross-sectional study was conducted with general linear regression modeling. Staffing was measured as skill mix and the ratio of qualified staff to residents. Hospital-based homes and homes with higher proportions of Medicare residents have a higher ratio of qualified social services staff to residents. Facilities with higher Medicare payer mix have a higher level of skill mix of qualified staff. Besides regulative factors, normative and market factors influence social services staffing in nursing homes.

### NURSING HOME ADMINISTRATORS' PERCEPTIONS OF PSYCHOSOCIAL CARE IN NURSING HOMES: REPORT ON A NATIONAL SURVEY

C. Galambos[1], K. Simons[3], M. Bern-Klug[2], D. Parker-Oliver[1], N. Castle[4], *1. School of Social Work, University of Missouri, Columbia, Missouri, 2. University of Iowa, Iowa City, Iowa, 3. Baycrest, Toronto, Ontario, Canada, 4. University of Pittsburg, Pittsburg, Pennsylvania*

In 2003, an Office of the Inspector General's report indicated there are gaps in the delivery of psychosocial care in Medicare supported facilities including inadequate care plans and, sometimes, no psychosocial care. In response, a study was conducted to determine nursing home administrators' perceptions about psychosocial care and who delivers such care. This session discusses the results of a national survey of nursing home administrators who responded to a 2005 nursing home turnover study. Participants were asked to describe factors related to the provision of social services and psychosocial care such as type of coverage, social service personnel credentials, social work involvement in care, job functions, reporting structure, and impact on resident quality of care and quality of life. These factors were compared with selected facility characteristics reported in the OSCAR database. Results of the survey will be reported as well as recommendations to enhance psychosocial care within nursing homes.

### SKILLED NURSING FACILITY ADMINISTRATORS' VALUES AND PERCEPTIONS OF SOCIAL WORK SERVICES IN ARIZONA

K.A. Bailey[1], P. Hector[2], R.P. Bonifas[2], *1. Social Work, Bridgewater State College, Bridgewater, Massachusetts, 2. Arizona State University, Phoenix, Arizona*

This presentation reviews results of a survey of skilled nursing facility (SNF) administrators in Arizona regarding the roles, responsibilities, and professional credentials of social workers employed in their facilities. Recruitment efforts and training opportunities were also a focus of inquiry. A team of university and community stakeholders designed the survey, which included 28 items encompassing both demographic characteristics and open-ended questions eliciting administrators' impressions of diverse aspects of social work practice. Results indicate that administrators highly value social workers as members of the interdisciplinary team and these professionals play significant roles in care and treatment planning, discharge planning, and alleged abuse investigations. In addition, they often are involved in marketing and admission duties, experience challenges in managing documentation requirements, and could benefit from more structured training programs. After attending this session, participants will be able to characterize Arizona facility administrators' impressions of SNF social workers and their scope of practice.

### EXPLAINING VARIATION IN JOB SATISFACTION AMONG NH SOCIAL WORKERS

M. Bern-Klug, J. Liu, *Social Work, University of Iowa, Iowa City, Iowa*

We applied Borzaga and Tortia's (2006) conceptual framework of job satisfaction to data representing a nationally representative sample of nursing home (NH) social service directors (n =1,071). The B & T model includes two sets of independent variables: those related to the employee's personal motivations and goals, and a second set related to what the organization has to offer. For this study, we focused on the latter and were able to explain 30% of the variation in "thriving" (we did not have a measure for satisfaction per se) among social service directors. Factors positively related to thriving include: sense of job autonomy, support from boss, and staffing issues. Variables related to characteristics of the employee or the NH did not improve the model.

### WORKFORCE COMPARISONS: LICENSED SOCIAL WORKERS IN NURSING HOMES AND OTHER GERONTOLOGICAL SETTINGS

R.P. Bonifas[1], K. Simons[2], D. Gammonley[3], *1. Social work, Arizona State University, Phoenix, Arizona, 2. Baycrest, KLARU, Toronto, Ontario, Canada, 3. University of Central Florida, Orlanda, Florida*

Individuals residing in nursing homes have complex psychosocial needs; the availability of social workers prepared to address issues specific to this population is a critical component in quality care. This presentation reviews research findings on the context of service delivery for a skilled group of nursing home practitioners: licensed social workers. Using data from the 2004 NASW Workforce Study, comparisons were made between social workers in nursing homes and those in other gerontological settings regarding professional characteristics, work environment characteristics, service delivery patterns, and workforce issues. Results indicate that nursing home practitioners have larger caseloads and serve clients who are more physically and cognitively impaired. They also spend more time on assessment and treatment planning, but report feeling less skilled in providing these services relative to other clinicians. After attending this session, participants will be able to describe differences between nursing home and other types of gerontological social work practice.

## SESSION 50 (SYMPOSIUM)

### STRESS, AGING AND DISEASE

Chair: *G.J. Lithgow, Buck Institute for Age Research, Novato, California*

Aging is often thought to be a failure of homeostasis. Consequently the ways in which humans and other animals respond to environmental change is very important for aging outcomes. Great progress is being made in understanding the relationship between stress responses and lifespan determination. This is also beginning to reveal the underlying reasons that aging is a risk factor for neurological disease. This session shall explore these issues. Speakers: Richard Morimoto, Northwestern University Gary Fisher, University of Michigan

## SESSION 55 (SYMPOSIUM)

### AGE-RELATED DIFFERENCES AND SIMILARITIES IN LEARNING AND MEMORY

Chair: *K. Nashiro, Gerontology, University of Southern California, Los Angeles, California*

We often make decisions based on previous experiences — in order to maximize future gains and minimize potential losses. Previous research suggests that reward-based learning and decision-making abilities decline with age. This is consistent with some neuroimaging evidence showing that older adults have structural and functional declines in reward and learning systems. However, more recent research suggests that some aspects of reward-based learning remains intact in old age, while others decline due to age-related cognitive changes. In this symposium, we will present behavioral and neuroimaging evidence showing age-similarities and differences in various aspects of learning, such as phases of learning (anticipatory, acquisition, feedback phases), types of rewards given upon successful learning (affective or non-affective rewards), types of instructions given (attending or suppressing stimuli), and subsequent memory performance for learned items. Furthermore, we will discuss how positive and negative emotional content affects learning and memory in younger and older adults.

### REINFORCEMENT LEARNING AND AGE-RELATED CHANGES IN RELATIVE CODING IN MESOLIMBIC BRAIN REGIONS

G.R. Samanez-Larkin[1], D.A. Worthy[2], S.M. McClure[1], B. Knutson[1], *1. Psychology, Stanford University, Stanford, California, 2. University of Texas Austin, Austin, Texas*

Emerging evidence from decision neuroscience suggests that although younger and older adults show similar mesolimbic representation of the discrete values of reward outcomes, older adults in some situations show deficits in feedback-driven probabilistic reinforcement learning. In the present study, we sought to further clarify the potential mechanism underlying age-related changes in probabilistic reward learning. Forty adults between the ages of 20 and 85 played a probabilistic reward learning task while undergoing functional brain imaging. A reinforcement learning model was used to assess learning rates and to generate estimates of relative value coding for brain imaging analyses. We found no evidence for an age-related change in the absolute representation of reward outcomes. However, we did observe age-related declines in behavioral learning rates and in the neural representation of prediction errors and expected value suggesting that learning impairments may be due to age-related changes in relative coding in mesolimbic regions.

### POSITIVE EMOTIONAL CONTENT HELPS OLDER ADULTS LEARN MORE EFFECTIVELY

K. Nashiro, M. Mather, *Gerontology, University of Southern California, Los Angeles, California*

An age-related positivity effect has been observed in attention and memory (Mather & Carstensen, 2005). However, how this positivity effect can be harnessed to enhance learning has not been well investigated. To test this possibility, we examined differences between younger and older adults in the rate of learning using a reversal-learning paradigm. In the positive conditions of our two experiments, participants viewed two people concealing their emotions and had to select the person who would smile. Across the two experiments, we tested conditions in which the change that needed to be tracked was an angry facial expression as well as conditions with different types of non-affective outcomes. Older adults performed about as well as younger adults in the positive conditions but performed worse in the negative conditions. Overall, our findings suggest that positive emotional content helps older adults learn more effectively, whereas negative content impairs their learning.

### REWARD ANTICIPATION ENHANCES NEW LEARNING OF REWARD-IRRELEVANT INFORMATION FOR BOTH OLDER AND YOUNGER ADULTS

M. Mather, A. Schoeke, *Davis School of Gerontology, University of Southern California, Los Angeles, California*

We examined whether older adults' new learning could benefit from activation of dopaminergic neural pathways during reward anticipation. Participants played a game in which they had to press a button as soon as they saw a target. Gain trials began with a cue that they would win $.25 if they pressed the button fast enough, loss trials began with a cue that they would avoid losing $.25 if they pressed the button fast enough, and no-outcome trials began with a cue indicating no monetary outcome. The target was a different photo object on each trial (e.g., balloon, dolphin). Among both younger and older adults, recognition memory was best for target objects from gain trials, intermediate for those from no-outcome trials, and worst for those from loss trials. These findings indicate that neural systems involved in reward modulate memory and that these reward-memory system interactions remain intact in older age.

### MEMORY SUPPRESSION OF NEUTRAL AND EMOTIONAL ITEMS IN YOUNG AND OLDER ADULTS

B. Murray[1], K. Muscatell[2], E. Kensinger[1], *1. Boston College, Chestnut Hill, Massachusetts, 2. University of California Los Angeles, Los Angeles, California*

Recent studies have demonstrated that young adults can voluntarily suppress information from memory when directed to. However, it is unknown if this ability persists into older adulthood, or how the emotional content of the information affects the suppression process. Here, data are presented from two studies showing that older and young adults can suppress information from memory when directed to, and this result is not affected by the emotionality of the to-be-suppressed information. Study 1 employed a "think/no-think" task (Anderson & Green, 2001) and showed that older and younger adults exhibited lower recall for words in a "no-think" condition than a "think" condition. Study 2 demonstrated that both age groups could also suppress memory for either positive or negative words. These results suggest that the ability to suppress information is preserved into older adulthood, and there do not appear to be age-related changes in the suppression of valenced information.

## SESSION 60 (PAPER)

## DEMENTIA CAREGIVING

### AN EXAMINATION OF QUALITY OF CARE AS A MECHANISM UNDERLYING CAREGIVER DESIRE TO INSTITUTIONALIZE

D.W. Durkin[1], F. Sun[2], G. Harris[1], M.M. Hilgeman[1], R.S. Allen[1], J.E. Gaugler[4], L. Burgio[3], *1. University of Alabama Center for Mental Health and Aging, Tuscaloosa, Alabama, 2. Arizona State University, Phoenix, Arizona, 3. University of Michigan Institute of Gerontology, Ann Arbor, Michigan, 4. University of Minnesota, Minneapolis, Minnesota*

The decision to place an older adult with dementia in a nursing home or other long-term care facility is rarely sudden, and both premature and late placement have been linked to adverse outcomes for the caregiver (CG) and care recipient (CR). Although previous studies using the Desire to Institutionalize Scale (DTI; Morycz, 1985) have found both CR (i.e. behavior problems) and CG (i.e. burden) variables predict DTI, the quality of care (QOC) provided to the CR has not been examined. Using secondary data from the NIH-funded Resources for Enhancing Alzheimer's Caregiver Health (REACH) II study (N = 613), we examined the relation between caregiver subjective appraisal (Daily Care Bother, Burden, and Behavioral Bother), QOC (Exemplary Caregiving and Potential for Harm), and DTI. Specifically, QOC was examined as a possible mediator of the effects of caregiver subjective appraisal on DTI. Using a SPSS macro developed by Preacher and Hayes (2008) that allows for multiple mediators, we tested the indirect effect of QOC on the relation between CG subjective appraisal and DTI. Results revealed that both Exemplary Caregiving (EC) and Potential for Harm (PFH) partially mediate the relation between the subjective appraisal variables and DTI when examined independently; however, when both EC and PFH are entered as mediators in the same model, the indirect effect of EC is no longer significant. Results suggest that QOC may play a key role in the CG's consideration of long-term care placement, especially the potential for harm.

### CARING FOR MID-TO-LATE STAGE DEMENTIA PATIENTS: A LOVE INTERVENTION FOR CAREGIVERS

J. D'Ambrosio, A.C. Faul, *Kent School of Social Work, University of Louisville, Louisville, Kentucky*

Caregivers of dementia patients carry a heavy burden and report increased strain, depression and decreased mental health. Despite this heavy burden, caregivers know that their relatives with dementia have a human right to be treated with dignity and respect, despite their cognitive state. It is a moral challenge for any caregiver to keep loving a person even after he/she has drastically changed in appearance and cognition. Pitirim Sorokin, a noted sociologist who devoted a whole treatise to the subject of love, developed a theory of love that can effectively be used to guide caregivers through the burden or caregiving while remaining true to the moral task of enhancing the life of the person with dementia. In this presentation we discuss the procedures followed to develop and pilot test a love intervention for caregivers with ten family caregivers of people with mid-to late stage dementia, using the principles of Intervention Design and Development. This intervention guides caregivers through a self-evaluation of five constructs that make up love, while delivering care. Data demonstrates how this self-evaluation, through the lens of Sorokin's love theory, helped caregivers to show less caregiver burden and overall better mental health when they mastered the adequate application of this theory. Qualitative data was gathered throughout the pilot intervention and single subject AB designs were used to track caregiver burden and mental health. Results indicated a much better appreciation of themselves as caregivers, better self-worth and overall less caregiver burden and improved mental health.

### ADULT CHILDREN AND PARENTS WITH DEMENTIA IN ASSISTED LIVING: VISITING, PERCEPTIONS OF CARE, AND PROBLEM BEHAVIORS

D.M. La Fazia[1], L. Teri[1], K.C. Pike[1], N. Hooyman[2], G. McKenzie[3], J. van Leynseele[1], S.M. McCurry[1], *1. Psychosocial and Community Health, University of Washington, Seattle, Washington, 2. University of Washington, Seattle, Washington, 3. Oregon Health Sciences University, Portland, Oregon*

Assisted-living (AL) is the fastest growing residential care option for older adults. Adult children often provide care to a parent even after a move to AL. This study examines the relationship between adult child caregivers' perceptions of care and contact with their parent residing in AL, parent behavioral problems, and staff reaction to these behavioral problems. Data were collected as part of the Staff Training in Assisted-living Residences (STAR) studies to train staff a behavioral problem solving approach to reduce depression and anxiety in residents with dementia. Data were collected on 96 adult children/parents/staff triads. Descriptive statistics, correlational and multiple regression analyses were conducted. Results indicated that adult children were in contact with their AL residing parents, with 91% visiting at least monthly. Adult children had positive perceptions of the care their parents received (M=5.01, SD=.92, Range=2.24-6.92), with staff having caring interactions and being patient with their relative among the highest scored items. More frequent visiting was associated with lower satisfaction with care ($\beta$=-.22, p<.05). Sons visited less in the presence of greater behavioral problems while daughters visited more (β=-.28, p<.06). Greater staff reaction to behavioral problems was a predictor of lower family satisfaction with care (β=-.27, p=.012). These findings indicate the importance of family, resident, and staff interactions for family satisfaction with care.

### CAREGIVER BURDEN, HEALTH UTILITIES AND INSTITUTIONAL SERVICE COSTS IN ALZHEIMER'S DISEASE

E.A. Miller[1], L. Schneider[2], R. Rosenheck[3], *1. Gerontology, University of Massachusetts Boston, Boston, Massachusetts, 2. University of Southern California, Los Angeles, California, 3. Yale University, New Haven, Connecticut*

This study examined the moderating effect of caregiver burden on the relationship between patients' health status and institutional costs in Alzheimer's disease (AD). Data were obtained on 421 community-dwelling patients with AD in the CATIE-AD trial. Outcome variables include hospital, nursing home, residential, and combined institutional costs. Mixed models were employed to estimate the interaction of Health Utility Index (HUI)-III scores (a health status measure) and five measures of caregiver burden. Wherever significant, results indicate that caregiver burden dampens the inverse relationship between health utilities and institutional costs, with the association becoming less negative as burden increases. Altogether 45.0% of the models (9/20) showed this effect (positive coefficient on the burden-HUI interaction term). Interventions should be offered to individuals caring for less advanced AD cases if they experience substantial burden, for even seemingly manageable patients may be at heightened risk for institutionalization if caregivers experience high levels of burden.

### DESIRE TO INSTITUTIONALIZE A RELATIVE WITH DEMENTIA: QUALITY OF PREMORBID RELATIONSHIP AND CAREGIVER GENDER

L. Winter, L.N. Gitlin, *Thomas Jefferson University, Philadelphia, Pennsylvania*

Because most dementia patients live at home and are cared for by family members, considerable research attention has focused on the quality of the caregiver-patient relationship. The quality of this relationship has implications for patient outcomes (e.g., quality of care) and important aspects of the caregiving experience (e.g., burden and deprssive symptoms). We examined its association with the caregiver's desire to institutionalize (DTI), using a sample of 237 caregivers of community-dwelling patients with Alzheimer's disease or related disorders (ADRD). Stronger desire to institutionalize (DTI) was significantly associated with lower quality of premorbid relationship, being female, and the interaction between gender and quality of relationship. The interaction reflected a significant association between relationship quality and DTI for male but not female caregivers. Findings suggest that quality of caregiver-patient relationship may affect whether or how soon the patient is placed in a long-term care facility, especially for male caregivers.

## SESSION 65 (PAPER)

## DEVELOPMENT OF DISABILITIES

### EFFECTS OF RACE AND EDUCATION ON PROGRESSIVE DISABILITY PACING

K. Latham, G. Pavela, *University of Florida, Gainesville, Florida*

Progressive disability is characterized by the gradual onset of disability typically caused by degenerative diseases such as arthritis. It is often defined as having mild impairment prior to disability onset. The pacing of progressive disability is essential to understand, because onset of severe disability signifies loss of independence, often followed by lower quality of life measures and increasing healthcare expenditures. The purpose of this research is to examine the effects of race and education on the pacing of progressive disability. We hypothesize that both being in a minority group or having lower educational attainment will be associated with an accelerated rate of progressive disability onset. Using the first eight waves of the Health and Retirement Study (HRS), we conduct a discrete time event history analysis within a multilevel framework to describe the pacing of progressive disability. Along with the key independent variables of race and education, we also included age and a number of other health measures as controls. Results suggest that race and education influence the pacing of progressive disability. Future research should examine interventions that may slow the onset of progressive disability and thus prolong independence to the fullest extent possible for the entire aging population.

### IDENTIFYING THE RISK FACTORS OF FALLS FOR OLDER ADULTS WHO RECEIVE HOME-CARE SERVICES IN OHIO, USA: LOGISTIC REGRESSION TREE ANALYSIS

T. Yamashita[1,2], D.A. Noe[1], A. Bailer[1,2], S. Mehdizadeh[1,2], I.M. Nelson[2], *1. Miami University, Oxford, Ohio, 2. Scripps Gerontology Center, Oxford, Ohio*

Falling, a major public health problem in the U.S., puts older adults at risk of severe injuries including hip fracture which is associated with increased medical and long-term care expenditures. Additionally, fall-related injuries often result in loss of independence and lower quality of life. Preventing falls is particularly important for vulnerable, community-dwelling older adults who have higher chance of institutionalization compared to healthy adults. However, vulnerable older adults receiving home care service are understudied for fall risk factors. This study identified fall risk factors for participants of Ohio's Medicaid waiver home care services (PASSPORT) program. Logistic regression tree method was used to partition participants into subgroups based on demographic, medical condition, health status, functional limitation and current intervention factors with similar characteristics (e.g., female diabetes patients) and fit a different logistic regression to each subgroup. The results are visualized in an easily interpreted tree-structured chart. The group of participants with incontinence and joint pain, and the group of those with more than 7 different medications, more than 2 ADL limitations (e.g., eating, dressing), age over 78 years and joint pain had the highest risks of falls. Among those at-risk groups, number of medications had positive associations with the chance of falling in a different way for those with joint pain (beta = 0.04) versus those without (beta = 0.07). In accordance with theoretical explanations about the identified risk factors, the application of the logistic regression tree method in the context of fall research and practical implications are evaluated.

### INSUFFICIENT PERSONAL ASSISTANCE FOR ADL DISABILITY AND RISK FOR HOSPITALIZATION AMONG COMMUNITY-LIVING OLDER ADULTS

L.P. Sands[1], H. Xu[2], K. Covinsky[3], *1. School of Nursing, Purdue University, West Lafayette, Indiana, 2. Mississippi State University, Mississippi State, Mississippi, 3. University of California, San Francisco, San Francisco, California*

BACKGROUND. Approximately 20% of older adults with disability in one or more basic activities of daily living (ADL) report they do not have sufficient personal assistance for their ADL disabilities. Self-reported consequences of insufficient ADL assistance include falls, dehydration and skin breakdown. We determined whether self-reports of insufficient personal help were prognostic of hospital admissions. METHODS. 5,992 community respondents to the 1994, 1999, and 2004 National Long Term Care Survey were asked whether in the past week they could have used more personal assistance for the ADL's for which they were disabled. Hospitalizations in the 12 months after each survey were determined from Medicare claims. An extension of the Cox proportional hazards model that accommodates recurrent events was computed to determine the association between insufficient ADL assistance and hospitalizations. RESULTS. Eighty percent of respondents were 75 or older; 72% were female, 87% were white, and 40% lived alone. Unadjusted rates of hospital admission for those with sufficient ADL help were 0.52, 0.62 and 0.78 respectively for those with 1, 2-3 and 3+ ADL dependencies, whereas rates among those who reported insufficient ADL help were 0.81, 0.79, and 0.81 respectively for those with 1, 2-3 and 3+ ADL dependencies. After adjustment for demographics and illness status, insufficient ADL assistance was associated with an increased risk for hospitalization among respondents with 1 ADL dependency (HR = 1.40, 95% CI: 1.07-1.83). CONCLUSION. Programs that provide personal ADL assistance to only the most severely disabled elders may be missing an opportunity to prevent hospitalization.

### ASSESSING THE RISK OF COMPLEX IADL FROM THE PERSPECTIVE OF MEDICALLY-AT-RISK OLDER ADULTS AND THEIR CAREGIVERS

A. Dickerson, J. Gaudy, T. Reistetter, *Occupational Therapy, East Carolina University, Greenville, North Carolina*

The purpose of the descriptive study was to understand the impact of chronic disease on the functional ability of older adults by determining which instrumental activities of daily living are most meaningful and may pose a safety hazard for the medically-at-risk older adult who plans to live independently. Data was collected through individual interviews with twenty older adults and their respective caregivers. The older adults were recently discharged from a hospital due to one of the following medical conditions: heart disease, stroke, COPD, dementia, or diabetes, all chronic conditions that put older adults at risk for safe independent living. Mean age of the older adult participants was 71 years. Results indicated the most important tasks were driving, managing medication, managing finances and phone use with no significant difference between the two groups (older adults and caregivers) in terms of meaningfulness (p<.40). The older adults reported that all tasks were affected by their respective condition. Paired sample t-test to examine difference between the participant's perception of previous level of function and current level of function showed a significant difference all eleven IADLs. The same was true for the caregiver's perception. However, when analysis examined differences between the participant and their caregiver for previous level of function showed a significant difference for shopping for groceries (t=5.62, p<.03), managing medication (t= 4.66, p<.04), and planning a meal (t= 6.52, p<.02). Qualitative results revealed safety issues with medication management and driving. Discussion will focus on the implications of these findings and needed future research.

## SESSION 70 (PAPER)

## HEALTH PROMOTION AND HEALTH LITERACY

### ACTIVE AGING AND EMERGENCY PREPAREDNESS: CAN THE MERGER BE ACHIEVED THROUGH A COMMUNITY DEVELOPMENT INTERVENTION?

G. Gutman[1], M. Kloseck[2], M. Gibson[3], L. Cox[2], *1. Simon Fraser University, Vancouver, Ontario, Canada, 2. The University of Western Ontario, London, Ontario, Canada, 3. St. Joseph's Health Care, London, Ontario, Canada*

The World Health Organization (2008) has endorsed the Active Aging Framework as a platform for promoting health, security and participation of older persons in emergency situations. This 3-phase project combines an Active Aging perspective with a community development approach to prepare residents of a naturally occurring retirement community (NORC) in London, Ontario to cope with naturally occurring and man-made emergency and disaster situations. Purpose: In Phase 1 we reviewed emergency planning guidelines to determine whether they consider the unique needs of seniors. In Phase 2, the focus of this presentation, we aimed to understand NORC residents' perceptions of their needs and their potential sources of support in emergency situations. Method: 7 focus groups were conducted in which participants, provided with a realistic emergency scenario (3 day power loss following an ice storm), considered their own needs/resources, and their neighbours, both for sheltering in place and evacuation. Results: Participants (6 males, 27 females; mean age 79.8; 94% living alone and 42% using a mobility aid), expressed the following concerns: maneuvering stairs, having a sufficient supply of medications, being aware of/able to remember emergency procedures and plans, and lack of concrete and consistent information concerning what to do in an emergency. Discussion: The concerns expressed highlight important issues for emergency planners to address in their messaging to seniors and illustrate the value of a combined Active Aging/Community Development model as a way of engaging seniors in knowledge translation and transfer around emergency preparedness.

### A RANDOMIZED CONTROLLED TRIAL OF A HEALTH PROMOTION INTERVENTION FOR WOMEN AGING WITH DISABILITIES

S. Robinson-Whelen[1], R.B. Hughes[2], N. Elsayegh[1], M.A. Nosek[1], *1. Center for Research on Women with Disabilities, Baylor College of Medicine, Houston, Texas, 2. University of Montana, Missoula, Montana*

Women with disabilities are at risk for an array of secondary health conditions that may be preventable or mutable with improved health behaviors. The authors conducted a randomized, controlled study of a health promotion intervention for women aging with physical disabilities at sites across the country. The 8 week, peer-led, interactive group program covered various health topics and included weekly action planning. Middle-age and older women (N=278) representing a wide range of physical disabilities were randomized to a group program or a wait-list control group. All participants completed measures of health behavior, health, self-efficacy, and social support at baseline, 2 months, 6 months and 12 months follow-up. Data were analyzed using a multilevel growth curve model with three groups: controls, low attendees (<4 sessions attended), and moderate to high attendees (4+ sessions). Health behavior was significantly better at the 6 month follow-up among the mod-high attendees than the two other groups combined. Examining change over time, the mod-high attendees showed improved health behaviors through the 6 month follow-up whereas both other groups declined. Between the 6 and 12 month follow-ups, low attendees leveled off, controls began to increase, and mod-high attendees declined. On several measures, including health-related quality of life and social support, differences between the low and mod-high attendees were larger than differences between the mod-high attendees and the control group. Possible explanations for the low attendees' poorer and declining performance on a variety of measures are discussed as well as strategies to intervene with this group.

### AN INTERNATIONAL COMPARISON OF H1N1 WEB SITES: READABILITY AND USEABILITY FOR OLDER ADULTS

N. Pearce, S. Gardhouse, *University of Waterloo, Waterloo, Ontario, Canada*

Introduction: The Internet has become an important resource for older adults seeking health information. However, nearly one-half of older Americans have low reading skills and almost 80% of older adult Canadians have literacy levels rated at the two lowest IALS levels. Many are also coping with age and disease related changes that limit their use of the Internet. Reading levels and web design factors such as fonts, colors, and navigation may pose barriers to older adults searching for H1N1 information on the Web. Objectives: To evaluate H1N1 websites produced by either national public health agencies or state health departments across 5 international jurisdictions (Australia, Canada, New Zealand, United Kingdom, United States) for readability levels and ease of use by older adults. Methods: The top public health/government H1N1 websites returned across three top-rated search engines (Google, Bing and Yahoo!) were selected for analysis. Readability was assessed using the Simple Measure of Gobbledygook (SMOG), Flesch-Kincaid (FK), and Flesch Reading Ease (FRE). Usability was assessed using The National Institute on Aging Web "senior-friendly" guidelines. Results: Mean readability of web pages was Grade 14.24 using SMOG (range 12.60 – 15.70) and Grade 11.55 using FK (range 9.82 – 23.90). Mean FRE was 48.57 (difficult to read). Mean usability score was 28.67 out of 50 (range 23 -38). Conclusion: The web pages examined required high level reading skills and demonstrated limited usability making these pages unsuitable for many older adults.

### RELATION OF EDUCATIONAL LEVEL, INTERNALITY, AND HEALTH STATUS TO OLDER ADULTS' SELF HEALTH CARE

V.G. Cicirelli, *Psychological Sciences, Purdue University, West Lafayette, Indiana*

Self health care is becoming more relevant to elders' positive health outcomes in view of likely future limitations in formal medical care. The present study examined factors related to the aspect of self health care: seeking information about one's health conditions. Structural equation modeling was used to determine relationships in a hypothesized path model, in which educational level, health status, and internal health locus of control are directly related to seeking health information, while education is indirectly related through health and internality. Participants were 109 Midwestern elders (64% women, 56% married) aged 61-99 (M = 77.1), from a senior center and an independent living residence, interviewed individually. Measures were seeking health information (7-item scale), educational level (7-point scale), health status (4-point self rating), and the internality subscale from Walton's health locus of control scales. Lisrel 8 yielded estimates of the path coefficients in the hypothesized model, with satisfactory goodness of fit (Chi-square for independence = 63.5; RMR = .05; GFI = .98). Path coefficients for variables directly related to seeking information were .28 for education, .27 for internality, and -.01 for health (explained variance = .16). The indirect effect of education was .02. Results confirmed the importance of educational level as well as the equally important factor of internal health locus of control in seeking health information for self health care, with internality and health status as mediating factors.

### PROMOTING COLON CANCER SCREENING AMONG OLDER CHINESE ADULTS: REACHING OUT THROUGH COMMUNITY ELDERLY CENTRES

V. Lou[1,3], K. Tsoi[2], M.C. Wong[2], S.S. Ng[2], S. Choi[2], S. Griffiths[2], J. Sung[2], *1. Social Work & Social Administration, The University of Hong Kong, Hong Kong, Hong Kong, 2. The Chinese University of Hong Kong, Hong Kong, Hong Kong, 3. Sau Po Centre on Ageing, The University of Hong Kong, Hong Kong, Hong Kong*

Background: In 2006, Hong Kong launched a five-year pilot project on bowel cancer education, promotion, and screening that targeted symptomatic adults ages fifty to seventy who were offered a Faecal Immunochemical Test (FIT). Under this project, this program reached out to soon-to-be aged and young-old through Community Elderly Centres (CECs). During a 12 month period, more than two thousand people attended health talks, and about four hundred eligible participants used the FIT screening. Aims: This paper examines the strategy of using CECs as conduits to promote colon cancer screening among older Chinese. Method: Qualitative methods, including focus groups and in-depth interviews, were administered to three groups of stakeholders, including social workers, participants with negative FIT screening results, and participants with positive FIT screening results (4 in-depth interviews). The processes followed semi-structured guidelines and were audio-recorded and transcribed. Successive approximation was used as a method for data analysis. Results: The strategies to used CECs as conduits to reach the elderly were seemingly effective, which is supported by the following four emerging themes: 1) The health promotion matches the service directions of CECs; 2) A rippling effect can be achieved by using the first batch of participants as role models for others; 3) CECs can recruit hard-to-reach older adults; and 4) Social workers could also play support roles by helping participants with their worries and emotional reactions during the process. Conclusion: Reaching older adults through CECs to promote colon cancer screening among older Chinese adults is promising. Policy implications are discussed.

# SESSION 75 (PAPER)

## LIFE GOALS: SELECTION AND REINVESTMENT

### THE PROCESS OF SELECTIVE OPTIMIZATION WITH COMPENSATION IN LEISURE ACTIVITIES AMONG ADULTS WITH ARTHRITIS

M.C. Janke[1], J.J. Jones[2], J. Son[2], L.L. Payne[2], *1. School of Aging Studies, University of South Florida, Tampa, Florida, 2. University of Illinois at Urbana-Champaign, Champaign, Illinois*

Research suggests that adults use the process of selective optimization with compensation (SOC) in their leisure activities to promote successful aging when faced with changes in physical abilities. Individuals with arthritis report ceasing their participation in valued activities (i.e., leisure) as a result of their arthritis which has been associated with increased depressive symptoms (Katz & Yellin, 2001). This study examines the SOC strategies adults use in their leisure as a means of coping with their arthritis and is drawn from a larger study on leisure and arthritis. Qualitative data were obtained from adults who participated in 6 focus group sessions (N = 34) related to their arthritis and leisure. The sample had an average age of 70, was 83% White, 88% female, and 44% "resource-poor". The transcripts were initially coded for statements related to the concepts of elective-based selection (EBS), loss-based selection (LBS), optimization (OPT), and compensation (COMP) by three independent researchers. A codebook of themes was then developed using these codes and the descriptions of these processes as outlined by Freund and Baltes (2002). Using content analysis, the data was then independently reanalyzed for these themes by two members of the research team. We found evidence of all four SOC processes in relation to leisure participation. Additionally, we found that most individuals in our sample ceased an important leisure activity due to their arthritis symptoms. We will discuss these findings in terms of implications for helping adults with arthritis self-regulate and adapt their leisure to promote successful aging.

### DOWNSIZING LIVES, DOWNSIZING STORIES: PATTERNS OF REINVESTMENT AND OPTIMIZATION IN LATER LIFE

M.R. Luborsky, C. Lysack, K. Cross, J. Van Nuil, *Institute of Gerontology, Wayne State University, Detroit, Michigan*

PROBLEM. Older adults face a daunting task: while they continue to experience multiple relationships (present and remembered), investment in their own and other's futures, and shifting life interests and capacities, they also confront tasks to reconfigure the place where their social life and objects are housed. Gerontological knowledge about aging in place and preserving physical and psychosocial independence is not matched by insights into how older adults contemplate and undertake processes of downsizing moves and possessions. APPROACH. This paper describes the ways selective optimization with compensation (SOC; Baltes & Baltes, 1990) infuses downsizing of possessions and homes. Competing hypotheses are examined regarding the interpretation of outcomes of material changes in lives to identify patterns of social and psychological reinvestment and optimization. DESIGN. We reported results from a study designed to specify both the features of the downsizing process and the narrative structures for representing downsizing. Data include narratives and semi-structured interviews from 40 older men and women who recently downsized their possessions and moved to smaller residences drawn from an ongoing study of downsizing and household moves in Michigan and Kansas. FINDINGS from narrative and content analyses indicate downsizing dynamics feature:

(a) value dilemmas at multiple levels (independence; psychosocial development, family development, societal norms); (b) mixed loyalties (self, family, community), (c) unexpected positive investment and opportunities for growth (vs. loss); and, (d) and key story types, and age-specific styles. DISCUSSION considers later life story telling and the intersection of telling, living and negotiating social transitions. [NIH #R01AG030477]

### LIFE INVESTMENT AND PSYCHO-PHYSICAL WELL-BEING IN OLD AGE

A.K. Leist, D. Ferring, *Faculté des Lettres, des Sciences Humaines, des Arts et des Sciences de l'Education, University of Luxembourg, Walferdange, Luxembourg*

According to life investment theory, the importance of life domains and goals shifts across the life span (Staudinger, 1996). Developmental theories explain the adjustment of goals to current life circumstances as an adaptive mechanism to ensure psychological well-being (e.g., Heckhausen & Schulz, 1995; Brandtstädter & Renner, 1990). The present study picks up these notions by, firstly, investigating content and meaning of life investment domains by a qualitative approach and, secondly, by exploring associations of life investment domains and indicators of psycho-physical well-being by quantitative methodology. A total of 62 participants aged 65 to 89 years answered to the question "Who or what is currently very important to you?" Categories were developed using qualitative content analysis, answers were then categorized by independent raters. Inspections of frequency showed that participants mentioned their own psycho-physical well-being and relationships with family and friends as very important goals. Other emerging topics were everyday activities (e.g., going shopping), hobbies, and concrete goals (e.g., going on a vacation). Values like generativity, individual autonomy, continuity, and harmony constituted further categories. Another topic concerned goals judged as irrelevant or unrealizable (e.g., not be able to go to the movies anymore). In addition, answers covered personal worries as well as worries concerning global threats, such as war or poverty. As subsequent quantitative analyses showed, the number and valence of mentioned life investment domains was related to age and measures of psycho-physical well-being.

## SESSION 80 (PAPER)

## VITALITY AND POSITIVE AFFECT

### RELATION BETWEEN AGE, UNDERSTANDING OF EMOTIONS AND PERCEIVED EMOTIONAL INTELLIGENCE

N. Galdona[1], P. Fernandez-Berrocal[2], J. Yanguas[1], E. Orce[1], I. Etxeberria[1], E. Aldaz[1], L. Coello[1], E. Urdaneta[1], *1. Fundacion Instituto Gerontologico Matia INGEMA, Donostia-San Sebastian, Spain, 2. Facultad de Psicologia, Universidad de Malaga, Malaga, Spain*

The ability to interpret emotional cues has been argued to play an important role in maintaining successful relationships and healthy psychological functioning. Being able to identify others emotions from facial expressions or written descriptions is seen as a key component in the concept of emotional intelligence, along with the ability to empathize with others emotions. In the current study, we investigated the relationship between the ability to empathize with others emotions and perceived emotional intelligence among elderly people. Forty eight people (29% men and 71% women) aged beetween 65 and 88 with an average age of 74, participated in this study. Perceived Emotional Intelligence (PEI) was evaluated by the Trait Meta Mood Scale-24. While, the ability to empathize with others emotions was evaluated by the revised version of the Eyes Test. The results of the Eyes Test showed that men scored a mean of 15.3 (SD=3.9), whereas women scored sligthly higher with a mean of 16.4 (SD=4.8). In men a significant relationship was found between Emotional Attention (r=0.67, p<0.01) and Eye test total score only in men. Older adults poor performance on the Eyes task may reflect a specific deficit of aspects of identifying emotional cues from eyes. Changes associated with age predict age-related decline in performance on tests of emotion understanding due to the involvement of particular brain regions that are affected by normal aging. On the other hand, these findings indicated the link between levels of Emotional Attention and the ability to empathize with others emotions.

### A MIXED-METHODS APPROACH TO SYNTHESISING RESILIENCE RESEARCH: DEFINITION, MEASUREMENT AND GAPS IN THE EVIDENCE

G. Windle, *Bangor University, Bangor, Wales, United Kingdom*

This paper summarises some of the findings from the Resilience and Healthy Ageing Network, a multi-disciplinary group of academics and stakeholders convened to explore the role of resilience in achieving healthy ageing across the life-course. The aim of the work programme was to unite and build upon previous work and existing evidence on resilience, and strengthen this with new perspectives and collaborations, thereby enhancing research capacity and development. The work was undertaken through a systematic review of the literature, concept analysis and academic and stakeholder consultation. Knowledge transfer has been embedded in the work processes. The concept analysis found that the complexities of defining what appears to be the relatively simple construct of resilience are widely recognised in research. The data synthesis enabled a clear identification of the antecedents, defining attributes and consequences of resilience. A working definition was developed. Variations and misunderstandings of what resilience actually is can create considerable challenges for trying to measure or assess it. A methodological review identified fourteen resilience measurement scales, and results are discussed in relation to the pros and cons of each measure, and their capacity to reflect the complexity of the concept of resilience. Within a life course framework a range of research gaps were identified, including the lack of evidence from older populations, transitions across all developmental stages, especially from adolescence onwards, robust evaluations of interventions, and multi-level/multi-disciplinary study of resilience, especially examining the interplay between the individual (biological and psychological), the immediate social environment and wider contexts.

### THE IMPORTANCE OF VITALITY IN PROMOTING SELF-RATED HEALTH THROUGHOUT ADULTHOOD AND OLD AGE

R.A. Burns, K. Anstey, K.A. Sargent-Cox, *AGeing Research Unit, Australian National Universiry, Canberra, Australian Capital Territory, Australia*

Perceptions of self-rated health (SRH) typically decline with age and strong associations with physical and functional health are identified. Poor SRH is associated with mortality, stroke, mental health and increased health service utilization. A dearth of information describes the extent positive well-being constructs like vitality impact on SRH. Using the SF-36 vitality and mental health sub-scales, and single SRH item, we tested whether vitality and mental health report comparable effects on SRH in middle adulthood and old age over time. Participants (n = 50 652) were obtained from the DYNOPTA project, a harmonized dataset comprising 9 Australian longitudinal studies. At baseline, participants were aged 45 thru 95 years (M = 60; SD = 11), predominantly female (66%) and followed for up to 10 years. Generalized Estimating Equations identified a decline in SRH over time (OR = .983; 95% CI = .982-.985), whilst baseline vitality (OR = 1.024; 95% CI = 1.024-1.025) was a most important predictor of SRH, not mental health (OR = 1.004; 95%CI = 1.004-1.005). Latent Growth Curve models reported baseline ($\beta = .669$; $p < .001$) and change ($\beta = .627$; $p < .001$) in vitality as significant predictors of change in SRH whilst effects for mental health were negligible. We conclude that vitality, and not mental health, is a more important predictor of change in SRH in old age and emphasize that addressing mental health needs does not appear to be the most important mechanism to limit decline in SRH in old age.

### TODAY I AM GRATEFUL... GRATITUDE, REDEMPTION AND WISDOM

S. Koenig, K. Naschenweng, J. Gluck, *Psychology, University of Klagenfurt, Klagenfurt, Austria*

The current study which precisely explores the linkage between wisdom and gratitude is imbedded in a greater wisdom project, namely “The Development and Manifestation of Wisdom”. Within this project it is proposed that experience with and reflection upon different life events is crucial for the development of wisdom in real life. Therefore in standardized interview sessions autobiographical narratives concerning different live events were collected from wisdom nominees and young and old control participants. For the purposes of the present study, the focus was on how often participants spontaneously mentioned feelings of gratitude within their autobiographical memory narratives. In addition to this narrative approach, participants later completed a self-report measure of trait gratitude (Watkins et al., 2003) and several wisdom-relevant measurements. Furthermore they listed what they feel grateful for in their lives. Overall, the results indicate that feelings of gratitude play an important role in the lives of wisdom nominees. Wiser individuals were more likely to mention spontaneously that they feel grateful for both positive and negative live events, and showed a greater disposition toward gratitude. Furthermore, differences concerning what participants were grateful for in their lives could be identified. Finally relations between the measurements of gratitude and relevant correlates of wisdom were found. The findings suggest that gratitude plays an important role in the manifestation as well as in the development of wisdom. Implications for wisdom research are discussed.

# SESSION 85 (PAPER)

## ACCESS TO CARE: WHAT LARGE DATABASES TELL US

### BLACK-WHITE DISPARITY IN DISABILITY: THE ROLE OF SELECTED HEALTH CONDITIONS

H.E. Whitson[1,2,3], S. Hastings[1,2,3], L.R. Landerman[2], G. Fillenbaum[2], H. Cohen[1,2], K. Johnson[1,2], *1. Internal Medicine, Duke, Durham, North Carolina, 2. Duke Aging Center, Durham, North Carolina, 3. Durham VA Medical Center, Durham, North Carolina*

OBJECTIVE To determine the independent contributions of selected health conditions to the Black-White disparity in disability rates among older Americans DESIGN Cross-sectional analysis of a community-based cohort SETTING Urban and rural areas of central North Carolina PARTICIPANTS 2966 adults participating in the Duke Established Populations for Epidemiologic Studies of the Elderly (EPESE) MEASUREMENTS: Self-reported data on sociodemographic and health variables, short portable mental status questionnaire, basic and instrumental activities of daily living (BADLs and IADLs) RESULTS Fifty-five percent of the cohort was Black. Compared to Whites, Blacks were more likely to report BADL disability (odds ratio [OR] 1.39, 95% confidence interval [CI] 1.15-1,68) and IADL disability (OR 1.49, 95% CI 1.27-1.74). Controlling for demographics and socioeconomic factors, Blacks were more likely to have obesity and diabetes and less likely to report vision problems, history of fracture, and heart attacks. The increased prevalence of obesity and diabetes among Blacks independently accounted for >30% of the Black-White difference in BADL disability. CONCLUSIONS Higher rates of obesity and diabetes in Black older Americans, even after controlling for demographic and socioeconomic variables, are important contributors to racial disparity in disability. On the other hand, the difference in Black-White disability rates is lessened by disabling conditions that are more common in Whites, such as age-related macular degeneration and osteoporosis. Racial disparity may increase in future generations if treatment for these conditions advances without concomitant gains in the prevention and treatment of obesity and diabetes in older Blacks.

### EFFECT OF HOSPITAL OWNERSHIP ON FEEDING TUBE USE AMONG BLACK AND WHITE ADVANCED DEMENTIA PATIENTS

S. Cai[1], P. Gozalo[1], V. Mor[1], S. Mitchell[2], J. Bynum[3], S. Kuo[1], J.M. Teno[1], *1. Brown University, Providence, Rhode Island, 2. Harvard Medical School, Boston, Massachusetts, 3. Dartmouth Medical School, Lebanon, New Hampshire*

Background: Dementia is a terminal disease and eating problems often herald its final stage. Existing evidence suggests that feeding tubes (FT) do not improve patient outcomes. Objective: To determine whether hospital ownership affects the within-hospital difference of FT insertion among black and white nursing home residents (NHR) with advanced dementia. Methods: All hospitalizations of NHR with advanced dementia (CPS>= 4) were identified from matched Minimum Data Set and Medicare claims from 2000-2007. Only hospitals with at least 30 admissions overall and 5 admissions from black NHR were included. Hospitals were stratified by ownership (for-profit, private nonprofit, and church- affiliated nonprofit). Base logit and conditional fixed-effects logit models were estimated for each stratum; hospitals’ FT insertion rate differentials by race were compared across stratum. Results: Between 2000 and 2007, 62,733 NHR with advanced dementia were admitted to 959 hospitals (24% for-profit, 16 % church-affiliated nonprofit). Within a hospital, blacks are more likely to have FT insertion than whites (OR=2.36, 2.12, 1.87 in for-profit, private nonprofit, and church-affiliated nonprofit hospitals, respectively, $P<0.001$), accounting for individual risk-factors, hospital fixed-effects, and time trend. The within-hospital racial disparity is greater in for-profit hospitals than in church-affiliated nonprofit hospitals ($P<0.05$). Across-hospital variations may also contribute to the difference in FT use between black and white NH residents. Conclusion: Black NHR with advanced dementia admitted to hospitals are more likely to have a FT inserted than those who are white; this differential varies by hospital ownership status, suggesting the influence of provider practices.

### A MODEL FOR THE USE OF VETERANS HEALTH AFFAIRS AND/OR INDIAN HEALTH SERVICE BY OLDER AMERICAN INDIAN AND ALASKA NATIVE VETERANS

B. Kramer[1,2], S. Jouldjian[1], M. Wang[1], M. Mitchell[1], B. Finke[3], *1. VA Greater Los Angeles Healthcare System, Los Angeles, California, 2. David Geffen School of Medicine at UCLA, Los Angeles, California, 3. Indian Health Service, Nashville, Tennessee*

Background: One-quarter of American Indian and Alaska Native (AIAN) Veterans who are enrolled in the Indian Health Service (IHS) also receive care at the Veterans Health Administration (VHA). Objective: Understand the relationship between patient and organizational factors in predicting dual use of VHA and IHS. Methods: We developed multilevel models to describe the interplay of patient and organizational factors in a sample of 18,892 AIAN Veterans receiving care at 201 VHA and IHS facilities during FY02 and FY03. Since unique factors related to each organization may perform differently, we created a model for dual use versus VHA-only and a model for dual use versus IHS-only. Results: The common explanatory variable of dual use in both models was the number of unique diagnoses (per patient). Other demographic, medical need and organizational factors differed across models. Medical need and advancing age increased the likelihood of dual use in IHS Model and decreased the likelihood of dual use in VHA Model. In both models, multiple patient factors were related to dual use, while only one measured organizational factor was significant. Conclusions: Patients’ medical needs drive dual use. For AIAN Veterans with the greatest medical needs, VHA is the exclusive provider or shares responsibility with IHS.

### ACCULTURATION AND PROGRESSION OF LATE-LIFE DISABILITY IN OLDER MEXICAN AMERICANS

J. Delgado[1,2], E. Jacobs[1,2], K. Markides[3], C.F. Mendes de Leon[2], *1. John Stroger Jr. Hospital of Cook County, Chicago, Illinois, 2. Rush University Medical Center, Chicago, Illinois, 3. University of Texas Medical Branch, Galveston, Texas*

Late-life disability is an important health condition in older age. Older Hispanics have a higher prevalence of disability than non-Hispanic whites. Acculturation is an important factor in chronic conditions such as obesity and diabetes, however little is known about the effect of acculturation in disability. The aim of the study was to examine the relationship between acculturation and the progression of late-life disability in Mexican Americans. Methods: Data was obtained from the Hispanic Established Populations for the Epidemiological Study of the Elderly (H-EPESE). Interviews were performed in six consecutive waves between 1993 and 2007. Data included measures for disability (ADLs, IADLs, and a summary measure of performance based tests of physical function), acculturation and socioeconomic status (income, education). Longitudinal analysis models were used to examine the association of acculturation with each disability outcome. Results: There were 3050 participants in the study. Higher acculturation was associated with lower ADL disability (coef=-0.1650, p=0.004), lower IADL disability (coef =-0.2030, p<0.001) and higher physical function level (coef=0.3039, p=<0.001) at baseline. Acculturation was not associated with change in either ADL or AIDL disability over time (p=0.40 and p=0.37 respectively). Higher acculturation was associated with less decline in physical function scores over time (coef=0.0239 p=0.03). This longitudinal association remained significant after adjustment for education and income (coef=0.0265, p=0.02). Conclusion: The findings from this longitudinal study suggest that higher acculturation has a protective effect on late-life disability and on the decline of basic physical function in older Hispanics.

## SESSION 90 (SYMPOSIUM)

### TRANSITIONS IN STROKE CARE: FINDINGS FROM THE STROKE TELEMEDICINE ACCESS RECOVERY (STAR) PROJECT

Chair: *P. Gregory, Physical Medicine and Rehabilitation, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina*
Discussant: *S.L. Szanton, Johns Hopkins Medical Institutions, Baltimore, Maryland*

Stroke is a devastating disease and a leading cause of disability. While care focuses mainly on the first few hours of the acute hospitalization, stroke is a chronic disease filled with transitions across the continuum of recovery. Effective recovery management through transitions involves an understanding of three key issues: 1) identification and management of risk factors 2) prevention of stroke complications and 3) access to stroke rehabilitation. This symposium will present preliminary results of these key factors in participants of the Stroke Telemedicine Access Recovery (STAR) Project. The STAR Project is a new study designed to maximize access to stroke recovery services in a rural community hospital in the stroke belt. The population is predominately minority and historically minorities have a greater stroke prevalence and severity compared to whites. Evaluation of these key factors in this predominant minority population will provide a better understanding of recovery across the continuum. The "Stroke Risk Factors" paper will characterize the stroke risk factors of the study population and describe how they evolve over the course of the acute hospitalization. The "Prevention of Stroke Complications" paper will evaluate the prevalence of two measures associated with stroke complications prior to and presently at the STAR study hospital. The "Access to Stroke Rehabilitation" paper will compare the access to acute and post acute stroke rehabilitation prior to and currently at the STAR study hospital. A focus on these three key indicators can improve the overall quality of care and ease transitions across the continuum of recovery.

### IDENTIFYING STROKE RISK FACTORS

S.W. Williams, P. Gregory, A.C. Felix, K.R. Faurot, D. Urlaub, P.E. Sweat, *Physical Medicine and Rehabilitation, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina*

While stroke outcomes are improving, North Carolina residents continue to experience high rates of strokes and poor stroke related outcomes. This paper examines risk factors for a tri-racial population hospitalized with a stroke. We focus on modifiable risk factors (e.g., diabetes, hypertension, cholesterol, smoking history, obesity, and physical activity) rather than non-modifiable (e.g., age, racial minority, and geographic region) factors. Findings show that within this population of White, African American, and American Indian stroke survivors, 47% presented with diabetes, 87% with hypertension, 43% with coronary artery disease, and 37% with hyperlipidemia. In addition, among this mostly female sample (67%), 33% reported a prior stroke and 20% a history of smoking. Given that, in this sample, the modifiable risk factors also increase the risk of a recurrent stroke, secondary prevention through patient and family education is of critical importance.

### PREVENTION OF COMPLICATIONS DURING STROKE HOSPITALIZATION: A PILOT PROJECT

A.C. Felix, *Neurology, University of North Carolina, Chapel Hill, North Carolina*

Life-threatening complications, including pneumonia and deep venous thrombosis (DVT), arise frequently after a stroke. These complications increase morbidity, mortality and prolong the length of hospital stay. Pneumonia can be prevented with a simple bedside screening assessment of swallowing (dysphagia screening). Prior to initiation of Phase I of the STAR project, dysphagia screening was documented in 35 % of patient charts. After the implementation of the Phase I of the STAR Project, documentation of dysphagia screening was 93%. DVT prevention was documented in 45% of patient charts prior to Phase I of the STAR project and 52% after the initiation of the project. While many factors may impact adherence to practice guidelines for hospitalized stroke patients, the STAR project demonstrates that increased awareness of diagnosis, by participation in a research study, may be associated with increased adherence to current practice guidelines for stroke patients.

### ACCESS TO STROKE REHABILITATION IN THE STROKE TELEMEDICINE ACCESS RECOVERY (STAR) PROJECT

P. Gregory, A.C. Felix, S.W. Williams, K.R. Faurot, D. Urlaub, P.E. Sweat, *Physical Medicine and Rehabilitation, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina*

Stroke is a leading cause of long-term disability. Access to early aggressive rehabilitation maximizes recovery. Geographic disparities impair access to these recovery services. The Stroke Telemedicine Access Recovery (STAR) Project is designed to increase access to stroke rehabilitation by implementing a remote physiatry consultative service to oversee care. We compared the rates of acute and post acute rehabilitation access before and after the start of the STAR Project at a rural community hospital. Rehabilitation assessment overall has increased from 75% to 97%. Physical therapy evaluations increased from 67% to 93% since the start of STAR, occupational therapy assessments increased from 45% to 73%, and Speech therapy assessments increased from 58% to 73%. Results show that early into the study there has been an increase in access to stroke rehabilitation services. Improved access to stroke recovery services will ultimately improve functional outcomes and ease transition across the continuum.

## SESSION 95 (SYMPOSIUM)

### POLICY SERIES SYMPOSIUM: AGE DISCRIMINATION AND EMPLOYMENT ISSUE OF OLDER WORKERS IN GOOD TIMES AND BAD

Chair: *A.A. Sterns, College of Nursing, Kent State University, Kent, Ohio, University of Maryland, Adelphia, Maryland, Creative Action LLC, Akron, Ohio*

The national unemployment figures have risen to over 10%, with the underemployed reaching to over 17%. About 2 million people aged 55 and over were unemployed in January 2010, bringing the unemployment rate for this age group down to 6.8 percent from 7.2 percent in December, 2009. These represent unemployment rates not seen since the late 1940s (Rix, 2010). More than 1.4 million older persons reported that they would like to be working but were not in the labor force, that is, they were neither working nor looking for work. Nearly one-quarter of a million were discouraged workers; they were not looking for work because they believed that no work was available, employers would find them too old, they lacked the necessary schooling or training, or that they faced other types of discrimination (Rix, 2010). Utilizing current legislation of the ADA and the ADEA can assist the re-entry into the workforce for adults after disability. Harvey Sterns and Anthony Sterns will review the current interpretation of the ADA and ADEA legislation and how that is being implemented by organizations. Sarah Rix will discuss the growing number of EEOC filings for age discrimination and look at the trends of employment and unemployment as the economy has grown and declined. Krystal Culler and H. Sterns will look at the impact of disability on employment and provide recommendations for utilizing the ADA and ADEA legislation to support return to work after disability. This symposium is sponsored by the Aging and Work Taskforce.

### AGE DISCRIMINATION IN EMPLOYMENT-DOES GERONTOLOGICAL RESEARCH INFLUENCE COURT DECISIONS

A.A. Sterns[1,2,3], H.L. Sterns[4], *1. College of Nursing, Kent State University, Kent, Ohio, 2. University of Maryland, University College, Adelphia, Ohio, 3. Creative Action LLC, Akron, Ohio, 4. The University of Akron, Akron, Ohio*

In general, the industrial psychological literature for many years has not supported a link between age and job performance (McEvoy & Cascio,1989; Ng, T. W. H., & Feldman, D. C. (2008).Rhodes, 1983; Sterns & McDaniel, 1994; Waldman & Avolio, 1986). Plaintiffs may try to show that there are ways to either compensate for any declines or argue the employer should test for declining ability or performance (EEOC v. City of Minneapolis, 1982; EEOC v. City of St. Paul, 1982). If it is possible to show the link between ability and performance, then it should also be possible to develop valid tests of those abilities and test for the requisite abilities. This paper will review current court decisions that have supported older worker abilities and the opportunity to continue work.

### AGE DISCRIMINATION IN EMPLOYMENT—MORE OF A ROLE FOR PUBLIC POLICY?

S.E. Rix, *AARP, Washington, District of Columbia*

The number of age discrimination charges filed with the EEOC rose sharply over the past year, a development likely to continue as job losses among older workers mount. A majority of older workers maintain that, based on what they have seen or experienced, older workers do face age discrimination today. This figure, too, may rise as the recession continues. Yet, the EEOC finds reasonable cause that discrimination has occurred in fewer than 5 percent of the charges; even fewer cases are litigated. This presentation discusses the results of recent AARP research on (1) older workers' perceptions of and experience with age discrimination and (2) the role that age discrimination legislation has played in addressing the needs of discrimination victims. The paper highlights the strengths and weaknesses of current legal protections, possible reforms, and the role workers themselves must play to prevent discriminatory actions and increase the number of "valid" charges.

### THE IMPACT OF ADA AND ADEA ON EMPLOYMENT AFTER LATE LIFE DISABILITY

K.L. Culler, H.L. Sterns, *The University of Akron, Akron, Ohio*

As early as 1995, Sterns and Sterns noted the impact of the Americans with Disabilities Act (ADA) and the Age Discrimination in Employment Act (ADEA) as an emerging issue. Utilizing current legislation of the ADA and the ADEA can assist the re-entry into the workforce for adults after disability. The continuing issue of later life disability and return to work may be even more important today since many individuals need or want to work longer due to needing more financial resources or to engage in meaningful activities (Czaja and Sharrit, 2009). An important part of the care approach should make return to work evaluations fair and supportive for the employee while also being effective for the employer. Future policy should take into consideration that approximately 21.3 million people aged 16-64 had a condition that affected their ability to work (U.S. Census Bureau 2000) and that the ADEA is anticipated to cover over 88 million Americans by 2015 (AARP 2008). Recommendations for utilizing the ADA and ADEA legislation to support return to work after disability will be highlighted in this presentation.

## SESSION 100 (SYMPOSIUM)

### ELDER CARE IN CHINA

Chair: *L. Li, School of Social Work, University of Michigan, Ann Arbor, Michigan*

Discussant: *D. Biegel, Case Western Reserve University, Cleveland, Ohio*

Population aging in the context of rapid social change following the economic reforms has brought issues of elder care to the forefront in China. This symposium will bring together three qualitative studies that examine different aspects of elder care in China. The first paper by Li, Sui & Gao was based on the experience and perspective of 24 older Chinese with chronic illness and impairment. It reports how older Chinese in rural and urban areas were cared for by their families and what older persons perceived as good care. The second paper by Zhan explored issues related to using paid home care "Baomu", which has been increasing in urban China as adult children become less available to care for their elderly parents. Data from four focus groups reveal that using "Baomu" may relieve some burden of adult children yet could create new problems. The final paper by Wu et al. aims to develop behavioral intervention protocols to preserve cognitive health for elders with cognitive impairment in China. Data collected from caregivers of people with MCI and of those with mild/moderate dementia suggest that the caregivers recognized the importance of diet and exercise in maintaining cognitive health and were interested in using either or both to help their care recipients. The discussant, Dr. Biegel, will address common themes in these three papers and draw comparison between the United States and China.

### INFORMAL CARE RECEIVED BY OLDER PERSONS IN CHINA

L. Li[1], Y. Sui[2], L. Gao[3], *1. School of Social Work, University of Michigan, Ann Arbor, Michigan, 2. Renmin University of China, Beijing, China, 3. University of Jinan, Jinan, China*

This study aims to understand the informal care received by older persons in China, and their perception of quality of care. In-depth interviews were conducted with 24 elderly Chinese who had chronic illness and/or impairment. Half of them resided in two urban neighborhoods in Jinan city, Shandong and half lived in two nearby villages. They included 13 men and 11 women who averaged 72 years old. Most lived with their spouse (n=17), six lived alone and one lived with adult children. Four major themes were identified. (1) The whole family system was involved in elder care. (2) Spouse was an invaluable yet vulnerable asset for those married, eldest son was the care-in-charge for the widowed. (3) Rural and urban elders differed in what and how care was received, and the expectation of adult children as care providers. (4) Positive interaction was the defining feature of good care.

### PAYING FOR XIAO AT HOME—HIRED HOME CARE SERVICES AS AN OPTION OF LONG TERM CARE IN CHINA

H.J. Zhan, *Sociology, Georgia State University, Atlanta, Georgia*

This paper uses qualitative data of 4 focus group discussions with elders and family members collected in 2008 -09 in Nanjing China to discuss the issue of paid home care as an option of long term care services in China. Due to the increasing unavailability of adult children in urban China, many families have to hire home-care workers (or "baomu") to be live-in home care providers for elderly parents with disabilities. Major issues related to this practice of "baomu" include: male/female gender mis-match, crowded housing, incompatibility of personalities or habits, and lack of trust. To relieve the pressure of long-term care by adult children, the author argues for a promotion of a neighborhood-based surveillance system for both home care "baomu" practices at home and small scale elder care institutions in the neighborhoods.

### PRESERVING COGNITIVE HEALTH FOR INDIVIDUALS WITH COGNITIVE IMPAIRMENT: VIEWS FROM CAREGIVERS OF PATIENTS WITH MILD COGNITIVE IMPAIRMENT (MCI) AND DEMENTIA IN CHINA

B. Wu[1], H. Wang[2], D. Cui[3], H. Chen[5], Q. Wang[3], Z. Mao[3], S. Levkoff[4], *1. Gerontology, University of North Carolina at Greensboro, Greensboro, North Carolina, 2. Peking University Institute of Mental Health, Beijing, China, 3. Wuhan University School of Public Health, Wuhan, Hubei, China, 4. Brigham and Women's Hospital, Boston, Massachusetts, 5. Havard Medical School, Boston, Massachusetts*

This study aims to develop behavioral intervention protocols to preserve cognitive health for elders with cognitive impairment in China. A sample was drawn from memory clinics in Beijing and Wuhan, China. A total of 49 caregivers were enrolled in the study, including 25 MCI caregivers and 24 caregivers for mild/moderate dementia. We implemented a mixed methods approach to data collection, using a quantitative questionnaire to obtain information on care recipients' past and current health habits and qualitative semi-structured interviews to explore their views on potential behavioral interventions and the implementation of these interventions. Participants addressed the importance of diet and exercise in maintaining cognitive health. MCI caregivers expressed interest in a combined diet and exercise intervention, while dementia caregivers expressed more interest in diet alone, given more physical impairment among care recipients with dementia as compared to those with MCI. This study also discusses the strategies for implementing the interventions.

## SESSION 105 (SYMPOSIUM)

### FOLLOWED TO EXTINCTION: PREDICTORS OF EXCEPTIONAL SURVIVAL IN VERY LONG TERM COHORT STUDIES

Chair: *D. Melzer, Epidemiology and Public Health, University of Exeter, Exeter, United Kingdom*
Co-Chair: *J. Guralnik, National Institute on Aging, Besthesda, Maryland*
Discussant: *B. Willcox, Honolulu Aging Study, Honolulu, Hawaii*

Identifying determinants of healthy aging is of increasing interest in gerontology. Progress has been made by comparing ES to younger controls. However, the comparability of these groups has been questioned, as the younger controls have generally experienced very different material, social and medical care circumstances from those born several decades prior. Data from deceased cohort-matched controls of exceptional survivors is now emerging from long established cohorts, whose participants have been followed until near extinction. In this symposium we discuss emerging results from three such aging cohorts and one novel cohort: the Honolulu Heart Program (HHP), the Framingham Heart Study (FHS), the Iowa EPESE Study, and the Keys to Optimal Cognitive Aging Project (KOCOA). The HHP and FHS were both originally NHLBI cohorts established to study risk factors for cardiovascular diseases. The HHP began in 1965 with 8,006 ethnic Japanese men living in Oahu, Hawaii while the FHS began in 1948 with 2,336 and 2,873 men and women, respectively, from Framingham, Mass. As the cohorts aged, ancillary studies and aging phenotypes were begun, The Established Populations for Epidemiological Study of the Elderly - Iowa site (EPESE) was a US National Institute on Aging cohort study of demographic, medical, social, psychological and lifestyle factors. It included 3674 community dwelling people aged 65 plus first seen in 1981/82. Death certificates for all but 200 were obtained in 2008. The KOCOA project is a novel cohort study of the oldest-old in Okinawa, Japan, focused on predictors of healthy cognitive aging.

### EARLY LIFE PREDICTORS OF EXCEPTIONAL SURVIVAL IN THE IOWA EPESE-STUDY

A. Dutta[1], J. Guralnik[2], R. Wallace[3], D. Melzer[1], *1. Epidemiology and Public Health, University of Exeter, Exeter, United Kingdom, 2. National Institute on Aging, Besthesda, Maryland, 3. University of Iowa, Iowa City, Iowa*

Aim: To identify the early life and study baseline characteristics predicting exceptional survival Methods: Data were from the Iowa EPESE. Exceptional survivors were defined as the 10% longest-lived (men reaching age 94 years plus and women 97 years plus). Our analysis included individuals aged 65 to 85 at baseline who lived at least 3 years. Results: Earlier life factors associated with exceptional survival included smoking status, body mass index at age 50, parent's age of death, but not marital status or educational attainment. At baseline, better health and cognitive status were predictive of exceptional survival. Life satisfaction as a predictor was not independent of health status measures. Earlier birth order amongst siblings was only predictive in women, and mother's age of death may be more predictive than father's age at death. Conclusion: Cohort predictors for exceptional survival may be different from those identified in comparisons with younger cohorts.

### HEALTHY COGNITIVE AGING: A CROSS-NATIONAL COMPARISON OF CIRCULATING MICRONUTRIENT CONCENTRATIONS

H. Dodge[1,5], Y. Katsumata[2], H. Todoriki[2], D. Willcox[3,7], B. Willcox[7,6], J. Kaye[1], M. Traber[4], *1. Oregon Health & Science University, Portland, Oregon, 2. University of Ryukyus, Okinawa, Japan, 3. Okinawa International University, Okinawa, Japan, 4. Linus Pauling Institute, Oregon State University, Corvallis, Oregon, 5. University of Michigan, Ann Arbor, Michigan, 6. The Queen's Medical Center, Honolulu, Hawaii, 7. Pacific Health Research Institute, Honolulu, Hawaii*

Objective: To examine whether there is any uniform pattern of circulating micronutrients cross-nationally that are associated with healthy cognitive aging defined as "having no cognitive impairment at age 85 and above". Design: A pilot study to compare the pattern of circulating levels of micronutrients among cognitively healthy oldest-old in Okinawa and the U.S. Results: The Okinawan elderly used fewer vitamin supplements but had similar levels of vitamin B12 and $\alpha$-tocopherol, compared with Oregonian elderly. The Okinawans had lower folate and $\gamma$-tocopherol, and a higher proportion of subjects with hyperhomocysteinemia. On the other hand, the Oregon elderly had a much higher prevalence of obesity. Conclusions: There were significant differences in circulating micronutrient levels between the two cohorts. A uniform pattern of circulating micronutrient levels might not be required to achieve healthy cognitive aging. Alternatively, the differential selection/survival process over the life course could have led to these cross-national differences.

### IOWA 2: BLOOD BIOCHEMISTRY AND THE PREDICTION OF SURVIVAL IN THE IOWA-EPESE

R.B. Wallace[3], A. Dutta[1], J. Guralnik[2], D. Melzer[1], *1. Epidemiology and Public Health, University of Exeter, Exeter, United Kingdom, 2. National Institute on Aging, Bethesda, Maryland, 3. University of Iowa, Iowa City, Iowa*

Aim: To identify blood and biochemistry markers predicting long-term survival. Methods: Data were from Iowa-EPESE. We included hematology and biochemistry on up to 1748 respondents examined at wave 6 of the study. We used Cox proportional hazard models to identify the significant markers predictive overall, and in different time periods from wave 6. Results: After adjustment for baseline age, sex, smoking status, income level, education, the strongest individual predictors ($p<0.0001$) included: Albumin/Globulin ratio, chloride, creatinine, alkaline phosphataise, gamma-glutamyl transferase, glucose, high density lipoprotein, triglyceride, uric acid, white blood cell count, lymphocyte count, neutrophil count and red blood cell distribution width. Analyses of the role of these markers in short, medium and long term prediction of survival will be presented. IL6 and CRP concentrations (n=722) were not prominent predictors. Conclusion: Several clinical markers predict survival. Only certain aspects of lipid profile (excluding total cholesterol) were prominent predictors. Inflammatory markers were not prominent.

### NEW PREDICTORS OF EXCEPTIONAL HEALTH AND SURVIVAL FROM LONGITUDINAL DATA

A.I. Yashin[1,2], K.G. Arbeev[1], S.V. Ukraintseva[1,2], I. Akushevich[1], A. Kulminski[1], J. Kravchenko[2], D. Il'yasova[2], D. Wu[1], *1. Duke University, Center for Population Health and Aging, Durham, North Carolina, 2. Duke University, Duke Comprehensive Cancer Center, Durham, North Carolina*

Aim. To identify dynamic predictors of exceptional health and survival. Data and Methods. We use the Framingham Heart Study data (Original cohort, 5,209 individuals) to evaluate dynamic properties of individual age trajectories of physiological indices. We evaluated the rates of change for BMI, serum cholesterol, diastolic blood pressure, pulse pressure, pulse rate, hematocrit, and blood glucose at the age interval 40 — 60 years. For non-monotonic age trajectories, we evaluated the rates of increase and decline (after reaching the maximum), age at the maximum and the maximum value. Stratification and the Cox regression analyses were used to evaluate contribution of these variables to morbidity/mortality risks. Results. We found that dynamic variables evaluated for each of seven physiological indices contribute to exceptional health and longevity. Conclusion. Dynamic parameters describing age trajectories of physiological state could be considered as targets for preventive and treatment interventions aiming to improve population health and longevity.

### LATE-LIFE PREDICTORS OF HEALTHY SURVIVAL: THE HAWAII LIFESPAN STUDY

C. Bell[1], R. Chen[2], K. Masaki[1,2], P. Yee[1], Q. He[2], D. Curb[1,2], D. Willcox[3], B.J. Willcox[1,2,4], *1. Geriatric Medicine, John A. Burns School of Medicine, University of Hawaii, Honolulu, Hawaii, 2. Kuakini Medical Center, Honolulu, Hawaii, 3. Okinawa International University, Okinawa, Japan, 4. Queen's Medical Center, Honolulu, Hawaii*

Objective: To identify potentially modifiable late-life factors predicting healthy survival to age 85. Methods: The Hawaii Lifespan Study studied 1548 Japanese-American men, free of chronic disease, functional impairment and cognitive impairment at baseline, followed for 15 years (1991-2005). We compared factors in 3 groups: those who died before age 85 (n=354), those who survived to age 85 with either chronic disease or functional/cognitive impairment (n=635), and those with healthy survival to age 85 (n=559). Results: Stepwise logistic regression analyses demonstrated increased likelihood of non-survival to age 85 with high fibrinogen ($p=0.0005$), high pack years smoking ($p<0.0001$), poor self-rated health ($p=0.02$) and non-married status ($p=0.005$). There was increased likelihood of unhealthy survival with low ankle-brachial index ($p=0.002$), slower 10-foot walk time ($p=0.002$), high fibrinogen ($p=0.002$), lower education ($p=0.02$), and poor self-rated health ($p<0.0001$). Conclusions: Potentially modifiable factors in late-life were significantly associated with survival to age 85 and healthy survival.

## SESSION 110 (SYMPOSIUM)

### DNA DAMAGE IN AGING AND CANCER

Chair: *G.J. Lithgow, Buck Institute for Age Research, Novato, California*

Co-Chair: *H.M. Brown-Borg, University of North Dakota, Grand Forks, North Dakota*

Damage to DNA has long been considered a cause of aging phenotypes and is certainly a major contributing factor to cancer. The emerging molecular and cellular details are beginning to explain the complex relationships at play. Not only DNA damage itself but the cellular machinery that responds to DNA damage is proving important for aging. This session will explore the emerging science and consider the link to epigenetic changes. Speakers: Judith Campisi, The Buck Institute Mario Fraga, Spanish National Cancer Centre CNIO Laura Niedernhofer, University of Pittsburgh School of Medicine

## SESSION 115 (SYMPOSIUM)

### ACADEMIC MODELS OF INTERGENERATIONAL LEARNING AND RESEARCH

Chair: *R. Hanks, Sociology, Anthropology & Social Work, University of South Alabama, Mobile, Alabama*

Discussant: *H.L. Sterns, University of Akron, Akron, Ohio*

Intergenerational learning and research projects are occurring in a diverse array of academic and community settings. Service-learning is a popular method of delivery for intergenerational experiences in academic settings. Other strategies are emerging for academic and civic engagement across generational lines, including co-learning classrooms to bring older and younger students together formally or informally and community-based research projects to empower members of each generation to influence research design and dissemination. This AGHE-sponsored symposium will describe multiple projects and the methods used to evaluate their impact on students, elders, and communities. Presenters will review challenges and rewards of interacting with community-based organizations in bringing academic research, service-learning, and co-learning experiences to multi-generational target groups in communities.

### OVERVIEW OF THE FIELD OF INTERGENERATIONAL LEARNING AND RESEARCH

S. Newman, *University of Pittsburgh, Pittsburgh, Pennsylvania*

This presentation provides a brief description of the history and rationale for intergenerational learning and discusses the current availability of research that provides insights into the content and cultural diversity of intergenerational learning. Information presented includes the development of the concept of intergenerational learning from US and International perspectives.

### INTERGENERATIONAL CO-LEARNING STRATEGIES AT THE UNIVERSITY LEVEL

L.K. Donorfio, B.G. Chapman, *Human Development and Family Studies, University of Connecticut, Waterbury, Connecticut*

Three different types of intergenerational co-learning experiences or exemplars will be highlighted at the university level: traditional class with accompanying field trip (urban and community studies class); interactive technology (iTV) class at three different locations (adult development and aging class), and a one day biology lab pairing lifelong learners with traditional college age students (biology class). Qualitative information was gathered and outcomes will be highlighted. The many challenges and rewards will be discussed.

### IMPLEMENTATION AND EVALUATION OF GERONTOLOGY STUDENT PROJECTS ACROSS A DIVERSE ARRAY OF SETTINGS

K. Kopera-Frye[1], R.L. Lee[2], *1. Dept. of Gerontology, Sociology, & Political Science, University of Louisiana at Monroe, Monroe, Louisiana, 2. University of Nevada-Reno, School of Community Health Sciences, Reno, Nevada*

Intergenerational Learning Projects are occurring in a diverse array of senior settings (e.g., assisted living housing, long-term care facilities). They differ along dimensions of site, structure, generations involved, student requirements, and evaluation methods. This paper will describe multiple cohorts of graduate and undergraduate university student service learning projects and a method used to evaluate their projects, from the perspectives of both the student and the elder. Both qualitative and quantitative measures are utilized in the evaluation. Lessons learned from these projects in terms of their organization and evaluation will be shared. Recommendations addressing these challenges (e.g., appropriate level of project for type of senior population) will be reviewed.

### INFUSING INTERGENERATIONAL LEARNING AND RESEARCH INTO COMMUNITY-BASED PARTICIPATORY PROJECTS: A COMMUNITY HEALTH ADVOCACY MODEL

R. Hanks, *Sociology, Anthropology & Social Work, University of South Alabama, Mobile, Alabama*

Intergenerational learning and research are used in a Community Health Advocacy Program at the Center of Excellence, University of South Alabama. This presentation reports on the community-based participatory research context in which the program developed; growth of the program; strategies for program evaluation; and outcomes within and across generations involved in the project. The emphasis is on intergenerational co-participation in community-based research and advocacy.

## SESSION 120 (SYMPOSIUM)

### ATTACHMENT PROCESSES IN LATE LIFE

Chair: *J. Monin, University of Pittsburgh, Pittsburgh, Pennsylvania*
Discussant: *V.G. Cicirelli, Purdue University, West Lafayette, Indiana*

Attachment theory stipulates that the need for relationship security is one of the most fundamental of all basic needs for people of all ages, and it provides a basis for understanding complex interpersonal dynamics throughout the lifespan. Although attachment theory has stimulated an enormous body of empirical research during infancy, childhood, and early adulthood, research on late life relationships using this perspective has been relatively limited. We show that attachment theory can inform a variety of interpersonal processes in older adulthood. The first presentation will provide a definition of attachment and discuss measurement issues unique to studying attachment in older adults. Data will be presented describing specific attachment functions (e.g., safe haven and secure base support) of close partners of older adults. The second presentation will show how attachment styles and gender relate to emotional experiences in a sample of older adults from seven ethnic groups. The last two presentations will discuss how attachment security relates to experiences of chronically ill older adults and their caregivers. Specifically, research on associations between attachment and pain, psychological adjustment, and coping in patients with persistent pain and cancer will be presented in the penultimate talk. The final presentation will describe a laboratory study demonstrating that insecurely attached spouses of older adults with osteoarthritis experience heightened distress and are hyper-vigilant to signs of their partner's suffering. The aim of this symposium is to draw attention to the utility of attachment theory for understanding how relationship processes influence well-being in late life.

### DEFINING AND MEASURING ATTACHMENT IN LATE LIFE

J.Q. Morse, *Western Psychiatric Institute & Clinic, University of Pittsburgh, Pittsburgh, Pennsylvania*

Attachment theory (Bowlby, 1977) was formulated as a model of infant-caregiver bonds. The extension of attachment theory to adult relationships, not only with parents but also with romantic partners, and into later life raises questions about what relationships may be attachment relationships and how such attachments should be assessed to understand attachment in late life. This presentation will review issues in conceptualizing and assessing attachment in older adults. I will focus on the validity and utility of both self-reported and other reported attachment style, reporting preliminary data on different adult attachment measures. In addition, I will describe attachment functions and features (separation distress, proximity maintenance, safe haven, secure base) of reported by older adults. Potential clinical applications will be described by examining the relation between dimensional and categorical attachment styles and mental health outcomes like caregiver burden, depressive symptoms, and course of treatment for depression.

### GENDER MODERATES THE ASSOCIATIONS BETWEEN ATTACHMENT AND DISCRETE EMOTIONS IN LATE MIDDLE AGE AND LATER LIFE

K. Fiori[1], N. Consedine[2], *1. Gordon F. Derner Institute of Advanced Psychological Studies, Adelphi University, Garden City, New York, 2. University of Auckland, Auckland, New Zealand*

Although attachment has been linked to emotions, studies in developmentally diverse samples are few and have not yet examined possible gender differences in attachment or their implications for emotional well-being. Using a sample of 616 men and women from seven ethnic groups in middle age and later life, we examined the relations between attachment and the experience of nine discrete emotions, testing the hypothesis that gender moderates these associations. Regressions showed that gender did indeed moderate these associations such that (a) attachment security was more closely related to interest and joy among men; (b) fearful avoidance was more closely related to fear and contempt among men; and (c) preoccupation was associated with greater interest among men, whereas fear and contempt were associated with preoccupation among women only. We suggest that attachment styles may differentially predict male emotions because of their less diverse networks and greater reliance on attachment figures.

### ATTACHMENT IN THE CONTEXT OF PAIN AND CANCER: IMPLICATIONS FOR PATIENTS AND THEIR CAREGIVERS

L. Porter[1], M. Rumble[1], F. Keefe[1], D. Davis[2], C. Scipio[1], J. Garst[1], *1. Duke University Medical Center, Durham, North Carolina, 2. University of Nevada, Reno, Nevada*

Individuals suffering from medical conditions such as cancer and persistent pain experience frequent and persistent threats to their well-being which are likely to trigger attachment behaviors in both themselves and their informal caregivers. Thus, patient and caregiver attachment styles may impact their adjustment to the patient's disease. This paper will present an overview of research examining associations between attachment and pain, psychological adjustment, and coping in patients with persistent pain and cancer. Data from a recent study of lung cancer patients and their spouses will be presented. Results from this study indicated that patient anxious and avoidant attachment styles were associated with higher levels of psychological distress and lower social functioning. Among spouses, anxious and avoidant attachment were associated with higher levels of caregiver strain, and avoidant attachment was also associated with lower levels of marital quality and self-efficacy. Clinical implications and avenues for future research will be discussed.

### ATTACHMENT INSECURITY AND PERCEIVED PARTNER SUFFERING AS PREDICTORS OF CAREGIVERS' FEELINGS OF PERSONAL DISTRESS

J. Monin[1], R. Schulz[1], B.C. Feeney[2], *1. University of Pittsburgh, Pittsburgh, Pennsylvania, 2. Carnegie Mellon University, Pittsburgh, Pennsylvania*

This study examined the extent to which perceptions of partner suffering mediate the association between attachment insecurity (anxiety and avoidance) and personal distress among caregiving spouses of older adults with osteoarthritis. Fifty-three caregivers watched two videos of targets (their partner and an opposite sex stranger) performing a pain-eliciting household task, and caregivers were asked to rate their own distress and perceptions of the targets' pain. Caregivers also completed self-report measures of trait attachment and perceptions of their partner's physical, psychological, and existential/spiritual suffering over the past week and their own depressive symptoms. Results revealed that attachment anxiety was associated with greater personal distress in reaction to watching the partner in pain (but not the stranger), and heightened perceptions of partner pain mediated this association. Perceptions of the partner's psychological suffering over the past week also mediated the link between caregivers' attachment anxiety and depressive symptoms. Attachment avoidance was not significantly associated with distress. The results of this study indicate that anxiously attached individuals may be at a higher risk for the negative health effects of caregiving.

## SESSION 125 (SYMPOSIUM)

### BRIGHTEN PROGRAM: OUTCOME AND IMPLICATIONS OF AN INTERDISCIPLINARY TEAM FOR OLDER ADULT DEPRESSION INTERVENTION

Chair: *E.E. Emery, Rush University Medical Center, Chicago, Illinois*
Discussant: *F. Blow, University of Michigan, Ann Arbor, Michigan*

BRIGHTEN (Bridging Resources of an Interdisciplinary Geriatric mental Health Team via Electronic Networking) is a unique interdisciplinary "virtual" team model that screens for, assesses, and treats depression and anxiety among older adults through integration in primary care. Recognizing the diverse needs of older adults, our team includes disciplines not ordinarily participating directly in mental health intervention. The BRIGHTEN program has been operating in primary and specialty care clinics at a university medical center, a county clinic serving the under- and uninsured, and a Hispanic clinic serving primarily Spanish-speaking under- and uninsured individuals. Outcome data are presented that indicate higher engagement rates than community mental health centers, and clinically and statistically significant psychotherapy outcomes in three months of treatment. Both participants engaging in psychotherapy and those utilizing other BRIGHTEN services move from high symptom levels at baseline into the normal range within three months and maintain gains at six months. These findings are consistent across a wide range of ethnic, socioeconomic, and educational status older adults. Data will also be presented indicating that providing general psychotherapy outcome data to potential participants making treatment decisions is associated with increased engagement rates. The BRIGHTEN Program addresses many key policy and care model issues in mental health and aging. The impact of BRIGHTEN's primary care integration, reducing disparities in access to evidence-based treatment, and increasing the geriatric mental health workforce on local, state, and national policy will be discussed.

### PSYCHOTHERAPY OUTCOME AND ENGAGEMENT IN THE BRIGHTEN PROGRAM

E.E. Emery, S. Robertson, *Rush University Medical Center, Chicago, Illinois*

Few of the 15%-25% of older adults reporting depressive symptoms at a level considered to be clinically significant receive adequate treatment. Even when services are available, only 70% at best show up for treatment in community mental health treatments. The BRIGHTEN program is an interdisciplinary, virtual team model program designed to screen for, assess, and treat depression and anxiety among older adults in primary care. BRIGHTEN has demonstrated an 85% show rate for assessments and 95% show rate for psychotherapy. Preliminary data indicate that participants (N=39; Mean age = 69.70 years, SD = 7.75, range = 60 – 91) receiving cognitive behavioral or interpersonal psychotherapy demonstrated significant improvements in symptoms of depression (PHQ-9, $p < .01$) and anxiety (Beck Anxiety Inventory, $p < .05$) within three months of treatment onset. Implications of the interdisciplinary team approach to mental health intervention for engagement and symptom reduction are discussed.

### EFFECTIVENESS OF AN INTERDISCIPLINARY APPROACH IN MANAGEMENT OF DEPRESSION IN DIVERSE SOCIOECONOMIC POPULATIONS

G. Rodriguez-Morales, I.I. Ivan, E. Woodhead, R. Golden, E.E. Emery, *Rush University Medical Center, Chicago, Illinois*

Age and poverty are risk factors for depression. These variables interact with language barriers and limited access to resources, further interfering with the effective management of depression. The goal of the current study was to examine the differential effectiveness of the BRIGHTEN Program, an interdisciplinary approach to depression treatment, among historically advantaged and disadvantaged older adult populations. Data were analyzed from 30 patients served in a private, nonprofit medical center (PRMC) and 20 patients from public health centers serving under/uninsured populations (PHCs). These two groups differed in age ($p < 0.01$), education ($p < 0.001$), and insurance status ($p < 0.001$). There were also group differences in poverty level and employment status. The PHQ-9 score in PRMC and PHCs patients improved significantly ($p < 0.05$ on both). Therefore, despite differences in risk factors and challenges for management, both groups achieved reduction in depressive symptoms through participation in the BRIGHTEN Program.

### BRIGHTEN: THE EFFECTIVENESS OF A PATIENT-CENTERED INTERDISCIPLINARY TEAM IN IMPROVING MENTAL HEALTH

I.I. Ivan, A. Eisenstein, E.E. Emery, G. Rodriguez-Morales, *Rush University Medical Center, Chicago, Illinois*

By 2030, an estimated 20% of older adults in community settings will experience significant depressive symptoms. The aims of the study were to determine whether the BRIGHTEN intervention is effective in improving mental health and to examine how mean scores on mental health measures compare to the average U.S population norm mean for adults over the age of 60. SF12-Mental Component Score (MCS) and Geriatric Depression Scale (GDS) scores significantly improved from baseline (n= 60) to 3 month ($p<.05$, $p<.001$ respectively) and to 6 month follow-up ($p<.05$, $p<.001$, respectively). SF12-MCS scores were significantly below the 25th percentile mean at baseline. By the 6 month follow-up, patients were within the normative mean range. Psychotherapy patients did not have significantly different SF12-MCS or GDS scores from those patients involved in other BRIGHTEN interventions. The clear effectiveness of the patient-centered interdisciplinary team in improving mental health is further discussed.

### INCREASING ENGAGEMENT IN DEPRESSION TREATMENT FOR OLDER ADULTS: EVIDENCE FOR INCORPORATING TREATMENT OUTCOME DATA

E. Woodhead, I.I. Ivan, E.E. Emery, L.F. Fogg, *Behavioral Sciences, Rush University Medical Center, Chicago, Illinois*

The current study examined the relative weight assigned to treatment outcome data, personal, and vicarious experience among older adults deciding whether to initiate treatment for depression. Twenty-five adults over age 60 completed a structured interview about their decision making process. Among those reporting personal or vicarious experience with depression treatment (n = 17), treatment outcome data was ranked as significantly more important than experience in the decision making process, $t(16) = 2.99$, $p < 0.01$. This was not impacted by numeracy. Forty percent of participants requested clarification of the data; fifty-two percent reported that the treatment outcome data increased hope for successful treatment. Participants reporting that the treatment outcome data increased feelings of hopefulness had higher rates of psychotherapy engagement (75.0% vs. 54.5%). These results suggest that providing outcome data may increase motivation for depression treatment, particularly if the outcome data are tailored to the individual's level of understanding.

### POLICY IMPLICATIONS OF BRIGHTEN PROGRAM PROCESS AND OUTCOMES

R. Golden*, Older Adult Programs, Rush University Medical Center, Chicago, Illinois*

The BRIGHTEN Program addresses many key policy and care model issues in mental health and aging. First, the program improves access to care for underserved older adults by integrating mental health services into primary care through outreach. Second, the quality of care is improved by implementing evidence-based practices. Through these practices, BRIGHTEN reduces disparities of care with racially and ethnically diverse older adults. Finally, we are building workforce capacity by training new and current practitioners in evidence-based geriatric mental health practices. Issues discussed will include methods of influencing policy to sustain this model, and demonstrating to key stakeholders the value of the concept and the outcomes. Our national, state and local strategies through coalitions, advocacy and business plans will be discussed in an attempt to impact reimbursement sources, legislators, and funders.

## SESSION 130 (PAPER)

## DIABETES

### UNDIAGNOSED AND POORLY TREATED DIABETES AND HYPERTENSION AMONG OLDER CAREGIVERS

L.E. Best, L. Baker, *Andrus Gerontology Center, University of Southern California, Los Angeles, California*

Prior research suggests that caring for a family member is associated with poor health outcomes, including high rates of mortality. We propose that older adults providing excessive levels of care for grandchildren, parents, and spouses are more likely than non-caregivers to neglect their health, resulting in undiagnosed and poorly managed disease. Using the 2006 Health and Retirement Study, we examine both self-reports and biological markers of diabetes and hypertension among three groups of older adults (N=6,008): 1) those providing high (15+ hrs/week), 2) moderate (1-15 hrs/week), and 3) none/low (<1 hr/week) levels of family care. Hours of family care were defined as the total number of hours a respondent reports providing care for his/her grandchildren, parents, and/or spouse. Undiagnosed conditions were defined by whether respondents were ever told by a health professional that they had diabetes or hypertension, but exhibited high levels for that condition (HbA1c glycosylated hemoglobin for diabetes and automated inflatable cuff blood pressure reading for hypertension). Individuals reporting that a health professional diagnosed them as well as high readings for the corresponding biological marker were classified as having a poorly managed condition. We employ a series of logistic regression analyses controlling for demographic and socioeconomic characteristics. Results suggest that individuals providing moderate levels of care have a lower likelihood of having undiagnosed and poorly managed disease. The results of this study demonstrate not only the importance of biological marker data in population surveys but also the need to understand the extent to which caregiving affects disease diagnosis and management.

### USE OF COMPLEMENTARY AND INTEGRATIVE THERAPIES IN OLDER ADULTS WITH DIABETES

R.R. Whitebird[1], S.E. Asche[1], P.J. O'Connor[1], M. Kreitzer[2]*, 1. HealthPartners Research Foundation, Minneapolis, Minnesota, 2. University of Minnesota, Minneapolis, Minnesota*

Little is known about how older adults use complementary and integrative therapies for chronic health conditions and overall health. We surveyed a random sample of 2000 older adults with diabetes in a Midwest medical group regarding their use of complementary therapies. We had a 57% response rate following exclusion of ineligibles, with 54% reporting some use of complementary therapies in the prior year. Those using these therapies were younger, female, more educated, more likely to be employed, younger at age of diabetes diagnosis and had a higher BMI than those not using complementary therapies. They also reported lower levels of physical and mental health and a higher percentage reported slow healing foot ulcers. There were no differences in glycated hemoglobin (A1c) levels between groups and both reported high levels of having a regular primary care doctor, trust in their doctor and satisfaction with their health care. Only 24% of those using complementary therapies report discussing this with their doctor. Those using complementary therapies were less likely to follow their doctor's advice, and reported greater belief in the concept of holistic health and in the scientific validity of complementary therapies. The most frequently reported type of complementary therapies used were mind/body therapies such as meditation and deep breathing exercises (30%); 35% of those using complementary therapies (or 19% of all respondents) reported using them specifically for their diabetes. Results indicate that high proportions of older adults with diabetes are using complementary and integrative therapies for their diabetes and their overall health.

### DIABETES AND SELF-RATED MENTAL HEALTH: THE ROLE OF AGE AND RACE

G.M. McCaskill[1,3], C.B. Worley[2,3], G. Kim[3,2], J. DeCoster[3]*, 1. The University of Alabama, School of Social Work, Tuscaloosa, Alabama, 2. The University of Alabama, Department of Psychology, Tuscaloosa, Alabama, 3. School of Social Work, The University of Alabama, Center for Mental Health and Aging, Tuscaloosa, Alabama*

This study examined how socio-demographic characteristics and diabetes are associated with self-rated mental health among White and Black older adults in the United States. Data were drawn from a national multi-stage probability sample, the Collaborative Psychiatric Epidemiology Surveys (CPES, 2001-2003). General linear modeling was used to assess the interaction effect of age, race, and diabetes on self-rated mental health. Results showed a significant main effect of income, education, diabetes, and religiosity on self-rated mental health. After controlling for income, education, and religiosity, the significant interaction effects of age x diabetes and age x race were found. Older Blacks with diabetes had poorer self-rated mental health compared to older Whites with diabetes. Older Whites without diabetes had better self-rated mental health compared to older Blacks without diabetes. Findings suggest that self-rated mental health is influenced by diabetes and these associations appear to be different in older Whites and Blacks. Implications for research, practice, and policy in the area of diabetes and aging are discussed.

# SESSION 135 (POSTER)

## DIVERSE POPULATIONS

### NAVIGATING THE HISPANIC PARADOX: EXPLORING MIGRATION EFFECTS ON THE HEALTH STATUS OF MEXICANS

M. Rivera-Hernandez, *Gerontology, Miami University, Oxford, Ohio*

Since the 1980s several studies have found support for the Hispanic mortality advantage or Hispanic paradox (Markides & Coreil, 1986). In general research has shown that low socioeconomic status is strongly associated with poor health and mortality outcomes; however, the Hispanic paradox posits that Hispanic adults living in the U.S. have lower mortality rates than non-Hispanic whites even when Hispanics have lower socioeconomic status. One of the explanations for this paradox is related to migration. According to the salmon-bias hypothesis, the mortality advantage might be linked to the return migration of foreign-born Hispanics who return to their country of origin when they reach advanced age so that they can receive treatment there for illnesses, or can return home to spend their last days in their own country. The goal of this paper is to investigate the difference in health status (self-rated health) between people who lived in the United States and went back to Mexico and people that never left Mexico. The analyses are based on data from the Mexican Health and Aging Study (MHAS), a unique longitudinal dataset which addresses health dynamics based on history of residence. There is a clear relationship between location of residency, migration history, and health status of Mexicans. The results suggest that Mexicans who lived in the U.S. and returned to Mexico are more likely to have better health than their counterparts. This type of information may be useful to researchers that try to explain the Hispanic paradox and its link to successful aging.

### THE IMPACT OF PLACE OF EDUCATION ON HEALTH IN MEXICAN AMERICANS OVER 50 YEARS OF AGE

C.L. LaCoe, L.A. Wray, *The Pennsylvania State University, University Park, Pennsylvania*

Introduction: Strong, positive relationships between educational attainment and most measures of health exist, and even strengthen, throughout the lifespan. However, these relationships are attenuated in some social groups and are poorly understood. The aims of this study are to 1) examine the relationships between low education attainment and five health outcomes (heavy alcohol consumption, being a smoker, physical inactivity, obesity, diabetes) in first generation Mexican Americans over age 50, and 2) determine if place of education (U.S. vs. Mexico), a determinant of cultural capital, mediates these relationships, controlling for key covariates. Methods: We used panel data from Wave 4 (1998; n=298) and Wave 7 (2004; n=239) of the nationally representative Health and Retirement Study (HRS) and logistic regression analyses to address our aims. Results: Low educational attainment and education in Mexico did not significantly predict physical inactivity, obesity, smoking, or diabetes prevalence or incidence. However, low educational attainment significantly decreased the odds of heavy alcohol consumption ($OR=0.591$, $p<0.01$), net of other covariates. Marital status, gender, age, health behaviors, and comorbidity significantly, but differentially, influenced the odds of the health outcomes. Conclusions: Contrary to findings in samples of Asian American immigrants, educational attainment and place of education were not significantly related to most measures of health in Mexican American immigrants. This may be due to the surprisingly low levels of and variability in educational attainment and the small size of the sample. Our findings highlight the importance of studying indicators of health separately, as well as looking at specific subpopulations of immigrants.

### OLDER AFRICAN AMERICANS' STRATEGIES FOR COPING WITH ADVERSITY: SERVICE AND RESEARCH IMPLICATIONS

A. Schwartz[1], L.N. Gitlin[2], C.J. Caruso[2], J. Burke[2], *1. Boston College, Graduate School of Social Work, Chestnut Hill, Massachusetts, 2. Thomas Jefferson University, Center for Applied Research on Aging and Health, Philadelphia, Pennsylvania*

Existing coping scales are limited in their ability to capture culturally specific adaptive mechanisms used by diverse groups of elders. This is particularly the case for African American elders, for whom coping measures are primarily undeveloped and under validated. In addition, African American elders use and prefer unique coping strategies reflecting resilience to historical and present day adversities typically not reflected in existing measures of coping. A semi-structured qualitative interview was used to identify coping strategies to manage daily challenges of growing old among 30 African American elders. These adversities included functional changes, neighborhood crime, personal safety, and feeling sad or blue. Transcribed interviews were reviewed and coded for domains and topics reflecting approaches to coping, then analyzed further through use of Nvivo8 qualitative software. Analyses revealed 10 domains reflecting distinct approaches to coping with challenges. Some domains are represented in standardized coping scales and include: emotional and physical health management, cognitive reframing, purposeful engagement, relying on one's faith, relying on self, environmental and behavioral strategies, and social connectedness. Others appear unique to this group and include: future think, setting boundaries, and the problem resolving itself. Purposeful engagement was particularly highly utilized among respondents. Knowledge of culturally specific forms of adaptation adds to the discourse on coping and brings into question the adequacy of existing scales used to shape service delivery. Findings from this study suggest the need for systematic examination of the preferred and unique coping styles of diverse elders to inform intervention development. (NIMH # R24 MH074779)

### HEALTH LITERACY 101: CULTURE, EDUCATION, AND HEALTH CARE SYSTEM DO MAKE A DIFFERENCE

B. Flores, *University of Texas at Austin, University of Texas Health Science Center San Antonio, San Antonio, Texas*

ABSTRACT Background: Hispanic women suffer from higher rates of cervical cancer when compared to white women in the United States. Purpose: Review qualitative and quantitative studies addressing the relationship of cervical cancer screening with possible points of intervention according to the Institute of Medicine (IOM) model. These points are culture and society, the education system, and the health care system and its association with health outcomes. Methods: A literature search in CINAHL Plus With Full Text, Medline and ERIC was conducted using the search terms: cervical smear+, cancer screening, pap smear, Hispanic, and health literacy, from 1997 to 2007. The search was updated in CINAHL Plus with Full Text, Ovid Medline, Pub Med and ERIC to include the years between 1996 and 2009 using the search terms literacy, health literacy, cervical smears+, pap smears, vaginal smears, cancer screening, mass screenings, female, Hispanics+, Hispanic-American+, health care, health care cost, cost, and health education, from 1996-2009. Study Selection: A total of 140 articles were reviewed; of those, 56 met inclusion criteria. Findings: An association was found between low literacy, low education, decreased knowledge, low acculturation, lack of health insurance, fear, older Mexican women, and decrease utilization of Pap smear screening. Conclusion: There is a need to continue research targeted to improve health care outcomes and decrease mortality rates among the most vulnerable populations of older Mexican-American women and to develop educational tools and strategies aimed at Hispanic women with low literacy.

### RACIAL/ETHNIC DISPARITIES IN ANXIETY SYMPTOM SEVERITY: A STRESS PROCESS MODEL

C.B. Worley[1,2], R.S. Allen[1,2], G. Kim[1], M. Stenner[1], *1. Department of Psychology, University of Alabama, Tuscaloosa, Alabama, 2. Center for Mental Health and Aging, Tuscaloosa, Alabama*

As the nation becomes more diverse in both age and racial and ethnic group membership, unique challenges emerge in understanding health disparities. Research has suggested that as racial and ethnic minority groups from newly immigrant populations acculturate, their rates on mental illness rise. The purpose of this study was to examine anxiety symptom severity across diverse racial/ethnic groups. Data were drawn from the Collaborative Psychiatric Epidemiology Surveys (CPES, 2001-2003) dataset, which is one of the first to provide national data with enough power to explore cultural influences on mental health in a racial and ethnic minority sample (Colpe, et al, 2004). The Stress Process Model was used to assess factors associated with the development of anxiety symptoms in the following racial/ethnic groups separately: Vietnamese, Filipino, Chinese, Other Asians, Cuban, Puerto Rican, Mexican, Other Hispanics, Afro-Caribbean, African-American, Non-Latino Whites, and Other. Data were analyzed with Structural equation modeling (SEM). In the model, anxiety symptom severity was predicted by demographic variables, objective stressors, subjective stressors, intrapsychic strain, role strain, and resources. Differences in the model fit across diverse racial/ethnic and age groups are discussed. Implications for intervention programs and public policy are discussed in the cultural context.

### RURAL CULTURE AND HEALTHCARE UTILIZATION

J.A. Zimmerman, B. Mast, *Psychological and Brain Sciences, University of Louisville, Louisville, Kentucky*

Literature on rural health often states that compared to their urban counterparts, rural residents have a unique culture that may impact healthcare utilization (HCU). However, empirical evidence supporting this belief is lacking. The current study investigated the association between HCU and two cultural variables believed to be more relevant in rural communities: self-efficacy and negative attitudes (NAs) towards doctors. Level of rurality was measured by the USDA Economic Research Department's rural-urban continuum codes and resulted in four independent groups. Participants included 4,162 individuals from the Duke EPESE study. As predicted, one-way analysis of variance revealed NAs significantly differed across the four levels of rurality ($p < 0.001$). Although there was a general trend for greater NAs as rurality increased, post-hoc analyses indicated significant differences only between the most rural group and the three other groups ($p < 0.001$, for all three comparisons). Urban residents also reported greater self-efficacy compared to more rural residents ($p = 0.03$). Bivariate correlations demonstrated a significant relationship between self-efficacy and HCU ($p < 0.001$), such that higher levels of self-efficacy were associated with fewer doctor visits over the previous 12 months. NAs were not significantly associated with HCU. These findings suggest cultural aspects of rural residence are important in understanding differences between urban and rural older adults in terms of HCU. Further, the significant variation in cultural attitudes by level of rurality (as a continuum) suggests a dichotomous measure of rural/urban may be insufficient and that researchers should utilize a more detailed rural/urban classification system.

### RACIAL/ETHNIC DIFFERENCES IN LONG-TERM CARE SERVICES USE BY FRAIL ELDERS

Y. Ji[1], D.A. Chiriboga[2], G. Mitchell[3], *1. School of Aging Studies, University of South Florida, Tampa, Florida, 2. Louis de la Parte Florida Mental Health Institute, University of South Florida, Tampa, Florida, 3. The Claude Pepper Center, Florida State University, Tallahassee, Florida*

Using Florida Medicaid claim & eligibility data from fiscal year 1998-99 to 2007-08, the present study examined the different patterns of use of institutional and home- and community- based long-term care services by African American, Hispanic, and White frail elders. Under the same need characteristics, older African Americans were found less likely to use nursing home than their white counterpart, with older Hispanics being the least likely to use nursing home. Older Hispanics were found less likely to use home- and community-based services than their white and black counterparts. Older African Americans and Hispanics who newly entered Florida home and community alternatives in fiscal year 2004-05 were found more likely to die during the follow-up 36 months and less likely to end up in nursing home. Older Whites who newly entered nursing home in fiscal year 2004-05 were more likely to have previous experience using home- and community-based services over the previous 36-month period and have longer duration in nursing home over the follow-up 36 months. Over the ten year period, both use of nursing home and home- and community-based services among older Hispanics showed a steady upward trend while little variation was indicated for white and African American groups over time.

### RISK OF INCIDENT HYPERTENSION AMONG BLACK, WHITE, AND MEXICAN AMERICANS AFTER AGE 50

A.R. Quinones[1], J. Liang[1,2], W. Ye[1], *1. University of Michigan, Ann Arbor, Michigan, 2. Institute of Gerontology, Ann Arbor, Michigan*

There is extensive research on the prevalence of hypertension. However, information regarding incident hypertension among older individuals is more limited, particularly those involving minority groups over an extended period of time. This research examines the risk of developing hypertension for Americans over age 50 for a period of up to 10 years. It focuses on how incidence in self-reported hypertension varies across white, black and Mexican Americans. Data came from 9,547 respondents who were hypertension-free at the baseline in the Health and Retirement Study with up to six repeated observations (1996-2006). Discrete-time survival models were used to analyze ethnic variations in the probability of developing hypertension. The probability of incident hypertension among black Americans was 0.10 during the period of 1996-1998, which increased steadily to 0.16 during 2004-2006. In contrast, among white Americans the risk was 0.08 during 1996-1998 and 0.13 during 2004-2006. For Mexican Americans, the probability increased from 0.07 during 1996-1998 to 0.12 during 2004-2006. During the same period, there were no significant ethnic variations in the risk of dying. The risk of newly diagnosed hypertension increased between 1996 and 2006 for all Americans over 50. To a significant extent this increase was a result of changing demographic and health attributes. Relative to white and Mexican Americans, black Americans had an elevated risk of incident hypertension throughout the 10-year period of observation. These variations persisted even when differences in health behaviors, socioeconomic status, demographic, and time-varying health characteristics were adjusted.

### EXPLORING THE REASONS AFRICAN AMERICAN AND RURAL-DWELLING ELDERS PARTICIPATE IN MEMORY RESEARCH

A. Hunsaker[1], C. Sarles[2], D. Rosen[1], J. Lingler[3,2], M. Johnson[4], L. Morrow[2], J. Saxton[2], *1. School of Social Work, University of Pittsburgh, Pittsburgh, Pennsylvania, 2. University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania, 3. University of Pittsburgh School of Nursing, Pittsburgh, Pennsylvania, 4. Bonacile Enterprises, Pittsburgh, Pennsylvania*

African Americans and rural-dwelling older adults have been historically underrepresented in both community and university-based memory research, leading to a lack of normative data for these populations. Yet, both African Americans and rural-dwelling individuals may represent a large percentage of those who develop dementia in later life. This study examines how older African Americans and rural-dwelling individuals conceptualize the reasons for study participation, particularly in mild cognitive impairment and dementia studies that employ recruitment programming to enhance study participation from these populations. Nine focus groups were held with African Americans and rural-dwelling older adults (N=55) who had participated in a community-based memory screening study. Forty-two percent of focus group participants had additionally participated in a comprehensive memory assessment at a university-based Alzheimer Disease Center. Content analysis was employed using an inductive method of coding. The benefits of research participation were a predominant theme in all focus groups and were comprised of benefits to the participant, the participant's family and society. Participation in memory research was believed to lead to an understanding of memory function. Findings revealed that transportation to university-based study appointments was a key element in sustaining research participation for rural-dwelling elders, while financial compensation was important to African American participants. In light of recruitment mandates from the NIH, enhancing awareness of research opportunities among these communities will be a gain for both the participant and the advancement of effective dementia assessment and treatment strategies in our increasingly diverse population.

### AFRICAN AMERICAN FEMALE ELDERS LIVED EXPERIENCE WITH DEPRESSION: "DEPRESSION AFFECTS THE WHOLE BODY."

E.C. Ward, *School of Nursing, University of Wisconsin-Madison, Madison, Wisconsin*

Background: Among older African American women, depression is a major public health concern. More research is needed to examine African American elders' experiences with depression to increase treatment-seeking behaviors. Research Question: 1) What are older African American Females experiences with late-life depression? Methods: Study Design: Phenomenology, which is a method of inquiry that seeks a deeper understanding of the meaning of everyday experiences or phenomenon. Using phenomenology our goal was to understand the meaning (essence) of living with depression for African American women over 60 years. Sample: 13 African American women, mean age 72 years. Data Collection: Individual face-to-face interviews. Primary interview question: "Tell me about your experiences with depression." Follow-up questions were formulated based on responses to the primary interview question. Data Analysis: Analyzed each transcription separately and identified salient themes that appeared to capture participants' experiences with depression. Later analyzed all themes to identify areas where themes converged showing commonality of experiences. Results: The women made meaning (sense) of their depression by reflecting on causal factors (death of children, family-related stressors, and poor physical health) and symptoms (loneliness, sleep difficulties, and anger). Quotes capturing concerns about symptoms included "depression affects the whole body; one day you are happy and the next day you are down, like on a cycle). Implications: When working with African American women experiencing late-life depression it is important to get their perspective on causal factors and symptoms as understanding their perspective helps to facilitate trust and provision of culturally-sensitive, patient-centered care to this group.

### SOCIAL SERVICE NEEDS AND PERCEPTIONS OF LOW-INCOME LATINOS

M. Kaesemeyer, T.K. Amador, *Health Services Administration Dept., Regis University, Denver, Colorado*

Introduction: Social services are critical for older adults as they transition through care along the aging continuum. Access to social services is particularly important for low-income, minority populations who routinely experience health, social, and economic disparities (Kamble & Boyd, 2008). As a result, this study focused on social service needs and perceptions of low-income Latinos. Literature Review: Latinos are the largest minority group in the United States who frequently experience difficulty accessing social services due to language, cultural misunderstandings, discrimination, legal status, stigma, and other barriers (Ku, 2007).Methodology: Data were obtained through three focus group interviews in this qualitative study (Kaesemeyer, 2009). Seventy-five percent of participants (nine of twelve) were recruited from a community center's senior program. The focus group interviews were taped, transcribed, and analyzed utilizing content analysis to organize data into themes. Results: Central themes included challenges with accessing social services, negative emotions related to these challenges, and confusion around eligibility criteria (Kaesemeyer, 2009). Difficulty accessing social services was the most commonly discussed issue among these low-income Latinos. Words describing negative emotions of participants included frustration, disrespect, and sadness. Finally, low-income Latinos in this study perceived eligibility criteria to be inconsistent among providers, especially with regard to finances. Conclusions: Low-income Latinos encountered difficulty accessing social services and experienced a range of negative emotions as a result. It is clear that low-income Latinos in this study needed additional education and support to understand and access the services for which they are eligible. References: Kaesemeyer, M. (2009). Social service needs and perceptions of low-income Latinos in metro Denver. Unpublished master's thesis, Regis University, Denver. Kamble, S., & Boyd, A.S. (2008). Health disparities and social determinants of health among African-American women undergoing percutaneous coronary interventions (PCI). Journal of Cultural Diversity, 15(3), 132-142. Ku, L. (2007). Improving health insurance and access to care for children in immigrant families. Ambulatory Pediatrics, 7(6), 412-420.

### CULTURAL PERCEPTION OF ILLNESS

H. Ulatowska, B. Reyes, T. Santos, R. Varindani, *University of Texas at Dallas, Dallas, Texas*

When an individual becomes ill, he develops a need to make sense of his illness. In doing so, he links his personal life event to the bigger social environment in which he lives (Bury, 2001). From a clinical standpoint, illness narratives are of great value, in that, narratives bridge the gap between the person telling the illness and the listener (Charon, 2001). This value is further highlighted when dealing with individuals from different cultural backgrounds. The clinician is faced with the challenge of not only understanding the illness from the person's perspective, but also considering the cultural elements which define the individual and are vital to patient-doctor relationships. Given the importance of cultural sensitivity in medicine, this study deals with illness stories of individuals from four different cultural groups, namely: Caucasian Americans, Hispanic Americans, Filipino Americans and Indian Americans. It identifies common themes in illness stories, such as the vulnerability one experiences in illness and the importance of support structures (family/friends) to help cope with illness. The study also recognizes unique perspectives which are inherent in one's culture, such as the acceptance of one's condition, the importance of religion and the value of close family ties to name a few. The cultural perceptions of the roles of the people appearing in the illness narratives such as doctors, family members and friends are discussed.

### AGE, GENDER, AND ETHNIC DIFFERENCES IN DEPRESSION AND TRAIT ANXIETY AMONG DIFFERENT PRISON POPULATIONS

A. Begovic-Juhant, E.L. Collins, S. Bäck, *Health Sciences, Cleveland State University, Cleveland, Ohio*

This research examined age, gender, and ethnic differences in trait anxiety and depression among prison populations. Participants comprised of 140 males and females aged 25 to 81. Researchers submitted criteria for participation to the Ohio Department of Rehabilitation and Correction's (ODRC) office of Human Research. Inmates were randomly selected from four correctional institutions. They completed a semi-structured questionnaire consisting of demographics, established measures of depression and trait anxiety, and open ended questions related to health, religiosity, family, and social support. To examine age (young, middle age, and older adults), gender, and ethnicity differences in trait anxiety and depression, a MANOVA was conducted. The results revealed no significant gender and ethnic differences in trait anxiety and depression. There were no significant age differences in depression. When the younger group was excluded, the results were statistically significant F(1, 124) = 4.28, p = .04); older adults as opposed to middle aged adults reported significantly lower levels of depression (M = 17.05, SD = 11.58; M = 22.00, SD = 12.77 respectively). Significant age differences existed in trait anxiety F(2, 135) = 3.90, p = .02. Older adults in contrast to middle aged adults reported significantly lower scores on trait anxiety (M = 38.64, SD = 13.67; M = 45.44, SD = 13.01 respectively). In summary, of three age groups, older inmates scored lowest on trait anxiety and depression. This suggests that there are some underlying factors outside of ethnicity and gender, which contributed to the decreased levels of trait anxiety and depression.

## SUCCESSFUL AGING THROUGH THE EYES OF ALASKA NATIVES.' WHAT IT MEANS TO BE AN ELDER IN SOUTHWEST ALASKA

J. Lewis, *Alaska Native Studies, University of Alaska Fairbanks, Fairbanks, Alaska*

Alaska Natives view aging from a holistic perspective, an approach not typically found in the existing literature on successful aging. There is little research on Alaska Native (AN) Elders and how they subjectively define a successful older age. The lack of a culturally specific definition often results in the use of a generic definition that portrays AN Elders as aging less successfully than their non-Native counterparts. This research explores the concept of successful aging from an AN perspective and what it means to age well in AN communities. This study highlights four domains of successful aging, or “Eldership”: emotion, spirituality, community engagement, and physical health. One aspect of successful aging seen in each of these four domains is optimism, or having a positive outlook on life. These four domains serve as the foundation of how communities define who is an Elder and what is important when considering whether someone has aged successfully or not. Research findings also indicate that aging successfully is based on local understandings about personal responsibility and making the conscious decision to live a clean and healthy life. Most Elders stated that Elder status is not determined by reaching a certain age (e.g., 65 years), but instead is designated when an individual has demonstrated wisdom because of the experiences he or she has gained throughout life. This research seeks to inform future studies on rural aging that will prioritize the perspectives of Elders to impact positively on the delivery of health care services and programs in rural Alaska.

## GERIATRIC CONDITIONS IN OLDER HOMELESS ADULTS

R. Brown[1,2], M. Bharel[3,4], S. Mitchell[2,1], *1. Division of Gerontology, Beth Israel Deaconess Medical Center, Boston, Massachusetts, 2. Hebrew SeniorLife Institute for Aging Research, Roslindale, Massachusetts, 3. Boston Healthcare for the Homeless Program, Boston, Massachusetts, 4. Section of General Internal Medicine, Boston Medical Center, Boston, Massachusetts*

Background: The average age of the US homeless population is increasing. One-third of homeless adults are currently age 50 and older, increased from 11% in the early 1990s. The prevalence of geriatric syndromes in homeless adults age ≥50 has not been examined. Methods: Data were derived from an ongoing 12-month prospective cohort study of 250 homeless persons age ≥50 recruited from 6 large homeless shelters in Boston. This report describes demographics and geriatric syndromes from the first N=69 subjects recruited beginning January 25, 2010. Cognitive impairment was defined as MMSE ≤21, <23, or <24 (8th grade, high school, college education) or Trail Making Test Part B (TMT-B) >1.5 standard deviations (SDs) above population-based norms; hearing impairment as self-reported hearing impairment or inability to identify ≥50% of whispered stimuli in either ear; visual impairment as self-reported visual impairment or best-corrected vision <20/40 on Snellen chart; urinary incontinence as International Consultation on Incontinence Questionnaire score ≥1; and depression as PHQ-9 score ≥10. Results: The mean (SD) age of the sample was 56.5 (5.1) years. Six percent were women and 43% were African-American. Geriatric syndromes were common, including cognitive impairment (7.3% on MMSE (mean (SD) 27.1 (2.4)) and 69.7% on TMT-B (mean (SD) 144.7 (74.6)); hearing impairment (46.4%); visual impairment (52.2%); urinary incontinence (58%); and depression (46.4%). Conclusions: Potentially treatable geriatric syndromes are common in older homeless adults. Knowledge of the prevalence of geriatric syndromes is a necessary first step towards understanding the health problems facing this growing segment of underserved older Americans.

## SOCIOECONOMIC STATUS, PREVENTABLE DEATHS, AND THE LAUNCHING OF NATIONAL HEALTH INSURANCE IN TAIWAN

H. Tung, *Healthcare Administration, Asia University, Wufeng, Taichung, Taiwan*

Link and Phelan proposed a “fundamental causes” theory to explain the persistence of the association between socioeconomic status (SES) and health outcomes. People with higher SES status have better resources that can be used in different ways in different situations to avoid risks for disease and death, so that stronger SES gradients in mortality should be observed for causes of death that are highly preventable (effective measures of prevention or treatment are available) and weaker associations between SES and low-preventability causes of death. Adopting the methods developed by Phelan and her colleagues, we examined this theory with data from a longitudinal survey of elders in Taiwan. We also examined whether the launching of Taiwan’s National Health Insurance (NHI) in 1995 has contributed to narrowing the SES gradients in mortality. Survival status and causes of death were obtained from the Death Certificates managed by the Department of Health. SES status was measured as the elders’ educational attainment and income. Proportional hazard models were conducted for the before- (1989 through 1995) and after-NHI (1996 through 2003) follow-up periods. Results showed that, there were 549 high- and 190 low-preventability deaths during the before-NHI period. Stronger associations were observed between SES measures and mortality for high-preventability causes of death. For the after-NHI period, there were 816 high- and 297 low-preventability deaths. Again, stronger associations were seen between SES measures and high-preventability deaths. Plus, it seems the launching of NHI has played a limited role in narrowing SES gradients in mortality from the high-preventability causes.

## RACIAL AND ETHNIC DIFFERENCES IN SELF-RATED HEALTH IN LATE ADULTHOOD: A LONGITUDINAL ASSESSMENT

K. Kwag, Y. Jang, D.A. Chiriboga, *Aging and Mental Health Disparities, University of South Florida, Tampa, Florida*

The objective of this study was to examine racial and ethnic differences in the baseline level and change of trajectories in self-rated health (SRH) in late adulthood. The data for this study come from 5 waves of the Health and Retirement Study (N = 5,710 individuals aged 65 and older), univariate latent growth curves (LGCs) with the baseline level and change as latent constructs were estimated. The findings demonstrated that both Hispanic and Black older adults reported lower baseline levels but slower decrease of SRH than their non-Hispanic White counterparts, showing an equalization of SRH over time. In particular, White older adults reported faster decline in SRH but still maintained better SRH than racial and ethnic minority older adults. In comparing Hispanic and Black older adults, Hispanics reported the lower baseline level and faster decline than Blacks. Our findings support the existence of the racial and ethnic health disparities over time.

### ROLE OF SOCIAL CONTEXT IN AFRICAN AMERICAN HEALTH: EVIDENCE FROM CAATSA AND CENSUS ZIPCODE LEVEL DATA

F. Yong[1], K.E. Whitfield[2], *1. East Carlina University, Greenville, North Carolina, 2. Duke University, Durham, North Carolina*

Race-ethnicity is often the central feature in the discussions of health disparities, yet how these social constructs interact with different social contexts is less known. To address this issue, this pilot study examined the extent to which contextual factors explain mental and physical health, through traditionally studied individual factors. The contextual factors include both macro and mezzo level factors. Macro level factors include zipcode level socioeconomic characteristics (Zip-level-SES). They were extracted from Census 2000 summary file 3. Mezzo factors (family income, household structure, and social support), individual factors (blood pressure, digital span, life satisfaction, body mass index, age, education, and gender), and outcome variables (depression, self-rated health, the count of chronic illnesses) were from the Carolina African-American Twin Study of Aging (CAATSA). Zip-level-SES was combined with a data set from CAATSA (N=556; age range 22~88). The results show that depression ($p<.001$) and self-rated health ($p<.001$) are strongly explained by Zip-level-SES. The count of chronic illnesses ($p<.001$), by contrast, is explained by the individual factors. The unique findings are that the percentage of the white population living in a zipcode area is negatively associated with both depression ($p<.05$) and self-rated health ($p<.001$), and that family income ($p<.01$), rather than Zip-level-SES, is positively associated with all three outcome variables. These findings support "social stress models" and "social disorganization theory". We also highlight the importance of selecting a proper contextual level to explain individual health outcomes, suggesting that different contextual levels may have different influences on health.

## SESSION 140 (PAPER)

## EMOTIONAL REACTIVITY

### AGING AMPLIFIES THE EFFECT OF NEGATIVE AFFECT ON BEDTIME CORTISOL

J.R. Piazza[1], S.T. Charles[2], D. Almeida[1], R.S. Stawski[1], *1. Human Development and Family Studies, The Pennsylvania State University, University Park, Pennsylvania, 2. University of California, Irvine, Irvine, California*

The current study examined the association between negative affect (NA) and bedtime cortisol among people who participated in the National Study of Daily Experiences (NSDE), which is part of the Midlife Development in the United States (MIDUS) Survey. Participants (N = 2,022) completed a series of 8 consecutive nightly interviews, during which they reported the emotions they experienced over the course of the day. Of these participants, 86% provided 4 saliva samples (upon waking, 30 minutes after waking, before lunch and before bed) on 4 of the interview days. Trait and state NA were associated, such that on days people experienced higher levels of state NA, those who also scored high on trait NA had elevated bedtime cortisol levels. In addition, between-person analyses indicated that bedtime cortisol levels were elevated among people reporting higher levels of both state and trait NA. Both between- and within-person associations were most pronounced among older adults, demonstrating that NA may be more physiologically costly during later life. Findings will be discussed within the framework of the Theory of Strength and Vulnerability Integration (SAVI).

### EMOTIONAL & STRESS REACTIVITY IN DAILY LIFE ACROSS THE LIFESPAN

S. Scott, F. Blanchard-Fields, M. Sliwinski, *Georgia Institute of Technology, Atlanta, Georgia*

The link between the experience of stressors in daily life and emotional reactivity is of interest across the lifespan. This relationship may reflect two different effects: emotional reactivity (stress producing negative emotions) and stress reactivity (negative emotions predicting stress exposure or severity). Both types of reactivity were examined using lagged Multi-Level Models to predict subsequent stress from current negative affect and vice versa. Young, middle, and older adults (total N = 180) reported disruptive events and emotions 5 times daily in this 10 day time-sampling study. Across the study younger adults reported the highest levels of negative affect whereas stress severity was similar across age groups. Age differences in the results of emotional and stress reactivity analyses suggest middle aged adults may be particularly at-risk for lingering effects of disruptions and negative emotions. For the question of emotional reactivity, for middle aged adults reporting more severe disruptions predicted experience of negative emotions at the next survey that day; however, this lagged relationship between stress severity and later emotional reactions did not hold for neither younger or older adults. Examining the question of stress reactivity, previous level of negative affect was related to increased likelihood of reporting more severe disruptions at the next survey for middle aged adults. This relationship between negative affect and subsequent stress severity was weaker for older adults and not significant in young adults. Together, results indicate that the relationship between daily events and emotions is not necessarily unidirectional and varies across the lifespan.

### ARE INTRAINDIVIDUAL DIFFERENCES IN THE DYNAMICS OF NEGATIVE AFFECT AND STRESS CONSISTENT?

P.R. Deboeck[1], C.S. Bergeman[2], M.A. Montpetit[3], S.M. Boker[4], *1. Univeristy of Kansas, Lawrence, Kansas, 2. University of Notre Dame, Notre Dame, Indiana, 3. Illinoise Wesleyan University, Bloomington, Illinois, 4. University of Virginia, Charlottesville, Virginia*

With the collection of intensive individual measurements, novel information is being garnered about how older adults handle stressors in their daily lives. One individual characteristic that might be of particular importance is the extent to which changes in daily stress are related to, or produce, changes in negative affect. Of greater interest is the extent to which these relations are consistent over much of the lifespan or are particularly mutable as people adapt to their changing environments. This study examines a sample of over 300 older adults from the Notre Dame Study of Health and Well-being. As part of a larger study, older adults were asked to complete two series of 56-day measurements collected two years apart. These daily measurements include the Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988), and the Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983). Using latent differential equation modeling, a dynamical systems model is fit to the daily negative and stress self-reports. The model allows each individual to have his/her own parameters, and these parameters are estimated separately for each of the two years in which the daily measurements were collected. Correlations between the individual estimates of dynamical parameters are then examined. In particular, focus will be placed on the coupling between negative affect and stress. We will address whether over the course of two years, the individual estimates for the effect of negative affect on stress are highly correlated.

### DAILY SPIRITUAL EXPERIENCES: A BUFFER AGAINST THE EFFECT OF NEGATIVE LIFE EVENTS ON MOOD?

B. Jackson, C.S. Bergeman, *University of Notre Dame, Notre Dame, Indiana*

On the global level, spiritual experiences have been shown to buffer against the negative effects of life challenges on well-being, but global analyses do not necessarily capture the daily processes at work. The present project examined the daily associations between Negative Life Events (NLE), Daily Spiritual Experiences (DSE), and Mood (Positive and Negative Affect) within a stress-and-coping framework, especially focusing on the moderating effect of DSE on the deleterious impact of a given day's NLE on that day's Mood. A secondary question was whether between-person differences in global levels of Religious Practices, Religious Belief, and Spiritual Experiences impact these daily relationships. The sample consisted of 274 individuals from the later life cohort (> 60 years) of the Notre Dame Study of Health and Well-Being who completed both daily diaries (56 days) and global assessments in Year 3 of data collection. Multilevel modeling analyses tested both the within-person daily effects (Level 1) and the between-person global effects (Level 2). Results for Level 1 showed daily NLE to be positively related to NA and negatively related to PA, whereas DSE was positively associated with PA and negatively with NA; the daily interaction between NLE and DSE was significant for NA but not for PA. Results for Level 2 revealed that only global Religious Practices significantly predict the strength of the buffering effect for DSE on NA. These findings demonstrate the efficacy of daily spiritual experience as a coping mechanism in the face of stressors encountered in everyday life.

## SESSION 145 (SYMPOSIUM)

### FINANCIAL GERONTOLOGY: FROM RISK TOLERANCE TO CAPACITY AND VICTIMIZATION

Chair: *P.A. Lichtenberg, Wayne State University, Detroit, Michigan*
Discussant: *J.I. Wassel, University of North Carolina at Greensboro, Greensboro, North Carolina*

The links between aging, finances and health are becoming ever clearer, particularly with the recent economic downturn. Future older adults will be facing even more challenges to their economic security in the next few decades. Financial planner and gerontologist Mr. Donald Haas will present on research examining financial management across time by 400 individuals. These revealed improper and harmful management with misunderstanding of fundamental issues of risk tolerance and asset allocation. Drs. Karen Roberto and Peter Lichtenberg will present on different aspects of a growing phenomenon; financial victimization of older adults. Dr. Roberto will present data taken from national media coverage of financial issues of older adults. Dr. Lichtenberg will present from a national and two local urban data sets on prevalence of financial victimization and its correlates. Finally, Dr. Marson will present on issues of financial capacity and capacity assessment among those suffering from Parkinson's disease. Dr. Neal Cutler, one of the pioneers of creating the sub-field of financial gerontology will be the discussant. Thus from perspectives of financial planning to neuropsychology, aging and the media and health disparities this symposium is designed to bring together various aspects of financial gerontology. By bringing together research in the areas of financial management, capacity and victimization, this symposium should bring attention to the growing need to examine diverse financial issues in our expanding population of older adults.

### FINANCIAL SATISFACTION AND FINANCIAL VICTIMIZATION: PREVALENCE AND CORRELATES

P.A. Lichtenberg, *Wayne State University, Detroit, Michigan*

Financial victimization of older adults is increasing at an alarming rate. This presentation will focus on the prevalence of financial victimization and its demographic, health and financial correlates. Three samples were utilized; a nationally representative sample from the 2008 Psychosocial Questionnaire of the Health and Retirement Survey (n=7000), and two urban samples made up of largely African American older adults. Nationally, the prevalence of financial victimization across a 5-year period was 3.3%. This correlated with age (being in young old group), and with a measure of disability (increased victimization with higher rate of disability) as well as with financial satisfaction. The urban samples (n=555 and n=123) reported 3-4 times higher rates of victimization (10-12% prevalence rates), and the correlates were similar to the national sample with age and health as well as financial satisfaction being related to victimization.

### IMPAIRED FINANCIAL CAPACITY IN PARKINSON'S DISEASE PATIENTS WITH MILD COGNITIVE IMPAIRMENT AND DEMENTIA

D. Marson[1,2], R.C. Martin[1,2], K. Triebel[1,2], J. Hill[3], H. Griffith[1,2,3], A. Nicholas[1,2,4], R. Watts[1,2], N. Stover[1,2], *1. Department of Neurology, University of Alabama at Birmingham, Birmingham, Alabama, 2. Alzheimer's Disease Research Center, University of Alabama at Birmingham, Birmingham, Alabama, 3. Department of Psychology, University of Alabama at Birmingham, Birmingham, Alabama, 4. Veterans Administration Medical Center, Birmingham, Alabama*

Purpose: This study investigated the financial capacity of cognitively impaired patients with idiopathic Parkinson's disease (PD). Methods: Participants consisted of 20 older controls and 35 PD patients who met criteria for either mild cognitive impairment (PD-MCI, n=18) or PD dementia (PDD, n=17). Subjects completed a standardized performance measure of financial skills (Financial Capacity Instrument; FCI). Group performance scores, and individual capacity outcomes (capable, marginally capable, incapable), were identified for each FCI domain and for FCI total score. Results: Relative to controls, PD-MCI patients demonstrated impairment on FCI total score and FCI domains involving complex mental calculations (Basic Monetary Skills, Financial Concepts, and Investment Decisions). PDD patients demonstrated near global impairment on the FCI variables. Approximately 33% of PD-MCI patients and 80% of PDD patients were classified as either marginally capable or incapable on the FCI variables. Conclusion: Impairment of financial capacity is present in PD-MCI and is advanced/global in PDD.

### FINANCIAL ABUSE IN THE HEADLINES: PREVALENCE OF NATIONAL NEWSFEEDS

K.A. Roberto[1], P.B. Teaster[2], J. Migliaccio[3], R. Blancato[4], S. Lawrence[2], *1. Center for Gerontology, Virginia Tech, Blacksburg, Virginia, 2. University of Kentucky, Lexington, Kentucky, 3. MetLife Mature Market Institute, Westport, Connecticut, 4. Matz, Blancato & Associates, Inc., Washington, District of Columbia*

Financial elder abuse, the unauthorized use or illegal taking of funds or property of older adults, is under-recognized, under-reported, and under-prosecuted. We analyzed 266 media reports on financial abuse published from April-June 2008 to identify the type, extent, and implications of the abuse. Information extracted included characteristics of the victims and perpetrators, type, frequency, and location of abuse, amount stolen, and outcomes. Overall, the media reports revealed a total of approximately $396,654,700 in losses. Business and industry related financial abuse resulted in the highest losses to victims followed by Medicare/Medicaid fraud and that perpetrated by family, friends or strangers. However family members, friends, neighbors, and caregivers were most frequently involved as perpetrators of elder financial abuse followed by businesses of varying kinds and then strangers. Findings put a face on financial elder abuse and provided real-time information on a growing problem found in every community and among all social strata.

### THE CHANGING FINANCIAL NEEDS OF INDIVIDUALS AS THEY TRANSITION THROUGH THE DECADES OF THEIR LIVES

P.A. Lichtenberg, D. Haas, *Wayne State University, Detroit, Michigan*

Financial Gerontology is a relatively new discipline developed over the past 20 years, primarily by Neal E. Cutler, Ph.D. It is the study of financial aging over one's entire life. This longevity study of over 400 individuals, over periods of time ranging from 5 to 45 years, revealed improper and harmful financial management starting with misunderstood financial risk tolerance, asset allocation based on improper concepts, and investing based purely on age. The proper management of each component of financial aging needs understanding and periodic adjustments to reflect the changing resources, needs, and beliefs at each stage of life as well as understanding that the economics of an individual or a whole country is based on as few as one simple economic factor—consumerism, which controls 70%+ of an economy. As we consume more, the economy improves and visa-versa. Combine this with the demographics of the population, and one has a long-term insight to where the future economic trends will emerge and how long the economy will continue in that direction.

# SESSION 150 (POSTER)

## HEALTH CARE AND REHABILITATION

### COGNITION AND FUNCTIONAL RECOVERY IN OLDER ADULTS WITH HIP FRACTURE: IMPLICATIONS FOR LONG-TERM CARE

Y. Young, K. Xiong, R. Pruzek, *State University of New York at Albany, Rensselaer, New York*

Objective. To compare functional recovery patterns of cognitively impaired and non-impaired older adults who had hip fracture surgeries, and to identify associated long-term care needs. Methods. Longitudinal study (n=254). Data were collected within 72 hours of admission to and prior to discharge from the post-acute rehabilitation facilities and at 2-, 6-, and 12-months following post-acute rehabilitation discharge. Functional Independence Measures (FIM) was used to assess functional recovery. Mini-mental status examination (MMSE) was used to gauge cognitive function. Mixed-effects models were performed to compare differences of FIM functional recovery patterns between groups while adjusting for potential confounders. Results: Multivariate results indicate patients with impaired cognition had notably different functional recovery patterns and significantly worse overall FIM scores ($p<.001$) than their counterpart. For locomotion function at one year, following post-acute rehabilitation discharge, patients with intact cognition needed supervision (FIM mean = 5.6), while patients with impaired cognition needed 50% human assistance (FIM mean = 3.4). In addition to needing locomotion assistance, cognitively-impaired patients also required 25% human assistance in transfers (FIM mean = 4.55), 25% in self-care (FIM mean = 4.92), and 25% in sphincter control. Conclusion: Cognitively-impaired patients were not able to retain rehabilitation gains in locomotion, transfers, self-care, and sphincter control at one year following post-acute rehabilitation discharge, and they still required human assistance to stay in their homes within the community. To prevent or delay nursing home entry, appropriate long-term care planning and social support to caregivers are needed for cognitively-impaired hip fracture patients.

### PROXY AND CAREGIVING PREFERENCES IN ADVANCE CARE PLANNING: COMPARISONS ACROSS AGE, GENDER, AND SEXUAL ORIENTATION

A.K. Zaleta, B. Carpenter, *Psychology, Washington University, Saint Louis, Missouri*

Introduction. One component of advance care planning is choosing decisional proxies and caregivers for the future. In this study we examined how choices for proxies and caregivers differ across demographic groups. Methods. We surveyed 269 individuals, stratified by age, gender, and sexual orientation. Choosing from a list of family and friends, respondents rated who they would ideally like to make decisions for them in medical and financial matters, and who they would want to provide daily care to them in the future. Results. Overall, for decisional proxies and caregiving, spouses/partners were consistently ranked highest, followed by parents and children, then siblings, and finally, friends. Multivariate analyses of variance revealed that some rankings varied based on age and sexual orientation. Spouses/partners were most highly ranked across all groups, but differences were found in the remaining rankings. Younger adults, regardless of sexual orientation, identified parents as their second choice for proxies and caregivers. Friends were ranked as the second choice for caregiving by middle aged and older but not younger homosexuals. In contrast, heterosexual participants consistently ranked children over friends regardless of age; in fact, friends were ranked as the least preferred by heterosexuals. Summary. Spouses/partners were universally identified as the first choice for decisional proxies and caregivers. However, spouses/partners may not always be available to fulfill this role. Rankings of nonpartner proxies/caregivers varied by age and sexual orientation, suggesting that no one “rule of thumb” is sufficient to determine order of preference for proxies and caregivers.

### UNDERSTANDING DISCREPANCY IN VALUES BETWEEN CAREGIVERS AND INDIVIDUALS WITH MILD DEMENTIA

A.M. Reamy[1], K. Kim[1], S.H. Zarit[1], C.J. Whitlatch[2], *1. Human Development and Family Studies, The Pennsylvania State University, State College, Pennsylvania, 2. The Benjamin Rose Institute, Cleveland, Ohio*

Individuals with dementia (IWDs), whose symptoms are mild, are able to discuss their values and preferences for prospective care. Prior research suggests that discrepancies exist between the care values held by IWDs and what caregivers perceive these preferences to be. Using a sample of 266 dyads, where one person has early, mild dementia and the other is providing assistance and supervision, we considered the degree of agreement within the dyad and sources of disagreement for 5 types of values related to care. Using multilevel models, we found that caregivers and IWDs differed systematically on reports of values, with caregivers underestimating the IWD’s values on all five value categories considered (autonomy, burden, control, family, and safety). Race and cognitive functioning of the IWD were associated with the discrepancy of reported values. Discrepancies were further associated with the extent to which caregivers believed the IWD had involvement in care decisions and how much the caregiver took into account the IWD’s best interests when making care decisions. The results suggest that many caregivers do not have an accurate depiction of the IWD’s values. These findings indicate a need to investigate further both the predictors and the outcomes of such divergence to understand better the relationship between caregivers and people with early-stage dementia, and to inform intervention for this vulnerable subset of elder individuals.

### THE IMPORTANCE OF PROVIDER-CLIENT RACIAL CONCORDANCE IN THE HEALTHCARE ARENA: THE CLIENT PERSPECTIVE

W.J. Puentes, *School of Nursing, University of Medicine & Dentistry of New Jersey, Stratford, New Jersey*

It has been suggested that healthcare provider-consumer racial, ethnic and language concordance is linked to with higher patient satisfaction and better health care processes. The investigator explored this issue in follow-up interviews of a pilot study designed to test the efficacy of a psychosocial anxiety management intervention for individuals diagnosed with early Alzheimer’s disease. The intervention was based on the use of reminiscence. The investigator, who is white, asked the study participants and their caregivers (N=10), who were African-American, to describe their impressions and feelings regarding the interaction between themselves and the investigator. Subjects and their caregivers reported that having a white investigator coming into their homes in exclusively African-American urban communities initially was viewed with suspicion. As they began to tell their stories and engage with the investigator, they reported that issues related to racial discordance were no longer as important and that the empathy and interest exhibited by the investigator was a more significant influence on the interpersonal interaction. Several subjects reported that they were more comfortable interacting with the investigator than with their African-American caregivers in other settings. This was due to the dynamic of other caregivers assuming they understood the subjects' healthcare and personal needs because of racial concordance while the investigator took the time to understand their lived experience. Implications of these findings for clinical practice and future research are discussed.

### NURSES' PERCEPTIONS AND EXPERIENCES AT DAYCARE FOR ELDERLY WITH STROKE

Y. Park, *Nursing, Seoul National University, Seoul, Republic of Korea*

Purpose: While adult daycare (ADC) is considered a culturally acceptable model of long-term care in countries with a tradition of family-oriented caregiving, Korea is struggling as soaring needs for ADC outpace qualified staff and regulatory systems. This study aimed to describe Korean daycare nurses' perceptions of key daycare services and their working experiences with stroke patients and their families. Design: A mixed-method design was used. First, we conducted a cross-sectional descriptive survey to assess Korean nurses' perceptions about the importance of daycare services. Then focus group interviews were performed to explore the nurses' experiences at ADC. Methods: Seventy out of a total of 96 nurses at ADC specialized in the care of stroke patients responded the survey (response rate=72.9%) and rated the importance of 11 key daycare service items on a visual analogue scale (0-10). Using a purposive sampling design, 16 eligible nurses were interviewed as a group. The qualitative data from focus group interviews were analyzed using thematic analysis to classify common themes into larger categories. Findings: Survey data revealed that the nurses perceived 'skilled nursing services,' 'functional recovery,' and 'general health counseling' as the most important daycare service areas. Focus group data resulted in five themes: 'Providing the same, standard care,' 'Lack of partnership with family caregivers,' 'Conflict with other staff: ambiguity of the roles and tasks,' 'Lack of proper education and training,' and 'Need for quality control and monitoring.' Conclusions: Daycare nurses fully recognized the importance of direct nursing care services that are keys to adequate recovery and rehabilitation of older patients with stroke. However, they experienced substantial barriers to carrying out these services due to role confusion, insufficient number of qualified nursing staff, and lack of partnership with family caregivers. Clinical relevance: The results provide insight into changing health care policy to support daycare nurses in a country with limited resources and regulations. Strategies such as better quality control and monitoring of daycare services, provision of continuing education, and prioritizing key services should be considered as a way to address challenges experienced by daycare nurses.

### THE RELATIONSHIP OF MEDICATION TO LIFESTYLE TREATMENT ADHERENCE FACTORS IN HYPERTENSIVE PATIENTS

A.B. Berkowitz, L. Phillips, H. Leventhal, E.A. Leventhal, *Institute for Health, Health Care Policy, and Aging Research. Center for the Study of Health Beliefs and Behaviors., Rutgers University, New Brunswick, New Jersey*

The present study assessed if the factors involved in medication and lifestyle (diet, exercise, other) adherence are distinct from each other in a sample of hypertensive patients. Measures based off of the commonsense model of illness representations were used to determine the theoretical factors that are similarly/differentially important for medication compared to lifestyle-treatment adherence. Primary care patients (n = 105) with hypertension answered these items and others known to predict one type of adherence or the other, along with validated self-report measures of adherence. The predictive power of the items for each type of adherence (medication versus lifestyle-treatment) was assessed with correlations and regression. Medication and lifestyle-treatment adherence had zero correlation to each other, supporting the hypothesis that they are distinct constructs. Furthermore, the predictors of medication adherence (e.g., management of side-effects and treatment-related worry) were distinct from the predictors of lifestyle-treatment adherence (e.g., self-assessed health and illness-related worry).

### REGIONAL VARIATION IN RATES OF PREVENTABLE HOSPITALIZATION AMONG OLDER ADULTS IN BARBADOS

J. Bushelle-Edghill, J.N. Laditka, B.F. Ekezue, *College of Health and Human Services, University of North Carolina at Charlotte, Charlotte, North Carolina*

Hospitalization for ambulatory care sensitive conditions (ACSH), sometimes called potentially preventable hospitalization, has been used extensively to indicate access to primary health care of reasonable quality. Barbados is a developing nation with a comprehensive health care system that should enable access and produce relatively low rates of ACSH. No study has examined ACSH in Barbados. We calculated the ACSH rate for individuals ages 50+, and regional ACSH variation. Using 2002-2008 data (n=76,573) from Barbados, we investigated the five most common ACSH diagnoses, and rates of these hospitalizations for Barbados' 11 parishes. Of the Barbadian population ages 50+, 9.5% had ACSH admissions, accounting for 33% of all hospitalizations. The five most common diagnoses were diabetes & related amputations (8.4%), asthma (6.2%), hypertension (5.9%), CHF (5.1%), and urinary tract infection (5.0%). Men had higher rates, 99.34 per 1,000 population, than women, 90.4 ($p<0.0001$). Across the parishes, the rate of ACSH was highest for St. Michael (116.7 per 1000 population), St. Joseph (101.1), and St. John (98.8), with St. Peter, St. George and St. Thomas parishes having similar rates (94.0). Although Barbados has a comprehensive health care system, significant regional variation exists in ASCH rates among older adults, and a substantial proportion of hospitalizations are ACSH. This result suggests a notable opportunity for enhanced primary health care and cost savings. It will be useful for research to evaluate how the regional distribution of health care resources affects accessibility and quality of primary health care, and consequently ACSH.

### COGNITIVE STRATEGIES AND CARES TOWARDS ELDERLY WITH FUNCTIONAL INCONTINENCE AFTER BRAIN INJURY

M. Nagashima[1], C. Seki[1], A. Katada[2], *1. Tsukuba International University, Tsuchiura-shi, Ibaraki-ken, Japan, 2. Thubu Gakuin University, Seki-shi, Gifu-ken, Japan*

Purpose: To clarify cognitive strategies and common cares towards 20 elderly post brain injury patients whose functional incontinence disappeared after administrating Incontinence Care Programs (ICPs). Methods: Participants were 17 men and 3 women with normal bladder functions. Their average age was 66.4 (SD 4.9) years old, 70% of them were diagnosed cerebral infarction, 70% of them had left paralysis, and they had multiple and higher cortical dysfunctions. Subjective data was cognitive strategies after administrating ICPs for the participants and common characteristics of cares done by primary nurses considering the age of participants. Results: Fourteen participants eliminated their functional incontinence, 5 improved, one had no changes and no one had marked deterioration. Three major cognitive strategies were extracted: control for information input, control for learning methods, control for reactions and enforcements. There were 5 categories in the control for information input: selecting methods for caution, adjusting amount and simplify information, selecting communication symbols, adjusting shape, color and types of information, and information to guide movements. There were 3 categories in the control for learning methods: adjusting practice orders, cues for urinating environments and for movements. There were 2 categories in the control for reactions and enforcements: admiration and selection of cost/token. Common cares done by primary nurses toward aged participants were fall prevention because of weakened muscle strength and depression because of lowered self-esteem. Conclusion: It was suggested that ICP s were effective for elderly patients with functional incontinence and normal bladder functions.

### A COMPARISON OF ANIMAL-ASSISTED THERAPY AND ANIMAL-ASSISTED ACTIVITIES WITH DOGS IN SWEDISH RESIDENTIAL CARE

C. Nord*, Linköping university, Norrköping, Sweden*

This Poster Aims at Comparing Goal-oriented Rehabilitation Work with Dogs and Activities with Dogs Performed Without Explicit Therapeutic Goals. It is a Qualitative Research Project Based on Interviews with and Observations of Staff, as Well as Older People. The Results Presented Comes from an Evaluation of Two Assisted Living Facilities in Which Animal Assisted Therapy Had Been Used for Three Years. This Programme (AAT) Was Carried out with Trained Dogs on the Basis of Referrals Made by Occupational Therapists, Nurses, Medical Doctors and Physiotherapists. This Rehabilitative Work Was Compared to Situations in Assisted Living Facilities Where Dogs Were Used Primarily for Socialising Purposes (AAA). Preliminary Results Show That the Two Ways of Using Dogs Were Very Different in Certain Respects, Especially as to Their Therapeutic Ambitions, Even Though They Overlapped. The Variety of AAA Was Great. Ownership and Keeping of the Dog Varied. The Presence of Goals Also Varied. The Use of the Dogs Often Had a More or Less Explicit Aim to Increase Well-being and Social Skills Among the Residents. This Goal Made It Similar to the AAT Programme. Older People Who Encountered the Trained Dog in the AAT Programme Never Realized That They Were Actually Participating in a Rehabilitation Programme but Thought That the Purpose Was Amusement Alone. The Idea Was That the Older Person Would Participate More Voluntarily Because They Enjoyed Themselves. Preliminary Conclusions Are That the Range of Exercises with Dogs Has Great Potential and That AAA and AAT Can Be Mixed in New Fruitful Combinations.

### CONTENTS OF NIGHTSTANDS AMONG PATIENTS AT A REHABILITATION HOSPITAL

J. Brooks[1,2], S. Healy[2], M. Argoe[1], L. Smolentzov[1], A. Reis[2], I. Walker[1], K.E. Green[1], *1. Clemson University, Clemson, South Carolina, 2. Greenville Hospital System University Medical Center, Greenville, South Carolina*

Furniture available to patients in rehabilitation settings is limited. Typically, furniture utilized by the patients consists of the bed, the over-the-bed table and the nightstand. To begin to improve furniture design, this study sought to evaluate the contents of the over-the-bed table and nightstand for cognizant, functional patients in an inpatient rehabilitation setting. Locations, numbers and types of objects were recorded for 36 patients (18 males) with a mean age of 63.7 years (SD = 16.7 years). Patients in both private rooms (N = 21) and semi-private rooms (N = 15) participated. The patients' mean length of stay was 7.8 days with a maximum of 23 days. Over 750 individual items were recorded and grouped into 22 categories. The four most frequent categories were personal hygiene, food accessory, telephone, and water pitcher. Most items were located on the over-the-bed table followed by the top of the nightstand. Very few items were located in the nightstand drawers. If the drawers were used, it was typically only the top drawer. It appears that nightstand drawers may be functionally inaccessible for rehabilitation patients. New furniture designs may be able to increase patient independence and satisfaction.

### A PROFILE OF DIRECT CARE WORKERS FROM THE AMERICAN COMMUNITY SURVEY: CHANGES FROM 2000 THROUGH 2008

J. Deichert, K. Kosloski, L. Holley, *University of Nebraska at Omaha, Omaha, Nebraska*

The federal program for systems change encourages states to provide supports for chronically impaired older adults who wish to remain in the community rather than be institutionalized (Folkemer & Coleman, 2006). This movement has put increasing pressure on the supply of home care workers, where serious shortages already exist (U.S. DHHS, 2003). The goal of this study was to track changes in the population of direct care workers particularly home care workers that could affect supply, performance, and provide insights into potential recruitment and retention strategies of these individuals. Data were analyzed for eight waves of the American Community Survey (ACS), along with comparison data from the 2000 decennial census. The findings indicate that there have been substantial percentage increases in hospital aides (17.5%), and nursing home aides (26.3%); but the largest increase has occurred with home care aides (60.8%). Moreover, in 2000, the proportion of credentialed home care workers relative to uncredentialed workers approached 2 to 1. By 2008, the number of uncredentialed home care workers actually exceeded those credentialed, making them the second largest group of direct care workers. There also have been important changes in the characteristics of the home care workforce. For example, it is becoming more of a full-time workforce. Additionally, the proportion of home care workers for whom English is a second language and who are Hispanic continues to increase. Interestingly, the proportion of self-employed home care workers has been continually decreasing. Overall, these findings document the increasing importance of the home care workforce.

### WHAT PRECIPITATES ADMISSION TO SUBACUTE CARE?: DIAGNOSTIC VS. SUBJECTIVE REPORTS FROM PATIENTS

J.Y. Rodriguez, A. Horowitz, J.P. Reinhardt, K. Boerner, *Jewish Home Lifecare, NY, New York*

Admission to subacute units within long-term care facilities are typically precipitated by medical/rehab needs, but can be influenced by other life events as well. In this study, we compared the primary admitting medical diagnosis with the elder's self-reported life events prior to admission. A sample of 68 elders were interviewed within two weeks of their admission and data were also collected from medical records. Subjects had a mean age of 77, were predominately female (72%), White (67%), and lived in their own apartment/home before admission (93%). All patients reported some type of medical condition related to their admission. Also, 32% of the patients reported a major life event that was not medically related. Frequent medical conditions reported by the patients included surgical procedures (29%), falls (28%), cancer (15%) and stroke (10%). Concurrent reported life experiences included general physical decline (18%), death in support system (11%), aging (5%), and problems with housing (5%). About two-thirds (69%) of the patients self-reported a medical condition that corresponded and overlapped with the medical diagnosis from the medical record. Discrepancies included dissimilar accounts of medical conditions, such as pneumonia and surgery; meningitis and a seizure. While most patients focused on their current medical condition as their reason for admission into subacute rehabilitation, some of the more complex life experiences reported may also affect the recovery of some patients. Identifying and accounting for the medical and non-medical life experiences of subacute patients may be useful in developing a comprehensive care plan to assist with recovery.

## SESSION 155 (SYMPOSIUM)

### HEALTH DISPARITIES OVER THE LIFE COURSE

Chair: *E.K. Bozzelli, Miami University, Oxford, Ohio*

Whereas the life expectancy of the American population has continuously increased, health inequality has actually widened across different socio-demographic/economic groups. Addressing such existing health disparities is a public health priority of Healthy People 2010. Cumulative inequality (CI) theory holds that individuals who are in disadvantageous positions face greater health risks while those with advantage have more opportunities to improve/maintain health over the life course. Thus, studying the accumulation of inequality throughout the aging process and later life differences is of great interest. This symposium explores health disparities in light of CI theory and the Third Age. First, Shippee, Rinaldo, and Ferraro employ National Longitudinal Survey of Mature Women (NLSMW) data from 1967 to 2003 in discovering how perceptions of SES affect women's self-rated health throughout the life course. Second, Yamashita examines the disproportionate prevalence of type 2 diabetes across SES using nationally representative Behavioral Risk Factor Surveillance System (BRFSS) 2005 data. Third, Carr, Brown, and Lynch calculate how differences in the Third Age life expectancy vary in relation to SES, race, and gender based on National Health Interview Survey (NHIS) data, also from 2005. Finally, the Chair/Discussant will highlight each study's implications for future research and practice that are useful in addressing health inequality in the U.S. Taken together, these papers express how health disparities are experienced in different ways according to social context, education, resources (e.g., human agency), and genetic make-up.

### HEALTH CONSEQUENCES OF WOMEN'S SOCIOECONOMIC STATUS OVER THREE DECADES: TESTING CUMULATIVE INEQUALITY THEORY

T.P. Shippee, L.A. Rinaldo, K. Ferraro, *Purdue University, West Lafayette, Indiana*

Objectives: Drawing on cumulative inequality theory, this research examines how perceptions of socioeconomic status affect women's self-rated health over the life course. Particular emphasis is given to differences in the trajectories of Black and White women. Methods: Using data from the National Longitudinal Survey of Mature Women, we employ growth curve models to examine whether satisfaction with income influences women's health beyond objective measures of income, job type, and occupational prestige. Results: Satisfaction with income significantly predicts women's health over the life course, beyond the effects of objective measures of socioeconomic status. Effects differ by race: among White women, only satisfaction with income significantly predicts health; for Black women, both income satisfaction and objective measures have significant effects, but satisfaction remains a stronger predictor of health. Discussion: Findings indicate the importance of accounting for both perceived and objective trajectories in predicting health, and provide support for cumulative inequality theory.

### SOCIO-ECONOMIC DISPARITIES IN TYPE 2 DIABETES PREVALENCE AND DISEASE MANAGEMENT OUTCOMES IN OLDER POPULATIONS

T. Yamashita, *Miami University, Oxford, Ohio*

Whereas overwhelming evidence shows that socio-economic status (SES) predicts a variety of health outcomes, less is known about possible etiological explanations for pathways between SES and diabetes prevalence/management outcomes. Given the high prevalence of type 2 diabetes in older populations (23.1% in 2007) and challenging nature of management regimens, analyzing individuals with diabetes may provide useful insights for better understanding the possible mechanism of health disparities over the life course. This study examines older adults with type 2 diabetes in light of cumulative inequality theory using nationally representative BRFSS 2005 data. In accordance with a series of quantitative analyses, theoretical explanations (e.g., practical skills in diabetes management, community living environment) are evaluated. The presentation concludes with recommendations for future health disparity research, including suggestions for how SES measures can be refined.

### INEQUALITY IN THE THIRD AGE

D.C. Carr[1], J. Brown[2], S.M. Lynch[3], *1. Scripps Gerontology Center, Oxford, Ohio, 2. Miami University, Oxford, Ohio, 3. Princeton University, Princeton, New Jersey*

The emergence of the third age, a period occurring after retirement but prior to the onset of disability, has been described as a period of privilege whereby some individuals more than others are able to engage actively in society during later life. Although the average individual within the United States can expect to experience a third age, the amount of time one can expect to spend in this period varies. To more adequately understand inequalities related to the "active potential" of later life, this project uses life table analyses to calculate and examine differences in third age life expectancy (TALE) for individuals based on socioeconomic status, race and gender. We use the NHIS and vital statistics data and utilize a new Bayesian approach to life table construction that allows for the inclusion of survey-based covariates, a capability absent from traditional cross-sectional life table methods. Implications for theory and policy are discussed.

## SESSION 160 (PAPER)

## HISPANIC CAREGIVING

### EVALUATION OF A CULTURALLY APPROPRIATE, SPANISH LANGUAGE PROGRAM FOR CAREGIVERS OF PERSONS WITH ALZHEIMER'S DISEASE OR RELATED DEMENTIA

M. Talamantes[1,2], C.L. Alford[2], S. Oakes[2], *1. Our Lady of the Lake University, San Antonio, Texas, 2. University of Texas Health Science Center, San Antonio, Texas*

Cuidando con Respeto is a culturally appropriate, Spanish language, psychoeducational program for caregivers of family members with Alzheimer's disease or related dementia. This eight hour program, delivered in two sessions, is based on the Savvy Caregiver Program (Hepburn, Lewis, Sherman, & Tornatore, 2003). In adapting the course for a Spanish speaking population, our goal was to make the course culturally, linguistically, and educationally appropriate for Spanish speaking families. After successfully piloting the program (Oakes, Hepburn, Ross, Talamantes, & Espino, 2006), we planned and implemented a training process to prepare new course presenters with an emphasis on maintaining fidelity. These newly prepared trainers then presented the course twenty times to 294 caregivers over a period of eight months in the state of California. This paper reports on the dissemination process and a multi-faceted evaluation of the program. The course evaluation and open-ended telephone interviews conducted three to six months after the end of the course produced the strongest evaluation evidence, leading to the conclusion that the program was successful in teaching caregivers attitudes, knowledge, and skills that led to changes in caregiving practices.

### THE EFFECT OF ACCULTURATION AND MUTUALITY ON FAMILY LOYALTY AMONG MEXICAN AMERICAN FAMILY CAREGIVERS OF OLDER ADULTS

H.S. Kao[1], M.L. Lynn[2], *1. School of Nusing, The University of Texas at El Paso, El Paso, Texas, 2. University of North Carolina at Chapel Hill, Chapel Hill, North Carolina*

This study explores the relationships among cultural orientation, mutuality, and the expectations of family loyalty for Mexican American (MA) adult children in caregiving relationships with elderly relatives. Using Confirmatory Factor Analysis, data from a convenient sample of 192 MA adult family caregivers of community-dwelling older adults in El Paso, TX were analyzed. Cultural orientation was found to have minimal effect on family loyalty and no significant effect on mutuality. However, mutuality and family loyalty were found to have a strong relationship. The overall model was supported by the data. These findings provide a greater understanding of the proposed model for the expectations of family loyalty toward elderly relatives in the MA culture. While caregivers with a higher Mexican orientation tend to present higher expectations of family loyalty toward their elderly relatives than their Anglo orientation counterparts, it is mutuality, especially the interactions between the caregiving dyad (B = .09), which exhibits the most substantial effect on family loyalty. It thus appears that mutual exchanges between the caregiving dyad are better predictors of filial obligation than the caregivers' cultural orientation. In give-and-take family relationships, 'you reap what you sow' appears to be an idea that should be incorporated into research with Mexican American families. In addition to respecting traditional family mores, family care interventions for older adults in this population may well need to start with an understanding of the motivations that shape everyday caregiving activities.

### POSITIVE FEELINGS OF CAREGIVING AMONG LATINO ALZHEIMER'S FAMILY CAREGIVERS: THE ROLE OF SPIRITUALITY AND RELIGION

F. Sun, D. Hodge, *School of Social Work, ASU, Phoenix, Arizona*

Purpose: In light of the growing size and cultural distinctiveness of the Latino population, this study examined the role of spirituality and religion in relation to caregiving stressors and caregiving outcomes [i.e., positive aspects of caregiving (PAC)] among a sample of Latino Alzheimer's family caregivers. Methods: The study was conducted using baseline Latino participants (N=209) from the NIH-funded Resources for Enhancing Alzheimer's Caregiver Health II dataset. The sample (Mage=58, SD=13.7) was 82.3% female and 34.6% Cuban American, 21.6% Mexican heritage, 21.2 % Puerto Rican, and 22.5% other Latino. Guided by Pearlin and associate's model, we assessed objective stressors (e.g., care recipient ADL/IADL difficulties), subjective stressors (e.g., caregiver burden), and PAC. Spirituality/religion was indicated by frequency of prayer, church attendance, and religious coping. Covariates included caregiver socioeconomic status (SES), social support, years in the U.S., and caregiver country of origin. Results: To test the model, structural equation modeling (SEM) was used. A good model fit was achieved (CFI=.93, SRMR=.07, RMSEA=.06). The results suggest Cuban caregivers were less likely to engage in spirituality/religion than other Latino caregivers; participants with higher levels of spirituality/religion tended to have higher PAC; social support was positively related to PAC, while SES was inversely related to PAC. Implications: PAC is a salient construct among Latino caregivers. Facilitating spiritual/religious engagement and social support may help increase levels of PAC among Latino caregivers.

### DOES FAMILISM BUFFER OR EXACERBATE THE NEGATIVE IMPACT OF FAMILY CONFLICT ON HISPANIC CAREGIVERS?

S.S. Koerner, Y. Shirai, R. Pedroza, *Family Studies and Human Dev., University of Arizona, Tucson, Arizona*

Research repeatedly highlights the importance of family when Hispanic older adults are in need of care. Indeed, Hispanic family caregivers (HCs) hold stronger familism beliefs than their non-Hispanic White counterparts, are less likely to use professional services, and are more likely to share responsibilities with other family members. Despite the salient role of family in the Hispanic caregiving experience, no research studies have investigated the impact of family conflict/disagreement regarding care on the well-being of HCs. The current study used a daily diary design to examine: (a) the impact of family disagreement regarding care on the daily emotional/physical reactivity of HCs, and (b) the moderating role of familism - whether strong familism beliefs buffer or exacerbate the negative impact of family disagreement regarding care on the well-being of HCs. HCs of Mexican descent (N=67), reported their daily experiences (family disagreements regarding care, depressive symptoms, feelings of burden, physical health symptoms) on 8 survey days, and completed one familism scale (Sabogal et al., 1987). Multilevel modeling indicated that, on days when these HCs reported more than their usual number of family disagreements regarding care, they experienced decreases in well-being. Significant moderator effects indicated that the latter association was especially apparent for caregivers who strongly endorsed familism beliefs. Specifically, the experience of an additional family disagreement regarding care was more strongly associated with increased depressive symptoms (gamma11=.387, p<.01) and feelings of burden (gamma11=.167, p<.05) for HCs with stronger familism beliefs. Implications for further research and intervention will be discussed.

## SESSION 165 (SYMPOSIUM)

### NEIGHBORHOODS AND HEALTH: PUSHING THE BOUNDARIES

Chair: *R.A. Pruchno, New Jersey Institute for Successful Aging, University of Medicine & Dentistry School of Osteopathic Medicine, Stratford, New Jersey*
Discussant: *M.C. Fahs, Hunter College, New York, New York*

While there has been a surge of research devoted to examining the effects of neighborhood characteristics on the physical and mental health of older adults, most of these efforts have operationalized neighborhoods according to socioeconomic status, using rates of poverty, economic deprivation, and education as indicators. Yet there are a host of additional components of neighborhoods, including social vulnerability, wealth, violence, density, residential stability, the presence of physicians, supermarkets, bars and fast food establishments that may explain the mechanisms by which neighborhoods affect health. There are also questions about what constitutes a neighborhood and whether administratively defined geographic boundaries are meaningful to people. Operationalizing health from diverse perspectives that include physical activity, self-reported health, and depression, presentations examine the relationship between neighborhoods and health. Presenters describe how neighborhoods are defined by the older people who live in them and question whether these definitions compare with actual geographic boundaries. They examine the influences of perceived as well as objective characteristics of neighborhoods, using data from diverse sources that include administrative databases, GIS, and self-report. Using a combination of qualitative and quantitative analyses presentations demonstrate how neighborhood characteristics influence health. Discussion centers on the importance of examining multidimensional aspects of neighborhood and health as well as identifying the boundaries of neighborhoods.

### HOW NEIGHBORHOOD INFLUENCES HEALTH: UNRAVELING COMPLEX RELATIONSHIPS

R.A. Pruchno[1], M. Wilson-Genderson[2], F.P. Cartwright[1], *1. New Jersey Institute for Successful Aging, University of Medicine & Dentistry School of Osteopathic Medicine, Stratford, New Jersey, 2. Virginia Commonwealth University, Richmond, Virginia*

Although the effects of neighborhoods on self-rated health and depression are known, the mechanisms by which neighborhoods influence health are unclear. Using data from 5,688 persons aged 50-74 living in New Jersey we examine how characteristics of neighborhoods, including social vulnerability, wealth, violence, density, stability, and the presence of physicians, bars supermarkets, and fast food establishments influence health and depression. Hierarchical linear modeling analyses, controlling for gender, age, marital status, race, education, and income finds that indicators of violence, density, and social vulnerability influence self-rated health, while effects on depression are limited to neighborhood density and violence. Discussion centers on the different relationships that multiple facets of neighborhoods have on health.

### THE TEXTURE OF NEIGHBORHOODS: A CONCEPTUAL AND EMPIRICAL MODEL

R.A. Pruchno[1], M. Wilson-Genderson[2,1], F.P. Cartwright[1], *1. New Jersey Institute for Successful Aging, University of Medicine & Dentistry School of Osteopathic Medicine, Stratford, New Jersey, 2. Virginia Commonwealth University, Richmond, Virginia*

A multidimensional conceptual model of neighborhood characteristics likely to influence health, including social vulnerability, wealth, violence, density, stability, and the presence of physicians, bars, supermarkets, and fast food establishments is presented. Using administrative data representing 1,644 of New Jersey's census tracts from the 2000 U.S. Census, 2006 New Jersey Uniform Crime Report, New Jersey Department of Agriculture's Division of Marketing and Development, and New Jersey's Department of Law and Public Safety's Division of Alcohol Beverage Control the robustness of the model is demonstrated. Fit statistics of the final model ($\chi 2 = 418.73$, df = 113, NFI = 0.96, TLI = 0.96, CFI = 0.97, RMSEA =0.06, Hoelter = 296) suggest that the model is an excellent representation. The authors highlight the importance of using multiple indicators of neighborhood with good psychometric qualities for advancing knowledge about the mechanisms by which neighborhoods influence health.

### NEIGHBORHOOD CONTEXT: A COMPARISON OF CENSUS BOUNDARIES AND INDIVIDUAL PERCEPTIONS

I. Yen[1], E. Kersten[2], J. Connors[2], *1. University of California, San Francisco, San Francisco, California, 2. University of California, Berkeley, Berkeley, California*

The vast majority of research on the influence of neighborhood environment on health behaviors and health has defined neighborhood by census tract or block group boundaries, but these may not accurately represent an individual's neighborhood context. We asked 58 older adults (ages 62 to 85) who live in the San Francisco Bay Area to hand-draw the boundaries of their neighborhoods. These boundaries were digitized using Google Earth free software then imported into Geographic Information System (GIS) software to calculate the areas. There was a wide range of neighborhood areas from 0.007 to 8 square miles. Men, people who owned their homes, and people with higher educational attainment drew larger neighborhoods than women, people who rented, and people with lower education. There was no difference in area by age or perceived health status. The differences in perceived size of neighborhood may have implications for access to services and resources.

### PROMOTING ACTIVE URBAN AGING: CREATING A COMBINED WALKABILITY INDEX FOR OLDER ADULTS USING A GEOGRAPHIC INFORMATION SYSTEM

R.C. Weiss[2,1], M.C. Fahs[1,2], J.A. Maantay[3], *1. Brookdale Center for Healthy Aging & Longevity of Hunter College, New York, New York, 2. Doctoral Program in Public Health, City University of New York Graduate Center and CUNY School of Public Health, New York, New York, 3. Urban GISc. Lab, Lehman College/CUNY, New York, New York*

Conflicting evidence on the association between perceived and objectively measured walkability and physical activity among urban-dwelling older adults suggests both actual neighborhood environmental features and perceptions influence walking behavior. This project creates a Combined Walkability Index (CWI) using a Geographic Information System (GIS) incorporating data from an objective data audit and a subjective survey. Computerized Neighborhood Environment Tracking (ComNET) was used to systematically assess environmental risks impacting activity patterns of older adults in two NYC neighborhoods. In addition, the Senior Center Evaluation of the Neighborhood Environment (SCENE) survey was administered to 103 older adults attending two senior centers located within the target neighborhoods. Results indicate substantial variation in walkability and perceptions, with twice as many trip hazards (104 vs 269, $p<.05$) in the low vs high income neighborhood. GIS can contribute to creating active communities through data integration methods that recognize complex relationships between the built environment and neighborhood perceptions relevant to physical activity behavior.

## SESSION 170 (SYMPOSIUM)

### REPARTNERING IN LATER LIFE: THE PURSUIT OF NEW RELATIONSHIPS, LIVING APART TOGETHER AND REMARRIAGE

Chair: *D. Brothers, Miami University, Oxford, Ohio*
Discussant: *J. Gierveld, Netherlands Interdisciplinary Demographic Institute, The Hague, Netherlands*

Demographic and socio-cultural changes in Western societies have altered and continue to alter the ways in which people are partnering across the life course, including later life. The unprecedented number of older adults who are facing increasing longevity and who have been exposed to more varied partnering practices over their lifetimes (e.g., increasing rates of divorce, cohabiting, remarrying, remaining single, etc.) are pursuing and finding new relationships in later life. Despite the fact that partnering practices are becoming more diverse and less standardized for the current cohort of older adults compared to earlier cohorts, research on intimate relationships of older adults in the U.S. has yet to begin to explore in much detail and depth the varied ways of repartnering in later life. This symposium begins this exploration by examining three different topics of repartnering; the pursuit of new relationships, living apart together (LAT), and remarriage. The first paper draws on qualitative interviews with older adults who use internet dating sites to examine the topic of pursuing new romantic relationships in later life. The second paper uses constructivist grounded theory analysis of in-depth interviews with older adults in LAT relationships in order to explore how this form of repartnering can represent a site to resist as well as conform to heteronormative ideology. The third paper extends our knowledge of the relationship between first marriages and health, to discover whether similar mental health benefits are found for remarried older adults.

### THE PURSUIT OF LOVE IN LATE LIFE: NEW INSIGHTS INTO AN AGELESS ENDEAVOR

E.B. Levaro, K. Hooker, A.J. Walker, *Human Development and Family Sciences, Oregon State University, Corvallis, Oregon*

Although the desire for love, romance, and sexual intimacy does not end in the later decades of life, it may be challenging for older adults to find new partners, whether for companionship, LAT relationships, cohabitation, or marriage. Despite considerable interest, little is known about how women and men in their 70s, 80s, and beyond experience the pursuit of intimate relationships. We report findings from a qualitative study framed by feminist and critical social gerontology and interpretive phenomenology. Thirteen women and 13 men (M age = 76.5, range = 70 to 92) who were actively seeking romantic partners through classified ads or listings on Craigslist or Match.com participated in in-depth semistructured interviews. Utilizing the lenses of age relations and gender relations, we discuss the meaning of informants' experiences and perceptions of dating relationships, their attitudes about sexuality, and their views of themselves and each other as aging men and women.

### RE-DOING RELATIONSHIPS IN LATER LIFE: HETERONORMATIVITY AND LIVING APART TOGETHER

D. Brothers, *Miami University, Oxford, Ohio*

The dominant ideologies at work in the study of heterosexual relationships often include the assumptions of heteronormativity or the hegemonic ideals of heterosexuality, traditional gender norms and family values. Our understanding of these qualities within heterosexual relationships of older adults is mostly within the context of long-term marriages, showing how in the empty nest phase, wives become more agentic and husbands become more communal. Later-life repartnering in general, and living apart together (LAT) specifically, creates a unique context to explore the extent to which heteronormativity dominates relationships in a life stage no longer ruled by family formation or, in the case of living apart together, the desire to share a household. This paper uses constructivist grounded theory analysis of in-depth interviews with twenty older adults to explore the ways older men and women conform to and resist heteronormative ideals in their LAT relationships.

### REMARRIAGE IN LATER LIFE: IMPLICATIONS FOR MENTAL HEALTH

J. Bulanda, *Miami University, Oxford, OH*

Although numerous studies find that married adults are healthier than the unmarried, it is less clear if marriage benefits apply equally to first- and higher-order marriages. Research is particularly lacking on mental health consequences of remarriage for older adults, having largely concentrated on union dissolution through widowhood, and mostly neglected union formation that occurs in the later years. This study uses data from six waves (1998-2008) of the Health and Retirement Study (HRS) to examine mental health before and after remarriage. The analysis begins with a sample of previously-married, single older adults in 1998. Baseline mental health is measured by an eight-item scale from the CES-D. Respondents' previous marital status, including type and number of unions, is controlled. Baseline CES-D score, previous marital status and characteristics, and demographic, socioeconomic, and health factors are all included as independent variables in models examining change in depressive symptoms over the transition to remarriage.

## SESSION 175 (SYMPOSIUM)

### SOCIAL RELATIONSHIP DYNAMICS IN AGING RELATED LIFE CONDITIONS

Chair: *J. Wagner, University of Erlangen-Nuremberg, Erlangen, Germany*
Co-Chair: *F.R. Lang, University of Erlangen-Nuremberg, Erlangen, Germany*
Discussant: *R. Blieszner, Virginia Polytechnic Institute and State University, Blacksburg, Virginia*

More recently, empirical findings have shed new light on the age-specific constraints and potentials of social relationships across adulthood and late life. Dynamics of interpersonal contexts and the personal capability to adapt to aging-related challenges play a pivotal role in maintaining well-being and functionality in everyday life. The major objective of this symposium is to bring together a collection of empirical papers that examine social relationship dynamics across different aging related life conditions and their potentials for the quality of social relationships. H.H. Fung & T. Li present empirical data on perceived partner discrepancies in marital relationships and their effects on marital quality in late adulthood, J. Lee and S.H. Zarit examine couple's differences in the support given and perceived quality of relationships with adult children, and how the dyadic patterns of these scores affect their marital relationship, J. Wagner and colleagues deal with lifelong dynamics and challenges within childless couples and look at possible consequences on life satisfaction, and M.K. Rohr et al. address dyadic negotiation in the transition to caregiving and possible effects on health and subjective well-being of both partners. The discussion by R. Blieszner will integrate the four empirical papers, highlight the importance of the consideration of psychosocial dynamics across the entire life span, and discuss possible future directions that research on social relationship dynamics should take.

### DIMENSIONS OF THE RELATIONSHIPS BETWEEN PARENTS AND THEIR ADULT CHILDREN: IMPLICATIONS FOR MARITAL SATISFACTION

J. Lee[1], S.H. Zarit[1], M. Rovine[1], K.L. Fingerman[2], K.S. Birditt[3], *1. Human Development and Family Studies, Penn State University, University Park, Pennsylvania, 2. Purdue University, West Lafayette, Indiana, 3. Institute of Social Research, University of Michigan, Ann Arbor, Michigan*

Parents and children maintain active relationships throughout their adult lives, and these interactions may affect the older couple's marriage. Using a sample of 197 couples from the Family Exchange Study, we conducted a dyadic analysis to examine how two dimensions of the relationships between parents and their adult children affect marital satisfaction: how much support is exchanged by each parent with children and differences in parents' feelings toward children. As expected, wives gave and received more support from adult children but contrary to equity theory, these differences in support between husbands and wives did not affect marital satisfaction. When wives felt more ambivalent toward children than husbands, marital satisfaction was lower. These results show the importance of gender roles, that is, wives' feelings toward children had more of an impact on the couple's marital satisfaction than did husbands' feelings.

### CHILDLESS COUPLES: PARTNERSHIP DYNAMICS IN MIDDLE AND LATE ADULTHOOD

J. Wagner[1], F.R. Lang[1], C. Wrzus[2], F.J. Neyer[3], *1. University of Erlangen-Nuremberg, Erlangen, Germany, 2. Max-Plank Institute of Human Development, Berlin, Germany, 3. University Jena, Jena, Germany*

For long-term couples, not having children often entails some challenges for the partners with regard to the dynamics and adjustment processes within the dyad. It is an open question, what consequences result from childlessness on the quality of long-term marriages in midlife and old age. Our research focuses on two related issues: First, we examine patterns of relationship regulation in voluntary and involuntary childless couples of middle adulthood, and second, we compare dyadic relationship patterns of childless couples in middle and late adulthood. Our sample consists of 196 participants (98 dyads) with 152 middle-aged and 44 old individuals. The assessment included relationship specific ratings such as partnership distress and individual characteristics. Preliminary results indicate age-differential associations between relational stress and life satisfaction. Particularly older women are affected by relationship specific perceptions of their husband. Findings are discussed in the light of age-specific challenges and possible adaptive mechanisms of partnership stabilization.

### RELATIONSHIP REGULATION IN THE TRANSITION OF CARE

M.K. Rohr, S. Engel, F.R. Lang, *Institut of Psychogerontology University Erlangen-Nuremberg, Erlangen, Germany*

Numerous studies have explored the role and impact of relationship quality in the context of caregiving. Due to theoretical and methodological challenges the role of relationship regulation in the transition to care remains an open question. Drawing on an action-theoretical perspective and applying a multi-methodological approach, the current project investigates the role of individual (e.g. personality, cognition, health) and contextual aspects (social embeddedness, urgency of care needs) within the transition to care. The present study focuses on dyadic negotiation between older adults and their potential family caregivers (N = 70 dyads). We illustrate the balancing of positive and negative relationship aspects when one is confronted with age-related health problems of a family member. Preliminary results point to the critical impact of regulative management on health and subjective well-being of both partners in the caregiving relationship.

### PARTNER DISCREPANCIES AND MARITAL QUALITY ACROSS ADULTHOOD: IS YOUR IDEAL OR EXPECTED STANDARDS ABOUT YOUR PARTNER MORE IMPORTANT?

H. Fung, T. Li, *Chinese University of Hong Kong, Hong Kong, China*

Previous studies have established a negative association between perceived partner discrepancies and marital quality, but the partner discrepancies in these studies are ill defined. The present study examined the relationship between partner discrepancies and marital quality in 56 couples aged from 20 to 79 years old. Two levels of partner standards (i.e., ideal and expected standards) and two domains in couple interaction (i.e., personality and support) were considered. We found that husbands' marital quality was significantly related to own ideal-actual partner personality discrepancy and expected-actual partner support discrepancy, whereas wives' marital quality was not only significantly related to own ideal-actual partner personality and support discrepancies, but also related to the husbands' ideal-actual partner personality discrepancy. Husbands' ideal-actual partner personality discrepancy and expected-actual partner support discrepancy were also found to mediate the curvilinear age differences in their martial quality. The results suggest that the level of partner standards, the specific domain in couple interaction, and the developmental stage in life span all need to be considered in future studies about partner discrepancies.

## SESSION 180 (SYMPOSIUM)

### THE COMPLEX INTERPLAY OF SLEEP AND COGNITION IN OLDER ADULTS

Chair: *A.P. Spira, Department of Mental Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland*

Sleep complaints are highly prevalent among older adults, and researchers are linking poor sleep to a growing number of adverse health outcomes. Cognitive impairment also is common in older individuals, and is associated with great disability and economic cost. Despite the prevalence of both sleep disturbance and cognitive impairment in elders, however, we have a limited understanding of their relationship. To increase our knowledge in this domain, studies of sleep and cognition are needed that use objective sleep assessment methods (e.g., actigraphy, polysomnography) and rigorous measures of cognition (e.g., neuropsychological test batteries, adjudicated diagnosis of cognitive disorders). In the proposed symposium, we will present new findings from studies in two large cohorts of older women and men: the Study of Osteoporotic Fractures and the Osteoporotic Fractures in Men Study, respectively. Specifically, we will present studies of: the link between objectively measured sleep duration/fragmentation and performance across cognitive domains; the association between sleep-disordered breathing and subsequent diagnoses of mild cognitive impairment and dementia; whether reaction time mediates the association between sleep disturbance and falls; and the association between objectively measured sleep and cognitive decline. We will discuss potential public health implications of our findings, including the possible impact of treating sleep disturbance on prevention of cognitive decline and other disability.

### ACTIGRAPHIC SLEEP AND NEUROPSYCHOLOGICAL TEST PERFORMANCE IN VERY OLD WOMEN

A.P. Spira[1], K.L. Stone[2], S. Redline[3], K. Ensrud[4,5], K. Yaffe[6,7], *1. Department of Mental Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, 2. California Pacific Medical Center Research Institute, San Francisco, California, 3. Case Western Reserve University, Cleveland, Ohio, 4. University of Minnesota, Minneapolis, Minneapolis, Minnesota, 5. Minnepolis VA Medical Center, Minneapolis, Minnesota, 6. University of California, San Francisco, San Francisco, California, 7. San Francisco VA Medical Center, San Francisco, California*

Sleep disturbance has been linked to cognition in elders, but little is known about the association between objectively measured sleep and neuropsychological test performance in the very old. We studied 830 mostly white women aged 87.5 ±3.0 years who completed wrist actigraphy and seven neuropsychological tests. In adjusted analyses, longer sleep time (per standard deviation (SD)) was associated with impairment (>1.5 SD below mean) on the 3MS (OR = 1.44, 95% CI 1.08, 1.93) and a verbal (letter) fluency test (OR = 1.65, 95% CI 1.21, 2.25); there was a trend toward an association with executive dysfunction (Trails B; OR = 1.40, 95% CI 0.97, 2.02). Greater wake after sleep onset (per SD) was associated with impaired category fluency (OR = 1.41, 95% CI 1.10, 1.82). There was no association between sleep efficiency and test performance. In this presentation, we will provide further results and discuss implications for elders' functioning.

### SLEEP DISORDERED BREATHING, HYPOXIA, AND RISK OF MILD COGNITIVE IMPAIRMENT & DEMENTIA IN OLDER WOMEN

K. Yaffe[1,2], A. Laffan[3], S. Litwack Harrison[3], A.P. Spira[4], K. Ensrud[5,6], S. Ancoli-Israel[7], S. Redline[8], K.L. Stone[3], *1. University of California, San Francisco, San Francisco, California, 2. San Francisco VA Medical Center, San Francisco, California, 3. California Pacific Medical Center Research Institute, San Francisco, California, 4. Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, 5. University of Minnesota, Minneapolis, Minneapolis, Minnesota, 6. Minneapolis VA Medical Center, Minneapolis, Minnesota, 7. University of California, San Diego, San Diego, California, 8. Case Western Reserve University, Cleveland, Ohio*

Sleep-disordered breathing (SDB) is common among elders, but its association with cognitive impairment is unclear. We prospectively examined the association between SDB and subsequent diagnoses of mild cognitive impairment (MCI) and dementia in 298 women without dementia (mean age 82.3 ± 3.2) who completed polysomnography at baseline and had their cognitive status clinically adjudicated 5 years later. Women with SDB had a greater likelihood of MCI/dementia than women without SDB (44.8% vs 31.1%, odds ratio [OR] = 2.33, 95% confidence interval [CI] 1.28 - 4.25). Elevated oxygen desaturation index (≥15 events/hr of sleep) and percent sleep time with desaturation ≥3% increased odds of developing MCI/dementia (OR 2.05, 95% CI 1.15 – 3.67 and OR 2.23, 95% CI 1.10 – 4.54, respectively); percent sleep time with <90% oxygen desaturation and mean number of arousals/hour did not. Findings suggest that SDB greatly increases risk of cognitive impairment, and that hypoxia explains this association.

### ACTIGRAPHIC CHARACTERISTICS OF SLEEP, REACTION TIME, AND RISK OF FALLS IN OLDER WOMEN

K.L. Stone[1], T. Blackwell[1], A.P. Spira[2], K. Ensrud[3], J.A. Cauley[4], S. Ancoli-Israel[5], K. Yaffe[6], *1. Research Institute, California Pacific Medical Center, San Francisco, California, 2. Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, 3. University of Minnesota, Minneapolis, Minnesota, 4. University of Pittsburgh, Pittsburgh, Pennsylvania, 5. University of California, San Diego, San Diego, California, 6. University of California, San Francisco, San Francisco, California*

Falls pose a major health risk among the older adults and are a leading cause of mortality, morbidity and premature nursing home placement. Sleep disorders are also extremely common, yet frequently underdiagnosed and untreated, particularly in the elderly. We recently published data from the Study of Osteoporotic Fractures, showing strong associations between actigraphic characteristics of sleep and fall risk in older women. In particular, the multivariate-adjusted odds of suffering two or more falls in the subsequent year was elevated for women who slept <=5 hours (OR=1.52; 1.03 – 2.24) compared to those who slept > 7 to 8 hours per night. Indices of sleep fragmentation were also associated with increased risk of falls. Using recently released data, we will present new data on the association between sleep characteristics and reaction time, and determine whether reaction time is a mediator of the association between sleep characteristics and fall risk among older women.

### SLEEP DURATION AND DISRUPTION: ASSOCIATIONS WITH COGNITIVE DECLINE IN OLDER MEN

A. Laffan[1], K.L. Stone[1], T. Blackwell[1], S. Ancoli-Israel[3], K. Ensrud[7,5], S. Redline[6], Y. Slinin[7,5], K. Yaffe[2,4], *1. California Pacific Medical Center, San Francisco, California, 2. University of California, San Francisco, San Francisco, California, 3. University of California, San Diego, San Diego, California, 4. San Francisco Veterans Affairs Medical Center, San Francisco, California, 5. Veterans Affairs Medical Center, Minneapolis, Minnesota, 6. Case Western Reserve University, Cleveland, Ohio, 7. University of Minnesota, MInneapolis, Minnesota*

Sleep complaints and cognitive impairment are common among older populations; however, the literature linking poor sleep and cognition relies on patient populations and self-reported sleep. We prospectively studied the effects of sleep quality (actigraphy defined total sleep time [TST], sleep efficiency [SE], and wake after sleep onset [WASO]) on cognitive decline (≥5 point decline 3MS or > 58 sec [mean + 1SD] increase Trails B time) over 4-years in the MrOS study, a community-based cohort of older men. In 2,370 men, 16.7% (395) met definition for decline on the 3MS and 10.8% (255) on the Trails B. Predictors of Trails B declines were lower SE (per SD, OR [95% CI]:1.14 [1.01, 1.28] and longer WASO (per 30 min, 1.10 [1.01, 1.20]) but not longer TST (per 30 min, 0.99 [0.94, 1.05]) (results were similar for 3MS). Measures of sleep disruption, but not duration, were associated with decline in cognitive function.

## SESSION 185 (POSTER)

## THERAPEUTIC INTERVENTIONS

### ART THERAPY TREATMENT IN ALZHEIMER'S DISEASE AND STROKE REHABILITATION

K.J. Edens, *Psychology, Sacramento State University, Sacramento, California*

Art therapy is an important method for addressing the psychological, emotional, and communication needs of patients with depression, dementia, Alzheimer's, and stroke. I conducted an art class for Alzheimer's and stroke rehabilitation patients in an assisted and independent living facility as part of the residents' daily activity selection to encourage socialization and creativity. The art class offered a variety of different mediums; water color, acrylic paint, pastel, and colored pencil, on canvas or paper. The class was conducted once a week for one to two hours with five to ten individuals. Students' capacity of functioning ability was measured by working unassisted for their first session. Over a six month period, I observed and monitored the correlates of art therapy with improvements in; emotions, cognition, visual perception, motor activity and function, as well as socialization. By comparing before and after drawings, the artwork demonstrated overall improvements in composition, color, and tone. Results also showed some confirmation of increased emotional well being, enhanced engagement in rehabilitation therapies, and improved psycho-social adjustment. This observation demonstrates a positive, holistic therapeutic approach, which could improve upon existing cognitive therapies that rely primarily on a verbal approach. The psychological aspects of brain-damaged patients often show anxiety, depression, and low self-esteem as a result of living with reduced capabilities caused by their condition. In conclusion, the objective of this method of therapy is to return the individual to independent functioning; this may be achieved through art therapy as a treatment modality in geriatric rehabilitation.

### EFFECT OF COMMUNITY SUPPORTIVE CARE PROGRAM FOR MAINTAINING DAILY LIVES OF ELDERS WITH DEMENTIA

S. Maruo[1], A. Kono[2], *1. The Doctoral Course, Graduate School of Nursing, Osaka City University, Osaka, Japan, 2. School of Nursing, Osaka City University, Osaka, Japan*

The purpose of the present study is to examine effects of community supportive care program for maintaining daily lives of elders with dementia to community-dwelling people. We provided group educational programs in three sessions dowering two or three months. Subjects who participated in all these sessions of the program were 106 persons living at home. Data were collected written questionnaires pre and post the programs, including image and knowledge of dementia, self-efficacy how support to elders with Behavioral and Psychological Symptoms of Dementia (BPSD). Of subjects, mean age was 69.9 years (SD, 6.9), and mean years of education was 12.3 years (SD, 2.0). A total of 78.3% (83 persons) of subjects were women, and 66.0% (70 persons) of them were maintained cognitive function. Regarding image of dementia, scores between pre and post programs were significantly improved, including 'ashamed' ($p <.0001$), 'sad' ($p =. 0006$), 'dementia is not disease' ($p =. 0023$) and 'not matter to me' ($p =. 0493$). A total scores of dementia knowledge ($p =. 0319$) and scores of self-efficacy which could support elders with BPSD in 'verbal or physical aggression' ($p =. 0356$) were improved at post problems. These results suggest that the programs could effect of image and knowledge of dementia, and self-efficacy how support to elders with BPSD to people living community.

### A COMMUNITY AND ACADEMIC PARTNERSHIP APPROACH TO IMPROVE HEALTH OUTCOMES IN A SENIOR HOUSING COMMUNITY

T.B. Hughes[1,2], C. Boyd[1], E.R. Giovannetti[1], D. Danner[2], *1. Division of Geriatric Medicine and Gerontology, Johns Hopkins University, Baltimore, Maryland, 2. University of Kentucky, Lexington, Kentucky*

In an effort to meet the objectives set forth by Healthy People 2010, public health officials, researchers and legislatures have begun to recognize the need for creative new approaches and interventions to address health disparities. To this end, a collaborative effort between researchers and residents of a low-income independent living facility in Lexington, KY sought to quantitatively evaluate the overall health status of residents and to qualitatively identify resident barriers to health care. Methods: A health needs assessment was performed with 75 residents and 5 focus groups were held with 35 residents of a low-income independent living facility. Results: Participants (n=75) were predominantly African American (80%) and low-income (94.7%: income <15,000) with ages 52-100 (mean=67.6). The majority of participants were obese (80%; BMI > 30) with multiple co-morbid conditions (96% had 2 or more chronic conditions). Focus group transcripts were analyzed using content analysis. Findings revealed the emergence of four central themes: a holistic perspective of health, the maintenance of independence as an integral aspect of health, the need for age-specific activities among young-old, old-old and oldest-old residents, and the need for support beyond chronic disease management for residents dealing with drug and alcohol issues. Conclusions: Findings revealed barriers to healthcare that may be uniquely germane to those living in low-income congregant housing settings and the need for innovative outreach and educational programs for these older residents.

### THE CHRONIC DISEASE SELF-MANAGEMENT PROGRAM IN RURAL COMMUNITIES: PARTICIPANTS' PERCEIVED BENEFITS

I.S. Harvey[1], L.L. Payne[2], M. Janke[4], C. Etkin[5], J. Wallace[2], H. Coyle[3], K. Broughton[2], *1. Kinesology and Community Health, University of Illinois Urbana Champaign, Champaign, Illinois, 2. Department of Recreation, Sport and Tourism, University of Illinois, Champaign, Illinois, 3. University of Illinois Extension, Champaign, Illinois, 4. University of South Florida, Tampa, Florida, 5. Rush University Medical Center, Chicago, Illinois*

Since nearly half of all persons in the United States have at least one chronic condition, meeting the complex needs of these individuals has become a challenge for our current health care system. Rural areas have a higher proportion of older adults and this population is likely significantly affected by chronic disease. Based on these factors, it is evident that providing programs to help rural residents self-manage their chronic conditions is necessary, and that in rural settings, offering a general chronic disease management program may be more appropriate than trying to provide disease-specific (e.g., arthritis, diabetes) management programs. This study examined the experiences and perceived benefits of rural residents who participated in the (Stanford) Chronic Disease Self-Management Program (CDSMP). Qualitative data were obtained from six focus groups (N = 34 participants) using a semi-structured focused group guide. Thematic analysis was used to analyze the qualitative data and three prominent themes emerged from the examination of the focus group interviews with the rural CDSMP participants: 1) the use of social support to create and facilitate behavioral change; 2) self-management strategies used for behavioral change; and 3) the increased use of self-regulatory activities to improve physical health outcomes. Our findings support that this tailored chronic disease self-management program has positive influences for health outcomes on rural populations and have has important implications for the design and delivery of interventions to enhance active self-management behaviors among rural populations.

### TACKLING AGEING CONTINENCE THROUGH THEORY, TOOLS AND TECHNOLOGY (TACT3)

M.L. Gilhooly[1,2], E. van den Heuvel[1,3,2], F. Jowitt[1,3,2], I. Sutherland[1,3,2], J. Bichard[4], P. Gaydecki[5], N. Ratcliff[6], S. Parker[7], *1. Brunel University, Uxbridge, England, United Kingdom, 2. Brunel Institute for Ageing Studies, Uxbridge, England, United Kingdom, 3. Brunel Institute for Bioengineering, Uxbridge, England, United Kingdom, 4. Royal College of Art, London, England, United Kingdom, 5. University of Manchester, Manchester, England, United Kingdom, 6. University of the West of England, Bristol, England, United Kingdom, 7. University of Sheffield, Sheffield, England, United Kingdom*

Incontinence is a precursor to social isolation, loss of self esteem and depression. The aim of this project is to reduce the impact of continence difficulties and, thus, assist older people in maintaining a positive identity and good quality of life. The TACT3 project is comprised of three research workpackages: Challenging Environmental barriers to continence: Two sets of stakeholders are involved, older people with continence difficulties and toilet providers. Focus groups, workshops, interviews and photographic diaries have been conducted to identify key issues. A design tool and pictorial reference cards will be produced. Improving continence interventions and services: 140 patients and their carers are being interviewed twice within a 12 month interval from a specialist continence clinic for older people and generic continence clinic. Twenty Health and social care managers and 200 practitioners will also be interviewed. Care outcomes will be analysed from each clinic and a cost benefit analysis will be carried out. Developing assistive devices: A colour change odour indicating formula has been developed to indicate the presence of the odour of urine at a just imperceptible level. A washable fabric underwear wetness sensor and alert mechanism is in the process of being developed. User opinion is currently being gathered via focus group to identify desired forms for the sensor and underwear. The preliminary findings from the first two years of this three year interdisciplinary project will be presented. The assistive devices will be on display. This research is funded by the UK New Dynamics of Ageing Programme.

### TTAP METHOD© RESEARCH: ENHANCING COGNITIVE AND PSYCHOSOCIAL WELL-BEING IN ALZHEIMERS DISEASE

L. Levine- Madori[1], E. Coveney[2], *1. Department of Social Sciences,Memory and Evaluation Services, St. Thomas Aquinas/Cornell University, Principle Investigator, Chappaqua, New York, 2. Beechtree Healthcare Center, Ithaca, New York*

The TTAP Method™ synthesizes the past decade of research in the fields of neuroscience, psychology, education, into a systematized and replicable multimodal creative arts approach. The TTAP Method™ developed in 2005, to enhance the global functioning of those diagnosed with Alzheimer's disease within a nine step format (Levine Madori, 2007). Simultaneously, through TTAP Method™ assessment forms and activity analysis protocols ensure replication through structured documentation, and evaluation of services thus furthering clinical research specifically in the area of Arts and Alzheimer's disease (Levine Madori, 2009a, 2009b, 2009c, Levine Madori & Alders, 2010). To date, the TTAP Method™ has been utilized successfully in 5 studies, and has National Certification Training for both professionals and caregivers. This non-pharmaceutical approach has proven to enhanced cognition as well as impacting quality of life issues in mild and moderate AD (Levine Madori, 2007, 2009a, 2009b, 2009c, Levine Madori, L.& Alders, A.,2010). The challenge facing health care professions, specifically therapists, is the lack of reliable, methods and modalities that are culturally sensitive (Alders, 2008, 2010) for recording, collecting, and evaluating clinical findings in formats that benefits long-term data collection (Fernandez et al., 2006).The TTAP Method™ was developed to meet these significant needs nationally and globally, being translated into Finnish in 2009. This paper focuses on studies completed, variables measured, the data collection, analysis and evaluation of findings. Discussion of two National studies utilizing the TTAP Method ™ where all interdisciplinary team members received the TTAP Method Certification Course Training prior to intervention will end this presentation.

## SESSION 190 (SYMPOSIUM)

### MILLION AND COUNTING: ELDERCARE ISSUES IN CHINA

Chair: *G. Guo, Peking University School of Nursing, Beijing, China*
Discussant: *L. Phillips, University of California School of Nursing, Los Angeles, California*

Elder people already accounted for 12.5% of the overall population in China, and over 20% in major cities. The ways of eldercare in China are affected by family structure changes and social-economic system reform. Emerging phenomena indicate the importance of mental health of frail elders and family caregivers within a society in transition. This symposium aimed identifying mental health issues among elders in Mainland China and Macau; and discussing caregiving related mental health issues in families of persons with dementia. Four papers will be presented in this symposium. The first paper, "Three-Wait-Citizen: Lived Experiences of Older Persons with Depression in Macau", uses qualitative and quantitative methods to explore the nature and meaning of depressive experiences among elders in Macau. Three meta-categories were drawn from the dominant categories reflected across the findings. The second paper, "Post-operative Depression and Rehabilitation Status in Elders with Hip Fracture", reports on the high incidence of post-operative depression among elders with hip fracture and its negative relationship with post-operative rehabilitation. The third paper,"Facing Challenges of Family Caregivers of Demented Elders: Roles of Caregiving Appraisal and Coping", tests Dementia Caregiving Model and investigates roles of caregiving appraisal and coping in relationship between caregiving stressors and caregiver psychological health. The forth paper, "Effect of One-year Nursing Intervention on Negative Emotions and Burden of Family Caregivers Caring for Homebound Elders with Dementia", provides evidence for community-based dementia care and demonstrates nursing intervention can help reducing anxiety and caregiving burden in families with dementia elders.

### THREE-WAIT-CITIZEN: NARRATIVES OF LIVED EXPERIENCES OF OLDER PERSONS WITH DEPRESSION IN MACAU

W. Zeng, *Kiang Wu Nursing College, Macau, Macao*

The study aims to interpret the lived experiences of 31 older persons with depression in Macau. The principal influences on depression were indentified and an explanatory framework constructed as a basis to indicate possible risk factors for depression and to inform the future development of interventions for depression among older persons in Macau. By adopting mixed methods, using both qualitative and quantitative approaches, it has been possible to gain, for the first time, a deeper understanding of the nature and meaning of experiences of older persons with depression in Macau. These lived experiences clustered into four broad dominant categories: negative thinking, physical limitations and complaints, present living conditions and social support, and the lives they have lived. Three meta-categories are drawn from the dominant categories reflected across the findings; physical/material meta-category, social/family meta-category, and mental suffering meta-category. The associated explanatory framework models the relationships between the three meta-categories.

### THE STUDY ON POST-OPERATIVE DEPRESSION AND REHABILITATION STATUS IN THE ELDERS WITH HIP FRACTURE

P. Yang, *Medical & Surgical Nursing Department, Peking University School of Nursing, Beijing, China*

Objective: To explore the relationship between post-operative depression and rehabilitation status among elders with hip fracture. Method: 73 post-operative elders with hip fracture were interviewed. Elders' depression was assessed by Geriatric Depression Scale (GDS), current physical rehabilitation status was assessed by Barthel Index and Harris Hip Joint Function Scale, and quality of life was assessed by Health Survey Questionnaire (SF-36). Result: Depression was a serious problem among elders after hip surgery, with an incidence rate of 38.36%. Depression had significant negative effects on hip functional rehabilitation($r=-0.478$, $P<0.001$), ADL($r=-0.504$, $P<0.001$), and quality of life($r=-0.305$~$-0.652$, $P=0.000$~$0.009$). Conclusion: High incidence of post-operative depression had negatively affected elders' post-operative rehabilitation. It is suggested that nurses should provide effective psychological support to alleviate the depressive emotion in elders with hip fracture, and to promote functional recovery and improve the quality of life.

### FACING CHALLENGES OF FAMILY CAREGIVING OF DEMENTED ELDERS: THE ROLE OF APPRAISAL AND COPING

Y. Liu, K. Insel, *The University of Arizona College of Nursing, Tucson, Arizona*

This study tested a model developed to understand caregiving of elderly with dementia in China based on theories of stress and coping and investigated the role of caregiving appraisal and coping on caregiver stressors and psychological health. Ninety-six family caregivers (mean age 59, range 25-83 years) completed measures of subjective burden, presence of behavioral problems, satisfaction, coping strategies, and psychological health. Path analysis showed the original model did not fit the data ($\chi 2(9, N=96)=39.20$, $p=.000$; GFI= .91, NFI= .71; RMSEA=.19). Model modifications were conducted. The final model showed a perfect fit ($\chi 2(10, N=96)=8.14$, $p=.62$; GFI= .98, NFI= .94; RMSEA=.00). Caregiving subjective burden and coping mediated the relationship between stressors and caregiver psychological health. Caregiving satisfaction did not play a mediating role as expected, but had an indirect effect on psychological health through coping. Findings of the study will facilitate development and testing of interventions for caregivers in China.

### EFFECT OF ONE-YEAR NURSING INTERVENTION ON NEGATIVE EMOTIONS AND BURDEN OF FAMILY CAREGIVERS CARING FOR HOMEBOUND ELDERS WITH DEMENTIA

S. Shang, *School of Nursing, Peking University, Beijing, China*

Objectives: To evaluate effects of a one-year nursing intervention on negative emotions and caregiving burden suffered by spouse caregivers of homebound dementia patients. Methods: 53 caregivers were randomly assigned to control and intervention groups. Intervention group received regular home-visit, telephone follow-up and consultations on problem-based guidance of caregiving, stress-coping skills, and social support. Caregivers' depression, anxiety, and burden were measured by Self-rating Depression Scale, Self-rating Anxiety Scale and Caregiver Burden Inventory at 3-month intervals. Results/Findings: There was no significant difference in spouse caregivers' depression between the two groups ($P>0.05$). Spouse caregivers in intervention group were less anxious, felt less burden than those in control group at the 9th month of intervention and remained stabile at the 12th month($P>0.05$). Conclusions: This study provided evidence for community-based dementia care. Nursing intervention can help reducing anxiety and burden in spouse caregivers of homebound patients with dementia.

## SESSION 195 (SYMPOSIUM)

### BODY COMPOSITION CHANGES AND MUSCLE FUNCTION: TARGETS FOR PRESERVING HEALTH AND FUNCTION

Chair: *E.S. Strotmeyer, Epidemiology, University of Pittsburgh, Graduate School of Public Health, Pittsburgh, Pennsylvania*
Discussant: *A.B. Newman, Epidemiology, University of Pittsburgh, Graduate School of Public Health, Pittsburgh, Pennsylvania*

Loss of muscle mass and muscle function - power and strength - are common with aging. The decline in muscle function is proportionally greater than the loss of mass, though both are associated with poor physical function and disability. The symposium will describe trajectories of body composition changes from several longitudinal epidemiologic studies in aging populations and relate these to mortality (Dr. Watson) and insulin resistance (Dr. Lee). The Health, Aging and Body Composition (Health ABC) Study enrolled 3075 Medicare-eligible, well-functioning ambulatory adults aged 70-79 years old (52% women, 42% black) in Pittsburgh, PA & Memphis, TN in 1997-98, with contacts every 6 months and annual exams through 2000-01 and bi-annually thereafter. The Study of Osteoporotic Fractures in Men (MrOS) enrolled 5,995 community-dwelling, ambulatory men aged aged 64-92 years in 2000-02 from 6 U.S. centers with a follow-up exam 4.6 ± 0.3 years later. We will additionally describe the importance of preserving muscle function for maintenance of physical function. The relationship of muscle function to high physical function in the oldest old from Health ABC (Ms. Ward) and recovery from a simulated trip (Dr. Marsh) will be presented. The discussion will focus on future directions for addressing body composition changes and loss of muscle function in order to prevent physical function decline and disability in older adults.

### LONGITUDINAL LOSS OF LEAN MASS AND MORTALITY RISK IN OLDER ADULTS

N.L. Watson[1], T.B. Harris[2], S.B. Kritchevsky[3], S. Satterfield[4], T.F. Hue[5], A.B. Newman[1,6], *1. Department of Epidemiology, University of Pittsburgh, Pittsburgh, Pennsylvania, 2. Intramural Research Program, National Institute on Aging, Bethesda, Maryland, 3. Wake Forest University School of Medicine, Winston-Salem, North Carolina, 4. University of Tennessee Health Science Center, Memphis, Tennessee, 5. University of California San Francisco, San Francisco, California, 6. Department of Medicine, University of Pittsburgh, Pittsburgh, Pennsylvania*

Involuntary loss of lean mass in aging may predict mortality independent of weight loss. Total lean mass (kg) was evaluated by DEXA at baseline and after four years in 2,264 black and white participants in the Health, Aging and Body Composition study. Subsequent mortality was ascertained among 1,533 (68%) participants with no evidence of weight loss ≥ 3% (mean age at followup ± SD 77.4 ± 2.8 yrs; 48% male; 36% black). 279 deaths occurred by the end of follow-up (median 5.4 years). In a multivariable Cox proportional hazards model predicting mortality, lean loss over four years was associated with higher risk after adjustment for demographics: HR (95% CI) 1.49 (1.13-1.98) for lean loss ≥ 3% (N=284; 19%), relative to participants with lean loss or gain within 3% (N=980; 64%). Lean mass loss over four years predicted mortality among older adults with no evidence of weight loss.

### INCREASED RISK OF LEAN MASS LOSS ASSOCIATED WITH INSULIN RESISTANCE IN OLDER MEN

C.G. Lee[1], E.J. Boyko[2], E.S. Strotmeyer[3], P.M. Cawthon[4], A.R. Hoffman[5], S. Everson-Rose[6], E. Barrett-Connor[7], E. Orwoll[1], *1. Oregon Health & Science University, Portland, Oregon, 2. VA Puget Sound Health Care System, Seattle, Washington, 3. University of Pittsburgh, Pittsburgh, Pennsylvania, 4. California Pacific Medical Center Research Institute, San Francisco, California, 5. Stanford School of Medicine, Palo Alto, California, 6. University of Minnesota, Minneapolis, Minnesota, 7. University of California, San Diego, California*

Body composition changes associated with insulin resistance (IR) were examined in 3497 non-diabetic men aged 64-92. Baseline IR was calculated using HOMA-IR. Baseline total fat, total lean, truncal fat and appendicular lean masses were measured using DXA and 4.6±0.3 years later. Greater % loss of weight, total and appendicular lean masses and lower % gain in total and truncal fat occurred with increasing HOMA-IR quartiles (p<0.001 for trends). In adjusted models, insulin-resistant men (Q4) vs. Q1 had higher odds of ≥ 5% loss in weight [OR 1.52 (95% CI 1.16, 1.99)] and lean mass [total: OR 1.90 (95% CI 1.43, 2.52); appendicular: OR 1.58 (95% CI 1.25, 2.00)] and lower odds of ≥ 5% gain in fat mass [total: OR 0.62 (95% CI 0.50, 0.77); truncal: OR 0.61 (95% CI 0.49, 0.76)]. Greater lean mass loss and lower fat gain occurred in non-diabetic, insulin-resistant men. IR may accelerate age-related sarcopenia.

### LEG POWER AND FUNCTIONAL MOBILITY IN THE OLDEST OLD: THE HEALTH, AGING AND BODY COMPOSITION STUDY

R.E. Ward[1], R. Boudreau[1], C. Rosano[1], M.A. Newman[1], B. Goodpaster[1], T. Harris[2], A.B. Newman[1], E.S. Strotmeyer[1], *1. Epidemiology, University of Pittsburgh, Pittsburgh, Pennsylvania, 2. National Institute on Aging, Bethesda, Maryland*

Power differs from strength since it measures muscle force and velocity and is dependent on nervous and musculoskeletal systems, though is not well-characterized in high-functioning older adults. We examined cross-sectional relationships between power from a pneumatic resistance machine and physical function in 37 participants (age=83.4±2.7, BMI=27.3±4.4, female=51.4%, black=37.8%) from the Health, Aging and Body Composition Study Pittsburgh site. Adjusting for age, sex, race and BMI, one standard deviation greater power was associated with higher likelihood of reporting "very easy" to walk 1/4 mile (OR=3.00; CI:1.05-8.59), climb 10 stairs (OR=3.79; CI:1.20-11.96) and rise from a chair (OR=3.98; CI:1.21-13.05) and 0.29 m/s faster walking speed (p<0.01). Additional adjustment for diabetes attenuated associations between power and physical function, explaining a portion of this association. Power may be important for maintaining high physical function in the oldest adults. We are currently collecting longitudinal power data in this cohort to examine trajectories of change.

### RECOVERY FROM A SIMULATED TRIP IN OLDER NORMAL AND OBESE OLDER ADULTS

A. Marsh[1], E.C. Haakonssen[1], J.A. Zaccaria[1], D. Pamukoff[1], M. Madigan[2], *1. Health and Exercise Science, Wake Forest University, Winston Salem, North Carolina, 2. Virginia Polytechnic Institute and State University, Blacksburg, Virginia*

Muscle power may be more important than muscle strength for regaining balance following a slip or trip but there are scant data to support this contention. Whether or not obesity plays a role in compromising the ability to recover is also unknown. Thus far we examined the ability to recover from a forward leaning posture in 4 normal BMI (NORM, mean=24.6±2.1 kg/m^2) and 6 obese BMI (OB, mean=33.4±2.8 kg/m^2) older adults (mean age=70.4±5.4 y). The outcome for this study was the maximal body lean angle from which an individual regained their balance. There was no significant difference in lean angle between NORM and OB (16.6±3.4 vs. 15.8±2.6 deg). The Spearman correlation between BMI and lean angle was r=-0.38 (p=.275). Both muscle strength and power were correlated to lean angle. Data will be collected on 16 subjects (8 NORM, 8 OB) who will be randomly assigned to power or strength training.

## SESSION 200 (POSTER)

## DISEASE AND GERIATRIC SYNDROMES

### LAB-BASED PHYSICAL TASKS TO INDUCE FATIGUE IN OLDER ADULTS WITH SYMPTOMATIC KNEE OR HIP OSTEOARTHRITIS

S. Schepens[1], A.K. Lyden[1], D. Wolford[1], A. Markel[1], S.L. Murphy[1,2], *1. University of Michigan, Ann Arbor, Michigan, 2. VA Ann Arbor Healthcare System GRECC, Ann Arbor, Michigan*

Introduction: Although osteoarthritis (OA) interventions focus predominantly on pain reduction, fatigue is emerging as a clinically important symptom. However, little is known about the fatigue experience in older adults with OA, making it difficult to address clinically. This study utilized lab-based, daily life tasks to induce fatigue and examined effects on fatigue and pain. Methods: Nine older adults with symptomatic knee or hip OA completed sweeping, grocery, and walking tasks in 15-minute circuits of increasing intensity. Participants were asked to stop when they felt too fatigued to continue. Fatigue and pain severity were self-reported (0 – 10 scale) following each circuit. At another visit, they completed physical performance tests. Results: Participants spent an average of 52.8±7.7 minutes performing tasks. On average, fatigue and pain increased by 3.4±0.9 (range 0 to 8) and 2.0±0.5 (range 1 to 5) units, respectively. Rates of change of fatigue and pain (symptom increase/time) were not significantly correlated (r=0.5, p=0.22). A physical performance test (timed up and go) was positively associated with rate of change in pain (r =0.8; p=0.02) but not with fatigue (r=0.4; p=0.28). Conclusions: Lab-based, daily life tasks induced both fatigue and pain in older adults with OA. The different rates of change and symptom severity, as well as the relationship of physical performance with pain and not fatigue supports the idea that fatigue and pain experiences are related but not the same. Our future study will examine carryover effects of lab-based tasks on symptoms and physical activity.

### FACTORS ASSOCIATED WITH FATIGUE AMONG OLDER ADULTS WITH SYMPTOMATIC KNEE OR HIP OSTEOARTHRITIS

S.L. Murphy[1,2], N. Alexander[2,1], D.M. Smith[3], A.K. Lyden[1], J.F. Koliba[2], B. Grincewicz[2], *1. Physical Medicine and Rehabilitation, University of Michigan, Ann Arbor, Michigan, 2. VA Ann Arbor Healthcare system GRECC, Ann Arbor, Michigan, 3. Stony Brook University, Stony Brook, New York*

Fatigue, one of the most frequently reported symptoms of osteoarthritis (OA), has been described by people with OA as debilitating, causing activity restriction, and greatly impacting life. Despite its clinical importance, few studies have examined fatigue in OA and there is no gold standard fatigue measure used in this population. Among adults aged 65 and older with painful knee or hip OA and reported fatigue (i.e., "moderate amount" or "most of the time" within the past week), we examined fatigue using the Brief Fatigue Inventory (BFI) and its association with several variables. Eighty-nine participants (61% female, 72.3 + 6.2 years) underwent performance testing and completed questionnaires during a lab visit. Participants had an average BFI score of 4.63 + 2.0 and an average WOMAC pain score of 8.9 + 3.3. A linear regression model was used to examine the relationship between fatigue and demographics, physical performance, sleep, pain, and depressive symptoms. Fifty percent of the variance in fatigue was explained by the model. Fatigue was most strongly related to pain (beta = .28; p = .0001) and depressive symptoms (beta = .10; p = .0001), whereas other variables (e.g., sleep efficiency and physical performance) were not significant. Thus in older adults with symptomatic OA, pain and depression, and, surprisingly, not sleep or physical performance, were independently associated with fatigue. Future interventions to alleviate fatigue in OA should consider not only pain, but also mood disorders.

### THE SYMPTOM EXPERIENCE IN OLDER MEN WITH PROSTATE CANCER RECEIVING RADIATION THERAPY

S.L. Beck[1], M. Caserta[1], J. Guo[1], B. Wong[1], L. Ellington[1], N. Honea[2], J. Smith[1], G. Towsley[1], *1. College of Nursing, University of Utah, Salt Lake City, Utah, 2. Arizona Oncology Services Foundation, Phoenix, Arizona*

Prostate cancer primarily occurs in older men and will afflict one in six men in their lifetime. Radiation therapy for localized prostate cancer has historically been associated with significant side effects including urinary and bowel problems as well as fatigue, insomnia, and depression. Recent advances such as Intensity-Modulated Radiation Therapy and the use of ultrasound to better target treatment of the prostate should result in an improved symptom experience. This report characterizes the symptom experience of men with prostate cancer who were over age 50 and receiving external radiation therapy +/- brachytherapy. Men were screened after receiving 40cGy using a systematic assessment of symptom occurrence and distress. The sample included 189 men ranging in age from 51 to 88 (median age of 69). The sample was primarily non-Hispanic white (90%). Eleven men (6%) reported no symptoms and 77 (41%) reported symptoms that were only mild in distress. The number of symptoms ranged from 0 to 12, median was 4. The most prevalent symptoms were urinary frequency (74%), fatigue (65%) and urinary burning (40%). There were very low levels of red or peeling skin (5%). The mean symptom distress for those who experienced any symptom was 2.34 (1 = not at all to 5 = extremely distressed). The associations between age and number of symptoms and symptom distress were non-significant, p-value > 0.35. In spite of advances in therapy, the majority of men regardless of age continue to experience symptoms that are distressing and targeted interventions are recommended. (NCI R21 CA120896-01A1).

### PREDICTORS OF HOME HEALTH UTILIZATION BY OLDER ADULTS HOSPITALIZED WITH HEART FAILURE

D. Bearden[1], M. Feller[1], L. Jones[1], Y. Zhang[1], A. Ahmed[1,2], *1. Medicine, UAB, Birmingham, Alabama, 2. Veterans Affairs Medical Center, Birmingham, Alabama*

Background: Heart failure (HF) is the leading cause of hospitalization for Medicare beneficiaries. HF patients are also major utilizers of home health care (HHC) services and many hospitalized HF patients are discharged home with HHC. However, little is known about the predictors of post-discharge HHC utilization for older adults hospitalized with HF. Methods: Of the 8555 Medicare beneficiaries discharged with a primary diagnosis of HF in 1998-2001 from 106 US hospitals, 6571 (77%) were discharged home alive. Of these, 1414 (22%) were discharged with HHC. We used logistic regression models, adjusting for demographic, clinical and care characteristics, to estimate odds ratios (OR) and 95% confidence intervals (CI) for HHC utilization. Results: Patients (n=6571) had a mean (+/-SD) age of 75 (+/- 11) years, 55 % were women and 26% were African American. Predictors of post-discharge HHC utilization included age (OR, 1.05; 95%CI, 1.04-1.06; P<0.001), female gender (OR, 1.33; 95% CI, 1.17-1.51; P<0.001), prevalent HF (OR, 1.35; 95% CI, 1.16-1.57; P<0.001), pulmonary edema by chest x-ray on admission (OR, 1.29; 95% CI 1.13-1.48;P<0.001) and beta-blockers (OR, 0.82; 95% CI, 0.71-0.95; p=0.006). Other predictors included comorbidities, intensive care unit use, lack of cardiology care, and care at rural or small hospitals (all P<0.05). Conclusion: One in five HF patients discharged home received HHC services. Several demographic, clinical and care characteristics predicted HHC utilization, which may help identify HF patients at high risk for HHC utilization.

### ASSOCIATION OF VITAMIN D LEVELS AND THE INITIATION OF CORONARY ARTERY BYPASS GRAFTING

J. Kautz, S.S. Cha, P.Y. Takahashi, *Internal Medicine, Mayo Clinic, Rochester, Minnesota*

Introduction: There is growing evidence of an association between lower vitamin D levels and coronary artery disease (CAD). Questions remain on the association between vitamin D levels and coronary artery bypass grafting (CABG). Specific Aim: To determine the association between vitamin D levels and the development of severe CAD requiring CABG. Material and Methods: This was a retrospective cohort study of over 1790 patients over age 60 in a primary care practice from years 2000-2007. The primary outcome was initiation of CABG in the following twenty four months. Vitamin D levels were placed within quartiles. Age, gender and Charlson comorbidity index served as adjustment cofactors. The primary analysis used multivariable logistic regression as well as a timed-to event analysis. Results: 129 patients (7.21%) of the cohort underwent CABG in the two years following index. Unadjusted vitamin D levels were associated with a decreased risk of CABG with an increasing vitamin D level (OR 0.98 95% CI 0.96-0.99) p value 0.0013. This relationship continued after adjustment for age and gender. After full adjustment for age, gender and Charlson score, the relationship became non-significant with an odds ratio of 0.99 (95% CI 0.98-1.01). Discussion: Vitamin D levels may play an important part of cardiovascular health. The full model does not show a relationship between vitamin D and CABG; however, the absolute number of events was low at 129. Given differences in models, vitamin D levels may also serve as a surrogate for poor health. Further studies are needed.

### SAFETY AND TOLERABILITY OF NEBIVOLOL IN SENIORS AND NON-SENIORS WITH STAGE I-II HYPERTENSION

F.W. Germino[1], W. Rowe[2], *1. Department of Internal Medicine, Rush Medical College, Chicago, Illinois, 2. Forest Research Institute, Jersey City, New Jersey*

Background: Hypertension, polypharmacy, and the number of comorbidities have been shown to increase with age, which makes the choice of antihypertensive therapy particularly important for the elderly. This analysis summarizes the safety and tolerability data of nebivolol, a cardioselective, vasodilatory beta-blocker, in seniors and non-seniors. Methods: Safety and tolerability data from 3 randomized, 12-week, multi-center, placebo-controlled trials of nebivolol (1.25-30/40 mg/day) in Stage I-II hypertension were pooled and stratified between seniors (≥65 years of age) and non-seniors (<65 years of age). Results: The stratified patient population comprised 375 seniors (nebivolol, n=345; placebo, n=30; mean age: 70.3 years) and 1641 non-seniors (nebivolol, n=1466; placebo, n=175; mean age: 49.8 years). Discontinuation rates due to AEs in nebivolol-treated seniors and non-seniors were 4.1% and 2.3%, respectively (placebo: 0% vs 2.3%). AEs were reported by 43.2% and 30.0% nebivolol-treated seniors and non-seniors, respectively (placebo: 44.8% vs 40.0%). In both nebivolol-treated seniors and non-seniors, the most frequent AEs were headache (5.2% vs 7.5%, respectively; placebo: 13.3% vs 4.6%) and fatigue (4.9% vs 3.3%; placebo, 3.3% vs 1.1%). Dizziness was experienced by 1.4% and 3.3% nebivolol-treated seniors and non-seniors, respectively (placebo: 0% vs 2.3%); orthostatic hypotension was experienced by 0% and 0.3% nebivolol-treated seniors and non-seniors, respectively (placebo: 0% vs 0%). In both seniors and non-seniors, there were no significant differences in frequency of AEs or clinically significant laboratory parameters between nebivolol (all doses)- and placebo-treated patients. Conclusions: The overall safety and tolerability profile of nebivolol is similar between seniors and non-seniors with Stage I-II hypertension.

## EXPLORING PSYCHOSOCIAL PATHWAYS BETWEEN NEIGHBORHOOD CHARACTERISTICS AND STROKE IN OLDER ADULTS: THE CARDIOVASCULAR HEALTH STUDY

T. Yan[1], J. Escarce[2], L. Liang[2], W. Longstreth[3], S. Merkin[2], B. Ovbiagele[2], S. Vassar[1], A.F. Brown[2], *1. Neurology, University of California Los Angeles, Los Angeles, California, 2. UCLA School of Medicine, Los Angeles, California, 3. Neurology, University of Washington, Seattle, Seattle, Washington*

Background: Studies have not investigated whether psychosocial pathways mediate the effect of neighborhood exposures on stroke. Methods: We used data from the Cardiovascular Health Study, a longitudinal population-based cohort study of adults >= 65 years, to construct race-stratified Cox proportional hazard models for time to first ischemic stroke. The key explanatory variable in the baseline model was an index of neighborhood socioeconomic status (NSES), constructed at the census-tract level from six measures of population income, education, employment and wealth. Covariates were individual sociodemographic characteristics (age, gender, marital status, education, and income). In subsequent models, we added psychosocial (depression, social support, social networks, and stressful life events), behavioral (smoking, physical activity, and alcohol), and biologic factors (EKG abnormalities, subclinical cardiovascular disease, hypertension, diabetes, and hyperlipidemia) separately and simultaneously to assess mediation of the effect of NSES on stroke. Results: Of the 3834 participants with no prior stroke, 548 had an incident ischemic stroke over the 11.5-year follow-up. Among the psychosocial factors, only depression was independently associated with higher stroke hazard (Hazard Ratio [HR]=1.26; 95% CI:1.02-1.59). However, addition of psychosocial factors to the baseline model slightly reduced the HRs among residents in the lowest relative to highest NSES quartile from 1.32 (1.01-1.74) to 1.30 (0.98-1.71). Depression ceased to be statistically significant in the model with behavioral and biological factors adjusted. We found no association between NSES and stroke incidence among African Americans. Conclusions: Psychosocial factors played a minimal role in mediating the effect of NSES on stroke incidence among whites.

## MILD CHRONIC KIDNEY DISEASE (STAGE-3A) AND POOR OUTCOMES IN MEDICARE BENEFICIARIES HOSPITALIZED WITH ACUTE HEART FAILURE

T.K. Winters, M.A. Feller, M. Mujib, B. Bowling, R. Campbell, I.B. Aban, A. Ahmed, *University of Alabama at Birmingham, Birmingham, Alabama*

Background: In patients with chronic heart failure (HF), mild chronic kidney disease (CKD) or CKD Stage-3A had no independent association with outcomes. The objective of this study is to determine if CKD Stage-3A is associated with poor outcomes in older adults with acute HF. Methods: Charts of 8049 Medicare beneficiaries discharged alive in 1998-2001 from 106 US hospitals with a primary diagnosis of HF were abstracted. Of these, 4965 had estimated glomerular filtration rate (eGFR) ≥45 ml/min/1.73m2, of which 2041 (41%) had CKD Stage-3A or eGFR 45–59 ml/min/1.73m2. Propensity scores for CKD Stage-3A were used to assemble a cohort of 1826 pairs of patients with and without CKD Stage-3A respectively, who were balanced on 58 baseline characteristics. Cox-regression models were used to estimate association of CKD Stage-3A with outcomes during 5 years of follow-up. Results: Matched patients had a mean (±SD) age of 76 (±10) years; 58% were women; 21% were African American. Patients with and without CKD Stage-3A had a mean eGFR of 52 and 78 ml/min/1.73m2. All-cause mortality occurred in 67% and 61% of matched patients with and without CKD Stage-3A respectively (hazard ratio for CKD Stage-3A, 1.18; 95% CI, 1.07–1.30; P=0.001). HF-hospitalization occurred in 58% and 56% of matched patients with and without CKD Stage-3A respectively (hazard ratio for CKD Stage-3A, 1.14; 95% CI, 1.02–1.28; P=0.027). Conclusion: Unlike in chronic HF, in older adults hospitalized with acute HF, the presence of CKD Stage-3A (eGFR 45–59) was associated with increased mortality and HF hospitalization.

## QUALITATIVE ANALYSIS OF CLINICAL LIFE COURSE BY OLDER PERSONS WITH NEUROFIBROMATOSIS 1

T. Teasdale[1,2], S. Karakattu[1,4], H. Rabalais[1], G. Hallford[1], P. Birch[3], B. Carnes[1], J. Friedman[3], J. Mulvihill[1], *1. Dept of Geriatric Medicine, University of Oklahoma, Oklahoma City, Oklahoma, 2. Veterans Affairs, Oklahoma City, Oklahoma, 3. The University of British Columbia, Vancouver, British Columbia, Canada, 4. University of Tennessee, Memphis, Tennessee*

The clinical picture of Neurofibromatosis 1 (NF1) in youth is well described. Two thirds of all people with NF1 survive past age 45, yet the issues of NF1 (as with many genetic disorders) in old age are largely unknown. Case reports suggest the medical problems, but we lack specific information guiding clinicians in the care of these older patients. As part of a larger initiative to define the issues that individuals with genetic disorders have in old age, focus groups and interviews were conducted in the USA and Canada. Self perceptions of aging, personal disease status, coping strategies, and the clinical experience were collected from persons with NF1 aged 50+, caregivers, and non-affected siblings. Nearly all unwaveringly stated that health care providers are under-trained in NF1 screening, management, and referral. Providers do not attend to issues of importance to affected older patients, including ADL/IADL limitations, pain, fatigue, health care costs, linking NF1 to symptoms, QoL, stigma, and future concerns (full listing will be presented). Instead, providers attend to the acute reason for the visit or to those medical conditions with which the provider is familiar. Inattention to NF1-specific health care issues had a negative impact on the respondents' quality of life and livelihood. Most respondents reported low levels of health care utilization, primarily because providers knew little about NF1. New QoL indicators and suggested clinical approaches for appropriate care of older persons with NF1 will be distributed. This approach may be transferable to other genetic diseases.

### EUROPEAN ANCESTRY AND RESTING METABOLIC RATE IN OLDER PERSONS

T. Manini[1], K. Patel[3], D.C. Bauer[5], E. Ziv[5], D. Schoeller[2], D. Mackey[5], A.B. Newman[4], T.B. Harris[3], *1. Aging and Geriatric Research, University of Florida, Gainesville, Florida, 2. University of Wisconsin, Madison, Wisconsin, 3. National Institute on Aging, Bethesda, Maryland, 4. University of Pittsburgh, Pittsburgh, Pennsylvania, 5. University of San Francisco, San Francisco, California*

Context: Resting metabolic rate (RMR) contributes 60-80% of total energy expenditure and is consistently lower in populations of African descent compared with populations of European populations. Genetic determination of European ancestry (EA) through SNP analysis would provide an initial step for indentifying genetic associations that contribute to low RMR in African Americans. Objective: We sought to evaluate the association between RMR and EA in African Americans. Design and Participants: RMR was measured by indirect calorimetry in 141 African American men and women (aged 74.7 ± 3.0 years). Ancestry informative markers were used to estimate individual percent EA. Multivariate regression was used to assess the association between RMR and EA after adjustments for fat-free mass, fat mass, age, study site, physical activity level and sex. Setting: University-based population research clinics in Memphis, Tennessee and Pittsburgh, Pennsylvania Main Outcome Measure: Resting metabolic rate Results: Mean EA was 23.8 ± 16% (range: 0.1% to 70.7%) and no differences were noted between sex. Following multivariate adjustment, each percent increment in EA was associated with a 1.6 kcal/day (95% Confidence interval: 0.42, 2.7 kcal/day) increase in RMR ($p = 0.008$). This equates to a 160 kcal/day lower RMR in a population of completely African ancestry compared with one of completely European ancestry. Additional adjustment for trunk fat-free mass that partially accounts for high-metabolic rate organs did not affect this association. Conclusions: European ancestry in African Americans is strongly associated with RMR, suggesting that population differences in RMR may be due to genetic variants.

### PHOTOSELECTIVE VAPORIZATION OF THE PROSTATE: OUTCOMES AND ADVERSE EVENTS OF 220 CONSECUTIVE PATIENTS

C.H. Robson, E. Mueller, *Urology, University of Texas Health Science Center San Antonio, San Antonio, Texas*

Purpose: To evaluate the short term outcomes of 220 consecutive patients who underwent the 532 nm KTP photoselective vaporization of the prostate (PVP) procedure and to evaluate and categorize the complications of the procedure. Materials and Methods: A total of 220 patients with symptomatic benign prostatic obstruction were treated with KTP photoselective vaporization of the prostate. Evaluation measures included the AUA Symptom Score (AUASS)/Quality of Life Score (QOL), peak urinary flow rate (Qmax), post void residual (PVR) and adverse events. Results: Symptoms were evaluated at 3 months and adverse events at 1 and 3 months. 181 patients returned for their 1 month visit and 152 returned for their 3 month visit. The American Urological Association Symptom Score (AUASS) decreased from 21.8 to 6.7. The Quality of Life Score (QOL) decreased from 3.8 to 0.7. The peak urinary flow rate (Qmax) increased from 10.7 cc/sec to 22.7 cc/sec. The post void residual urine (PVR) decreased from 262 cc to 105 cc. Most common adverse events in the early postoperative period were mild hematuria in 45%, mild transient dysuria in 32%, and transient irritative voiding symptoms such as urinary urgency and frequency in 31%. Conclusion: These results confirm that photoselective vaporization of the prostate (PVP) is a safe and effective therapy for benign prostatic obstruction.

### PREVALENCE OF URINARY CATHETERS: A PILOT STUDY OF ATTITUDES, USE, AND KNOWLEDGE

T. Dolinar[1], D.M. Kresevic[1,2], C.J. Donskey[1], C. Burant[3,1], B. Heath[1], *1. VA, Cleveland, Ohio, 2. University Hospitals Case Medical Center, Cleveland, Ohio, 3. Case Western Reserve University Frances Payne Bolton School of Nursing, Cleveland, Ohio*

Urinary tract infections (UTI) remain the most common hospital-acquired infection. The most frequent (80%) cause of developing UTI during an inpatient stay is catheter placement (Am J Infect Control, 2006). Each year over 5 million inpatients have urinary catheters inserted (CDC, 2001). Unfortunately, guidelines for appropriate catheter placement for urinary retention are lacking (Holroyd-Leduc et al., 2006; American Health Care Association, 2009). As phase one in a three phase study, Cleveland VAMC investigators conducted a web-based survey to determine current practices and attitudes of healthcare providers regarding indwelling catheter placement for elevated post-void residual (PVR) urine in older adults. Of the 46 initial respondents only 12% routinely measure PVR on new admissions despite the fact that 82% had a portable transabdominal ultrasound readily available on their unit to assess PVR. Over half of the respondents indicated they would only place a catheter in a patient with a PVR of 300 mL or higher; notably 91% of providers believed that elevated PVR of 300 mL can predispose an elderly patient to UTI. Less experience was associated ($r=-.53$, $p<.001$) with increased likelihood to recommend catheter placement in a patient with a PVR of 300 mL following hip replacement. However, more experience was associated ($r=.41$, $p<.01$) with the belief that a post-op knee replacement patient with an indwelling catheter would develop UTI. Studies to determine appropriate use of catheters for elevated PVR and associated risk of developing UTI are needed in order to establish guidelines for providers.

### INCIDENCE AND RISK FACTORS OF HEALTHCARE-ASSOCIATED INFECTIONS IN KOREAN NURSING HOMES FOR OLDER ADULTS

S. Choi, M. Song, *College of Nursing, Seoul National University, Seoul, Republic of Korea*

Background: Healthcare-associated infections (HAIs) are a major healthcare problem in nursing homes. There have been few reports related to HAIs in Korean nursing homes. Objectives: To identify the incidence and risk factors of HAIs in Korean nursing homes. Methods: A retrospective cohort study was done of 389 medical and nursing records of residents residing for more than one day in two nursing homes for older adults in Korea for one year beginning in June 2007. HAIs were defined according to the standard definitions developed by the Consensus Conference. Results: A total of 484 cases of HAIs were identified in 258 (66.3%) residents during 118,002 resident-days. The overall incidence rate of HAIs was 4.1 per 1000 resident-days. Catheter-associated urinary tract infection incidence had the highest rate of 4.02 per 1000 catheter-days followed by respiratory infections (1.49 per 1000 residents-days), skin and soft tissue infections (1.2 per 1000 residents-days), gastrointestinal tract infections (0.85 per 1000 resident-days), and urinary tract infections (0.40 per 1000 residents-days). Using a multivariate regression model, risk factors of HAIs were present for invasive devices [Odds ratio (OR) 3.02], length of stay greater than 2 years (OR 2.73), bedridden status (OR 2.70), and gender for males (OR 2.05). Conclusions: This is the first study about HAIs in nursing homes in Korea. The results of this study enable meaningful comparisons with other countries as well as contribute to preventing infections in nursing homes by implementing infection control programs. However, the small study sample and retrospective method limit our observations.

### CIRCULATING LEVELS OF MACROPHAGE MIGRATION INHIBITORY FACTOR IN COMMUNITY-DWELLING OLDER ADULTS

S.S. Chang[1], M. Tinetti[1], R. Bucala[2], I. Kang[2], *1. Internal Medicine, Section of Geriatrics, Yale University School of Medicine, New Haven, Connecticut, 2. Yale University School of Medicine, Department of Internal Medicine, Section of Rheumatology, New Haven, Connecticut*

Background: A pro-inflammatory state, characterized by elevated circulating levels of tumor necrosis factor alpha (TNF-$\alpha$) and interleukin-6 (IL-6), has been associated with aging. Macrophage migration inhibitory factor (MIF) is a cytokine that activates the production of TNF-$\alpha$, IL-6, and other pro-inflammatory mediators in immunoregulatory cells (e.g., macrophages and lymphocytes). Also, MIF is reported to be associated with inflammatory diseases and age-related conditions, including atherosclerosis, diabetes mellitus, osteoporosis, and Alzheimer's disease. Whether higher circulating MIF levels are associated with aging, independent of disease-related effects, is unknown. To address this question, we compared plasma MIF levels between healthy older and younger adults. Methods: Morning blood specimens were collected from 27 adults aged ≥65 and 69 participants aged 21-40, recruited from the New Haven, CT area. Individuals with chronic inflammatory diseases or acute infections were excluded. Plasma MIF levels were measured by enzyme-linked immunosorbent assays. Using Wilcoxon-Mann-Whitney rank-sum tests, we assessed differences in median MIF levels between older and younger participants. Results: The median MIF level was 4.77 ng/ml (interquartile range(IQR):2.23-11.74) in older adults vs. 3.92 ng/ml (IQR:2.13-7.85) in younger adults (p-value=0.28). After excluding participants with hypertension and ≥2 diseases (n=16), the difference in median MIF levels between older (6.35 ng/ml, IQR:4.72-11.74) and younger (3.92 ng/ml, IQR:2.11-7.85) adults became significant (p-value=0.045). Conclusions: These results suggest that MIF levels may increase in healthy adults with aging, independent of age-related conditions and co-morbid disease burden. Whether MIF production differs in immunoregulatory cell subsets between older and younger adults needs to be investigated in future studies.

### BIOMARKERS OF SARCOPENIA FROM SKELETAL MUSCLE BIOPSIES IN MEN

T.W. Buford[1,3], M.B. Cooke[2,3], B.D. Shelmadine[3], G.M. Hudson[4,3], L.L. Redd[3], D.S. Willoughby[3], *1. University of Florida, Gainesville, FL, Florida, 2. University of Queensland, Brisbane, Queensland, Australia, 3. Baylor University, Waco, Texas, 4. University of Southern Mississippi, Hattiesburg, Mississippi*

Sarcopenia is a prevalent condition in older adults with significant costs to afflicted individuals and the healthcare system. Attaining viable biomarkers of sarcopenia is critical to improving treatment of the condition. The present study examined skeletal muscle biopsies from young (N=14, 21.35+1.03 yr) and aged (N=13, 63.85±1.83 yr) men for biochemical indices related to muscle atrophy through proteolysis and/or apoptosis. Pearson correlations coefficients and multiple regression analysis also indicated relationships of biochemical measures to muscle mass and strength. Our results indicated that gene expression of forkhead box O 1 (FoXO1, p=0.001) and inhibitors of DNA binding 1 (Id1, p=0.010) and 3 (Id3, p=0.043) was significantly greater in aged compared to young men. Moreover, aged muscle contained significantly more phosphorylated inhibitor of kappa B alpha protein (pIKB$\alpha$, p=0.016) as well as greater nuclear content of p53 (p=0.039), glucocorticoid receptor (GCr, p=0.006), and p65 subunit of nuclear factor kappa B (NF-kB, p=0.007). Pearson coefficients revealed significant correlations with both lean mass and strength for FoXO1 mRNA (lean mass r= -0.435, p=0.023; strength r= -0.402, p=0.038) and nuclear NF-kB p65 (lean mass r= -0.508, p=0.007; strength r= -0.383, p=0.048). Meanwhile Id1 (r= -0.474, p=0.012), Id3 (r= -0.583, p=0.001) and GCr (r= -0.489, p=0.010) correlated significantly with muscle strength. Regression models indicated p65 and FoXO1 as significant predictors of lean mass (adjusted R2=0.423), while Id1 was the only significant predictor of muscle strength (adjusted R2= 0.313). These results suggest several potential biomarkers that are worthy targets of new therapeutic interventions meant to treat sarcopenia.

### MEDICATION MANAGEMENT IN OLDER ADULTS SEEN IN A GERIATRIC ASSESSMENT CLINIC

C.A. Sadowski[1,2], A. Marin[2], *1. Faculty of Pharmacy, University of Alberta, Edmonton, Alberta, Canada, 2. Covenant Health, Edmonton, Alberta, Canada*

Objective: The purpose of this study is to describe medication management problems in a cohort of older adults seen in a geriatric assessment clinic. Methods: A retrospective chart review was conducted through the interdisciplinary seniors clinic at the Misericordia Community Hospital, Edmonton, Alberta. Patients who were seen in the clinic in 2006 or 2007, age 65 years or older, and admitted from a community living setting were included. The data was abstracted by research assistant, entered into an Excel database, and analyzed by SPSS 15.0. Results: The first round of data collection has been completed. Eighty-two patients, 48 female (59%), mean age 81 (SD 7) were included in the first analysis. Three patients (4%) were referred for the primary reason of medication review. Fifty-one patients were identified as having some form of cognitive impairment. Non-adherence was identified in 48 (58%) of patients. Fifty (60%) were identified as having difficulties managing their medications, and 37 (45%) were identified as being “dependent” for medication management. On admission to clinic, 34 (41%) were using calendar packaging. Forty-two patients were receiving supports for medication management, mostly from a spouse (43%). For the specific medication management activities, the following required support: administration (57%), pick up (52%), and ordering refills (33%). Conclusion: Medication management is not recognized as a therapeutic problem by referring family physicians. Older adults have multiple challenges in handling complex medication regimens.

### AIR IN THE PANDORA- A CASE OF SPONTANEOUS NON-TRAUMATIC POSTERIOR GASTRIC PERFORATION

V. Nagaraja, M. Goldschmid, *Internal Medicine, University of Arizona/ University Physicians Health Care at Kino, Tucson, Arizona*

A 75 year old gentleman presented with a sudden onset of respiratory distress. He had exertional shortness of breath and anorexia for a week. He had a past medical history of coronary artery disease, congestive heart failure, atrial fibrillation, peripheral vascular disease, chronic obstructive pulmonary disease, hypertension and type 2 diabetes mellitus. Clinical examination was consistent with respiratory failure, hypovolemic shock and left sided pleural effusion. Abdominal examination was normal. He required intubation, mechanical ventilation and vasopressor support. A supine chest radiograph post-intubation confirmed the left sided pleural effusion. A CT scan of the chest without contrast confirmed the left sided pleural effusion but also revealed pneumoperitoneum. An emergent laparotomy revealed a 1.5 cm posterior gastric ulcer perforation and 1.5 litres of turbid peritoneal fluid was drained. A partial gastrectomy was performed. Stomach biopsy revealed ulceration, necrosis and acute inflammation but a benign stomach mucosa. The patient had a prolonged post-operative hospital course and eventually was transferred to in-patient hospice for comfort care in view of his multiple co-morbidities. Gastric ulcers are commoner in elderly owing to the changes in gastric physiology. Multiple co-morbidities and polypharmacy put them at a higher risk for perforations. Spontaneous non-traumatic posterior gastric perforation is a rare entity. The clinical presentation is less dramatic, more delayed and commonly missed on initial examination due to equivocal or minimal abdominal distension, tenderness and guarding. It is associated with a high mortality. Rapid diagnosis and treatment within the first six hours of perforation is associated with excellent prognosis.

### THE BURDEN OF HEARING LOSS ON THE QUALITY OF LIFE AMONG OLDER ADULTS WITH MEDICARE SUPPLEMENT INSURANCE

K. Hawkins[1], M. Bai[1], R.J. Ozminkowski[3], R.J. Migliori[3], C. Yeh[2], S. Musich[1], *1. Ingenix, Ann Arbor, Michigan, 2. AARP Services Inc., Washington, District of Columbia, 3. UnitedHealth Group Alliances, Ann Arbor, Michigan*

Objective: Estimate the burden of hearing loss on quality of life (QoL) among the elderly with AARP® Medicare Supplement (i.e., Medigap) Insurance underwritten by UnitedHealthcare (or UnitedHealthcare of New York for insureds residing there). Study Design: Data were obtained from insureds who completed the Health Update Survey (HUS). The HUS contained questions on demographics, comorbid conditions, and the Veterans RAND 12-item health status instrument (the VR-12), which was derived from the Short Form 12-item instrument. The HUS was mailed to a random sample of 15,000 insureds from 10 states in 2008. Survey respondents were divided into those with and without hearing loss based on their responses to a survey question. Multiple regression analyses were conducted to estimate the impact hearing loss had on physical and mental health aspects of QoL, while controlling for patient demographics and comorbid conditions. The QoL metrics included the physical (PCS) and mental component scores (MCS) obtained from the VR-12 instrument. Population Studied: Of the 5,515 respondents to the survey, a 37% survey response rate, 10.4% indicated hearing loss. Principle Findings: Those with hearing loss averaged significantly lower PCS (-3.25, p<0.0001) and MCS (-3.23, p<0.0001) scores, compared to those who indicated no hearing loss. Conclusions: The negative impact of hearing loss on QoL exceeded the burden of common comorbidities like diabetes, cancer, and cardiovascular conditions. Implications for Policy: Doctors should screen for hearing loss among elderly patients, and interventions to treat it when found should be applied.

### SLEEP DISTURBANCES AND ADVERSE DRIVING EVENTS IN A COHORT OF ACTIVE OLDER DRIVERS

C.A. Fragoso[1,2], K. Araujo[1], P.H. Van Ness[1], R.A. Marottoli[1,2], *1. Yale University, New Haven, Connecticut, 2. VA Connecticut, West Haven, Connecticut*

STUDY OBJECTIVE: To evaluate the association between sleep disturbances and subsequent adverse driving events, among active older drivers. METHODS: We evaluated 430 older persons, mean age of 78.5 years, who drove at least once-a-week. Baseline measures included self-reported driving patterns and sleep questionnaires, namely the Insomnia Severity Index (ISI), Epworth Sleepiness Scale (ESS), and Sleep Apnea Clinical Score (SACS). The primary outcome was an adverse driving event, based on self-report and driving records, and categorized as a crash or traffic-infraction (composite-I), or as a crash, traffic-infraction, near-crash, or getting lost (composite-II). RESULTS: Participants reported driving a median of 17.0 miles/day, with 96.7% (416/430) driving daily or every-other-day. Although 26.0% (112/430) had insomnia (ISI>/=8), 19.3% (83/430) had daytime drowsiness (ESS>/=10), and 19.9% (84/422) had a high sleep apnea risk (SACS>15), the median scores for the ISI, ESS, and SACS were normal at 3.0, 6.0, and 8.0, respectively, and drowsy-driving was reported by only 5.1%. Over a period of up to 2-years, 24.9% (104/418) and 51.4% (215/418) of participants had a composite-I and -II driving event, respectively. In unadjusted and adjusted multivariable models, insomnia, daytime drowsiness, and high sleep apnea risk were not associated with a composite-I or –II driving event. CONCLUSION: In active older drivers, sleep disturbances are mild and not associated with adverse driving events. Accordingly, and because older persons are known to self-regulate their driving practices, future studies should evaluate whether sleep disturbances are more important as a mechanism that underlies driving cessation, rather than compromising driving safety.

## SESSION 205 (SYMPOSIUM)

### HIP FRACTURES IN THE VETERANS HEALTH ADMINISTRATION (VHA): LESSONS FROM AN INTEGRATED NATIONAL HEALTHCARE SYSTEM

Chair: *R.R. Campbell, COE Maximizing Rehabilitation Outcomes, Tampa, Florida, VISN 8 Patient Safety of Inquiry, Tampa, Florida*
Co-Chair: *G. Powell-Cope, COE Maximizing Rehabilitation Outcomes, Tampa, Florida*
Discussant: *T. Bulat, VISN 8 Patient Safety of Inquiry, Tampa, Florida*

This symposium will discuss patient safety research conducted in the Veterans Health Administration on hip fractures over the past decade. Starting with a view from the developer of the VHA Injury and Adverse Surveillance System, hip fractures will be discussed within the context of a systems approach to measuring injuries and adverse events. Two presentations will be made by two clinicians on patient safety programs and on research using leading edge engineering methods in VHA nursing homes aimed at reducing the burden of hip fractures. Two presentations from health services researchers will discuss the implications of VHA national research on hip fractures and one year all-cause mortality in veterans treated both within the VHA and by the Medicare program. Additionally, an overview of leading edge studies of hip fracture readmission rates and medication profiles of long-stay nursing home residents will be presented by a health economist. VHA research from a multi-disciplinary team will be presented to demonstrate the breadth and depth of patient safety initiatives aimed at reducing the burden of hip fractures in veterans. Special emphasis will be placed on studies conducted in the long term care setting. Because the VHA is a large national horizontally and vertically integrated managed care system, the research findings from the VHA on hip fractures have the potential to inform programs and initiatives in the non-VHA care setting aimed at reducing the burden of hip fractures in the elderly

### AN OVERVIEW OF THE VHA INJURY AND ADVERSE EVENT SURVEILLANCE SYSTEM

R.R. Campbell[1,3], D. French[2], W.A. Lapcevic[1], A.M. Spehar[1], G. Powell-Cope[1], *1. COE Maximizing Rehabilitation Outcomes, Tampa, Florida, 2. VA Center of Excellence on Implementing Evidence, Indianapolis, Indiana, 3. VISN 8 Patient Safety Center of Inquiry, Tampa, Florida*

The purpose of this session is to describe the development and implementation of the VHA Injury and Adverse Event Surveillance System. This system was developed nearly a decade ago by the author at the VISN 8 Patient Safety Center using VHA administrative datasets to track and trend the incidence and costs associated with injury and adverse event hospitalizations in the VHA. The system tracks hospitalizations for admissions with primary admitting diagnoses associated with the AHRQ Clinical Classification System classes 225 through 244. These injuries and adverse events include fractures, traumatic brain injuries, other injuries, iatrogenic complications of healthcare, and poisonings and toxicities associated with medications and other substances. It provides a comprehensive means of tracking the burden of injury hospitalizations in the VHA. Its uses in current patient safety initiatives, to include hip fracture injury mitigation activities, will be described.

### TEMPORAL TRENDS IN INCIDENCE OF HIP FRACTURES IN VA COMMUNITY LIVING CENTERS (CLCS)

T. Bulat[2], R.R. Campbell[1,2], G. Powell-Cope[1], *1. COE Maximizing Rehabilitation Outcomes, Tampa, Florida, 2. VISN 8 Patient Safety Center of Inquiry, Tampa, Florida*

Purpose: To determine whether VA national patient safety initiatives (National Falls Toolkit) have impacted the incidence of hip fractures in VA community living centers (CLC). Methods: The data were extracted from the hospital discharge datasets for FY 2000 - 2008. Fractures were identified using ICD-9-CM diagnosis codes (800-829).The rate of hip fractures per bed days of care (BDOC) was calculated for each year.

Results: Overall, VA hospital hip fracture discharges (from all sources) have been decreasing over time. The number of hip fractures in CLCs have decreased 28% and the rate of hip fractures/BDOC by 19%. There was a distinct change in the rate in FY 2005 and this downward trend has persisted relative to pre-FY 2005 rates. Implications: There seems to be a temporal relationship between the patient safety initiatives implementation in FY 2005 and a subsequent improvement in the trends for hip fractures in VA CLCs.

### PREDICTING INJURIOUS FALLS IN NURSING HOMES USING SOCIO-TECHNICAL PROBABILISTIC RISK ASSESSMENT

G. Powell-Cope[1], R.R. Campbell[1,3], B. Hahm[1], I. Joseph[2,1], T. Bulat[3], J. Westphal[4], *1. COE Maximizing Rehabilitation Outcomes, Tampa, Florida, 2. James A Haley Hospital, Tampa, Florida, 3. VISN 8 Patient Safety Center of Inquiry, Tampa, Florida, 4. Outcome Engineering, Plano, Texas*

Purpose: This study applied socio-technical probabilistic risk assessment (used in high reliability industries) to prioritize risks for serious injurious falls in nursing homes. Methods: One and two day meetings were conducted with 26 clinical and nonclinical staff from four facilities. Staff identified and assigned probabilities to provider, resident, and equipment failures. Results: The greatest path of risk was for residents with impaired mobility and high fragility (e.g. osteoporosis) who engaged in unassisted wheelchair transfers to and from the bed and toilet, when the wheelchair locks were not engaged and protective measures were not in place (e.g. hip protectors). Implications: As modeled, injurious falls could be reduced by 26% by modest improvement in alarms response time, automatic break locks on 90% of wheelchairs, a high reliable wheelchair maintenance process, and a 10% improvement in transfer techniques. Models will be used to develop cognitive tools to assist clinicians in making evidence-based decisions about fall injury prevention.

### HIP FRACTURES: LESSONS FROM THE VHA FOR MEDICARE PROGRAMS AND POLICIES

D. French[2], R.R. Campbell[1,4], A.M. Spehar[1,4], W.A. Lapcevic[1], E. Bass[3], *1. COE Maximizing Rehabilitation Outcomes, Tampa, Florida, 2. VA Center of Excellence on Implementing Evidence, Indianapolis, Indiana, 3. Congressional Budget Office, Washington DC, District of Columbia, 4. VISN 8 Patient Safety Center of Inquiry, Tampa, Florida*

The purpose of this presentation is to present several published studies on hip fractures in the VHA. These studies will discuss the burden of hip fracture injuries in the long term care setting in the VHA, problematic medication profiles and attendant risks for hip fractures, hospital readmissions associated with hip fractures, and other leading edge issues dealing with financial incentives that may impact hip fracture injury mitigation programs. The presenter is a health economist who will discuss published research at the national level with an emphasis on hip fractures occuring in the VHA long term care setting.

### ALL-CAUSE MORTALITY RATES OF HIP FRACTURES TREATED IN THE VHA: DO THEY DIFFER FROM MEDICARE FACILITIES?

W.A. Lapcevic[1], D. French[2], R.R. Campbell[1,3], E. Bass[4], *1. COE Maximizing Rehabilitation Outcomes, Tampa, Florida, 2. VA Center of Excellence on Implementing Evidence, Indianapolis, Indiana, 3. VISN 8 Patient Safety Center of Inquiry, Tampa, Florida, 4. Congressional Budget Office, Washington DC, District of Columbia*

PURPOSE: To estimate the 1-year all-cause mortality rates for hip fracture (HFx) patients hospitalized at Veterans Health Administration (VHA) facilities and compare with previous published mortality rates for veterans treated in Medicare facilities. METHODS: In total, 7 years of VHA discharge data on HFxs for 12,539 patients age 65 and older were combined with national death registry data. We performed a 1-year survival analysis using the Cox proportional hazard method. RESULTS: The adjusted rates for veterans treated in the VHA (30 days=9.3%, 90 days=17.5%, 180 days=23.3%, 365 days=29.8%) were similar to veterans treated in Medicare facilities (30 days=8.9%, 90 days=15.6%, 180 days=21.8%, 365 days=29.9%). For veterans treated for a HFx in Medicare facilities, the average length of stay was 7 days compared to an average length of stay of 14 days in the VHA

## SESSION 210 (PAPER)

## IDENTIFYING RISKS OF FRAILTY AND NURSING HOME PLACEMENT

### THE PSYCHOMETRIC PROPERTIES OF THREE SELF-REPORT SCREENING INSTRUMENTS FOR IDENTIFYING FRAIL OLDER PEOPLE IN THE COMMUNITY

S. Metzelthin[1,2], R. Daniels[2,1], L. de Witte[2,1], W. van den Heuvel[1,3], G.I. Kempen[1], *1. Maastricht University, Maastricht, Limburg, Netherlands, 2. Zuyd University of Applied Sciences, Heerlen, Limburg, Netherlands, 3. University Medical Centre Groningen, Groningen, Groningen, Netherlands*

Background: Frailty is highly prevalent in older people. Its serious consequences, such as disability, are considered to be a public health problem. With regard to disability prevention, valid screening instruments are needed to identify frail older people in time. The aim of this study was to evaluate and compare the psychometric properties of three frailty instruments: the Groningen Frailty Indicator (GFI), the Tilburg Frailty Indicator (TFI) and the Sherbrooke Postal Questionnaire (SPQ). For validation purposes a disability questionnaire (GARS) was added. Methods: In The Netherlands a questionnaire was sent to 687 community-dwelling older people (≥70 years). Agreement between screening instruments, internal consistency, and construct validity were evaluated and compared. Results: The response rate was 77%. Frailty prevalence estimates ranged from 40% to 59%. Highest agreement was found between GFI and TFI (Cohen's kappa=0.74). Cronbach's alpha for GFI, TFI and SPQ was 0.73, 0.79 and 0.26, respectively. Scores on frailty instruments correlated significantly with each other (GFI–TFI, r=0.87; GFI–SPQ, r=0.47; TFI–SPQ, r=0.42) and with the GARS (GFI–GARS, r=0.57; TFI–GARS, r=0.61; SPQ–GARS, r=0.46). GFI and TFI scores were, as expected, significantly related to age, sex, education and income. Conclusions: GFI and TFI showed high internal consistency and construct validity in contrast to SPQ. Based on these findings it is not yet possible to conclude whether GFI or TFI should be preferred; data on the predictive values of both instruments are needed. The SPQ seems less appropriate for postal screening of frailty among community-dwelling older people.

### FRAILTY AS A PRECLINICAL STAGE OF THE DISABLEMENT PROCESS IN LATER LIFE

M.E. Bowen[1], M. Rowe[1,2], *1. HSR&D/RR&D Center of Excellence, Veterans Health Administration, Tampa, Florida, 2. University of Florida, Gainesville, Florida*

Purpose: To examine the relationship between frailty and the disablement process. Design and Methods: Eight years of longitudinal data from the Health and Retirement Study (HRS; 1998-2006), a nationally representative sample of community-dwelling adults age 50 and older in 1998 (N=11,491) were used. Nonlinear multi-level models used frailty (a fall, difficulty getting up from a chair, effort, exhaustion, physical inactivity, and being underweight, overweight, or obese) to predict disabilities in mobility, functioning (Instrumental Activities of Daily Living; IADL), and self-care (Activities of Daily Living; ADL). The roles of other confounding factors including demographics (age, sex, race/ethnicity, cohort, marital status), socioeconomic conditions (education, income, and wealth), health behaviors (smoking, drinking alcohol), and health conditions (high blood pressure, diabetes, stroke, heart condition, arthritis, and depressive symptoms) were also evaluated in multilevel models. Results: A fall, difficulties getting up from a chair, effort and exhaustion reports were significantly associated with mobility, IADL, and ADL disability. Underweight respondents had an increased risk for disabilities in mobility (1.16; p≤0.001), IADL (1.30; p≤0.001), and ADL (1.31; p≤0.001) and obese respondents had an increased risk for disabilities in mobility (1.40; p≤0.001) and ADL (1.16; p≤0.01). However, being overweight (0.76; p≤0.001) or obese (0.78; p≤0.001) was associated with a decreased risk for disabilities in IADL and there was no relationship between being overweight and disabilities in ADL. Implication: Overall, results from this nationally representative longitudinal study suggest that frailty may be a preclinical stage in the disablement process.

### EXPLAINING TRANSFERS FROM HOME AND COMMUNITY BASED WAIVER PROGRAM TO NURSING HOME: CAN PATIENTS STAY AT HOME?

C.W. Given[1], A. Sikorskii[2], S.L. Spoelstra[2], M. You[2], *1. College of Human Medicine, Michigan State University, East Lansing, Michigan, 2. Michigan State University, East Lansing, Michigan*

The ability of 8,161 medically and economically vulnerable older persons to remain at home compared to transferring to a nursing home (NH) is examined in a Home and Community Based Waiver (HCBW) program between 2003 and 2007. Comparisons of those who remained at home (4344) and NH transfers (3817) were performed on: sociodemographics, physical function, cognitive status, caregiver support, living arrangement, and service utilization. Data were obtained from the Minimum Data Set-Home Care and Medicaid claims. Generalized linear models were used to compare remaining at home to NH transfers. Patients remained at home for 38.8 months compared, to 27.6 months at home for NH transfers. Sex and race/ethnicity did not influence NH transfer, however Caucasians had a higher rate of NH transfer. Patients 76 years of age or older (74%), with one or more deterioration in activity of daily living (37%), with an increase in falls (23%), who wanted a change in living arrangement (12%), and had no increases in home care services (49%) were more likely to transfer to NH. Comorbid conditions and frailty measures (incontinence, vision, hearing, and weight loss) did not predicted NH transfer. Those who deteriorated in ADLs, are dissatisfied with their living arrangements, and have no increase in waiver program services are at highest risk of a transfer to NH. Thus, using known predictors to identifying those at risk of transfer to NH, modifying the plan of care to address these risks, and increasing home services may delay NH transfer in this population.

### PREDICTORS FOR NURSING HOME PLACEMENT AND DEATH IN COMMUNITY-BASED OLDER ADULTS WITH DISABILITY

M.R. Tomita, P. Suryakumar, S. Nochajski, B. Naughton, *Rehabiliatation Scinece, University at Buffalo, Buffalo, New York*

This study aimed to identify predictors for nursing home placement (N) and death (D) that may occur within a year in community-based older adults with functional deficit. A baseline assessment in participants' home and a one year follow-up phone interview were made by health care professionals. The data were collected for a period of five years. All participants were referred by a county senior services department or skilled nursing home facilities in Western New York. One year after the baseline assessment, 63.4% of 358 participants were living in their home (L), 8.7% moved to a nursing home, and 27.9% died. Binary logistic regression analyses were used with a stepwise entry method. The results showed that the prediction accuracies for N, D, and L were 76.7%, 71.0%, and 92.5-98.2%, respectively. The major common predictors for D and N were: having a diagnosis of Alzheimer's disease, a higher physical disability level, a lower Body Mass Index, and more sick days in the past six months. Unique predictors for N were: lower levels of Mini Mental State Exam scores, grip strength, and function for transfer. Those for D were: having a diagnosis of heart disease, lower function for locomotion, and being unable to take own medication, and not-married. The result confirms many past findings being applicable to this vulnerable population. The unique finding is that lower statuses of specific activities of daily living (ADL) and Instrumental ADL (IADL) are strong predictors for N or D within a year, therefore require particular attention.

# SESSION 215 (PAPER)

## ISSUES IN RESEARCH METHODS

### CHALLENGES IN RESEARCH RECRUITMENT OF HOSPITALIZED OLDER ADULTS WITH COGNITIVE IMPAIRMENT

K.B. Hirschman[1,2,3], C. Bradway[1,5,3], K.H. Bowles[1,2,3], B.O. Ha[1], T.V. Williams[1], M.D. Naylor[1,2,4], *1. University of Pennsylvania School of Nursing, Philadelphia, Pennsylvania, 2. NewCourtland Center for Transitions and Health, Philadelphia, Pennsylvania, 3. Insitute on Aging, University of Pennsylvania, Philadelphia, Pennsylvania, 4. Leonard Davis Institute of Health Economics, Philadelphia, Pennsylvania, 5. Center for Integrative Science in Aging, Philadelphia, Pennsylvania*

The objectives of this study were to screen and enroll cognitively impaired hospitalized older adults and their family caregivers into a clinical trial to test nursing interventions. Adults age 65 and older, non-terminal, living within 30 miles radius of admitting hospital and who were planning to return home were eligible to be screened. Cognitive impairment was assessed using two validated measures: the Six-Item Screen (SIS) and the CLOX1, unprompted clock drawing task. Patients with a diagnosis of dementia were automatically eligible to enroll. Of the 16,663 admissions from 4/2006 to 12/2009, 9374 charts were reviewed and 5164 met inclusion criteria. Within this sample, 234 (4.5%) patients had a diagnosis of dementia and an additional 4930 patients were approached to be screened for cognitive impairment. Among patients screened for CI (3549/4930, 72.0%), 44.7% (n=1588) had deficits in orientation or recall (SIS) or executive function (CLOX1). Among those eligible to participate (either screening for cognitive impairment or history of dementia), 536 patient-caregiver dyads enrolled (536/1822; 29.4%). Common reasons for refusal included the patient or the caregiver not willing to enroll, being unable to reach the family caregiver before the patient's discharge from the hospital and lack of interest in research. Among those who enrolled, delirium was present in 24% of patients. Lower Mini Mental State Examination score was highly associated with delirium, functional deficits, patient depression, and higher caregiver burden. Implications for recruitment in the hospital setting and retention of patients with cognitive impairment and their family caregivers will be discussed.

### OVERCOMING RECRUITMENT CHALLENGES IN OLDER ADULT PUBLIC HOUSING RESIDENTS: LESSONS LEARNED

A. Simning[1], E. van Wijngaarden[1], Y. Conwell[2], *1. University of Rochester School of Medicine and Dentistry, Department of Community and Preventive Medicine, Rochester, New York, 2. University of Rochester School of Medicine and Dentistry, Department of Psychiatry, Rochester, New York*

Background: Conducting research within urban communities and achieving recruitment goals can be challenging. A variety of approaches are needed to overcome recruitment barriers, which include mistrust, mobility issues, stigma, and illiteracy. We will share lessons learned from a study examining mental health among older adult public housing residents. Setting: Participants were recruited from four older adult public housing high-rises maintained by the Rochester Housing Authority in Rochester, NY. Methods: We conducted a two-stage cross-sectional study. In the first stage, high-rise residents completed a health questionnaire. The second stage consisted of a 1-2 hour psychiatric research interview of English-speaking residents aged 60 years and older. To enhance recruitment, we partnered with a community aging services agency, conducted a series of on-site educational booths prior to recruiting, had on-site recruitment booths, mailed a series of letters, provided financial incentives, and administered the interviews in residents' apartments. Results: Prior to recruitment, on-site educational booths enabled us to become acquainted with the residents, many of which helped with recruitment once the study commenced. Providing cash incentives at the on-site recruitment booths resulted in many referrals, and interviewing in residents' apartments also facilitated and increased participation. Mailings were largely ineffective because most residents preferred to participate in person. Conclusions: We overcame considerable recruitment barriers through a multipronged approach. To optimize recruitment of urban older adults, we recommend developing a relationship with the study population before initiating a research project, recruiting in-person, providing immediate incentives, and not requiring participants to travel to study sites.

### DEVELOPMENT AND PSYCHOMETRIC EVALUATION OF NURSE-PATIENT RELATIONSHIP SCALES IN CHRONIC CARE

V.M. Boscart, D. Pringle, K.S. McGilton, E. Peter, F. Wynn, *Bloomberg Faculty of Nursing, University of Toronto, Toronto, Ontario, Canada*

Quality of life and well-being of patients living in chronic care is determined largely by the relationships they have with nursing personnel. Given the importance of these relationships, there is an absence of valid and reliable scales to assess these relationships. The purpose of this study was to develop and test a measure to determine what qualities of relationships between patients and nursing personnel were most important and experienced. A conceptual framework based on the Humanistic Nursing Theory served as a foundation to develop two scales; the Humanistic Relationship Importance Scale (HRIS) and the Humanistic Relationship Experience Scale (HRES). Sixty-nine items were developed and tested for content validation and initial validity and reliability (n=40). Subsequently, 45 items were deleted. Next, the 24-item scales were completed by 249 patients in five facilities and the results subjected to a principal axis analysis. The HRIS presented a five factor solution and the HRES a one factor solution. The HRIS had a Cronbach′s alpha of .87 indicating strong internal reliability. The HRES had a Cronbach′s alpha of .98 suggesting redundancy of items. Relational availability was rated as the most important factor in the nurse-patient relationship although all factors were important to patients. The mean score of the HRES indicated that patients experience a moderate level of humanistic connection in terms of nurses who generally care for them. Findings of this study have contributed to a better understanding of the nurse-patient relationship, and support the care, research, and theoretical knowledge of relationships in these environments.

### METHODOLOGICAL CHALLENGES OF CONDUCTING AN ON-LINE, ELECTRONIC DELPHI SURVEY WITH AGING AND PHYSICAL ACTIVITY RESEARCH EXPERTS

K.H. Leith[1], S.L. Hughes[2], G. Moni[4], D.X. Marquez[2], P. Desai[2], H. Nguyen[4], D. Jones[3], *1. University of South Carolina, Columbia, South Carolina, 2. University of Illinois at Chicago, Chicago, Illinois, 3. West Virginia University, Morgantown, West Virginia, 4. University of Washington, Seattle, Washington*

Background: The purpose of this Delphi Survey was to query aging and physical activity (PA) experts about knowledge gaps and to determine the "state-of-the-art" in the relevant literature on health and functional outcomes. This presentation describes the methodological challenges of conducting the study. Theoretical Framework & Methods: The study was initiated as a Delphi Survey, an iterative, multi-stage process of group interaction to achieve consensus. An on-line survey was created in SurveyMonkey and pilot-tested in Spring 2009. Phase 1 data were collected in Fall 2009. Respondents had three weeks for completion; reminders were sent at Weeks 2 and 3. Of 402 invitations sent, 381 were received. Results: Of the 381 responses received, 348 were "appropriate" contacts. Of those, 181 (52%) responded but only 131 (38%) partially or fully completed the survey. Respondents who chose not to complete or partially completed the survey indicated that the survey took too long to complete and sought to elicit information too complex to address in this format. Conclusion & Implications for Practice: One major challenge was identifying and eliciting responses from "appropriate" respondents, i.e., those who were experts in aging and PA and recognized the study as legitimate. A second and third were the chosen timeframe for data collection (e.g., summer break), and the method of data collection (i.e., wrong e-mail addresses, spam filters). Based on respondents' feedback, conducting Phase 2 was not necessary. Phase 1 findings will be useful in developing a research agenda of aging and PA topics ranked according to scientific importance.

## SESSION 220 (SYMPOSIUM)

### NURSING CARE OF OLDER ADULTS INTEREST GROUP SYMPOSIUM: RESEARCH AND PRACTICE INNOVATIONS IN TRANSITIONS OF CARE

Chair: *H.M. Young, UC Davis Health System, Betty Irene Moore School of Nursing, Sacramento, California*
Co-Chair: *C. Beck, University of Arkansas for Medical Sciences, DW Reynolds Center on Aging, Little Rock, Arkansas*
Discussant: *K. Gretebeck, University of Michigan, School of Nursing, Ann Arbor, Michigan*

Older adults experience many transitions, including transitions in relationships, living environments, health, and health care settings. Nurses can facilitate these transitions and contribute to optimal outcomes for the older adult. The purpose of this presentation is to provide an overview of key aspects of transition theory and recent theoretical, research and practice developments, with application to gerontological nursing. Specifically, the presentations will discuss 1) the process of transitions, indicators of healthy transition processes, transition outcomes, and the risks inherent for older adults experiencing multiple simultaneous transitions; 2) how family caregivers of cognitively impaired older adults may benefit from interventions aimed at improving care management that would impact repeated hospitalizations; and 3) barriers and facilitators to change and other factors that may impact interventions focused on adoption of evidence-based practices and care of older adults with cancer.

### TRANSITION THEORY: APPLICATION TO GERONTOLOGICAL NURSING PRACTICE, EDUCATION, AND RESEARCH

K. Schumacher, *UNMC College of Nursing, Omaha, Nebraska*

Transition theory is central to the nursing knowledge base, with a high degree of relevance for gerontological nursing. Older adults experience many transitions, including transitions in relationships, living environments, health, and health care settings. Nurses can facilitate these transitions and contribute to optimal outcomes for the older adult. The purpose of this presentation is to provide an overview of key aspects of transition theory, with application to gerontological nursing. Meleis' and Brooten's ground-breaking work in transition theory as well as recent theoretical developments will be highlighted. Emphasis will be on transition as a process, critical periods and turning points in transitions, indicators of healthy transition processes, transition outcomes, and the risks inherent for older adults experiencing multiple simultaneous transitions. The presentation will conclude by envisioning innovative future directions for the application of transition theory in nursing research, education, and practice.

### ENHANCING CARE COORDINATION FOR COGNITIVELY IMPAIRED OLDER ADULTS AND THEIR FAMILY CAREGIVERS

M.D. Naylor, K.B. Hirschman, A.L. Hanlon, *University of Pennsylvania School of Nursing, Philadelphia, Pennsylvania*

Cognitively impaired hospitalized older adults typically experience complicated index hospitalizations, increased hospital readmissions and higher health care costs. Available evidence suggests that this population and their family caregivers may benefit from interventions aimed at improving care management. Using a prospective cross-sectional design study, hospitalized older adults with deficits in orientation, recall or executive function or who had a diagnosis of dementia and who had a family caregiver were enrolled during an acute hospitalization. Patient-caregiver dyads received one of three nursing interventions: 1) augmented standard of care provided during the index hospitalization; 2) resource nurse care received during the index hospitalization, and 3) advanced practice nurse care (Transitional Care Model) received during the hospitalization and up to three months post-discharge. Findings on patient and caregiver outcomes for each of these intervention groups will be presented for the first 150 matched (using propensity score adjustment) patient-caregiver dyads will be presented.

### IMPROVING PAIN MANAGEMENT AT THE END OF LIFE: BARRIERS AND FACILITATORS TO A CHANGE INTERVENTION

K. Herr, *University of Iowa, College of Nursing, Iowa City, Iowa*

Dr. Herr will overview the findings from an NCI-funded study “Cancer Pain in Elders: Improving Evidence-Based Practices in Hospices”. Following a year long intervention, data were gathered regarding barriers and facilitators to change and other factors that may impact interventions focused on adoption of evidence-based practices. This paper will highlight unforeseen issues that contribute to the effectiveness of a translating research into practice intervention in the setting of hospice and care of older adults.

## SESSION 225 (SYMPOSIUM)

### PERSONALITY TRAITS: PATHWAYS TO OLDER ADULTS’ FUNCTIONAL CAPACITY, AFFECT, AND SUBJECTIVE WELLBEING

Chair: *P.S. Fry, Graduate Psychology, Trinity Western University, Langley, British Columbia, Canada*
Discussant: *M.K. Diehl, Colorado State University, Fort Collins, Colorado*

Hitherto, much of the experimental and survey research on the relationship of personality traits to health, emotional and social well being and self-enhancement has been conducted on target samples of youth and adults. More recently, however, the emerging trends in the gerontological research are that personality traits play an equally important role in determining older adults’ behavioral characteristics, cognitive views and motivations for life. The papers to be presented in the present symposium aim to address these issues further and to highlight the newly emerging trends regarding the role of personality traits in relation to older individuals’ functional capacity, sense of self-efficacy/ positive and negative affect, and their will to live or die. For example, Martin et al.’s research presents findings to confirm that various personality traits, as defined by the 5-factor personality traits, serve as moderators of the old and very old adults’ functional capacity and positive and negative affects. Fry & Debats’ longitudinal investigation shows that, additional to the 5-factor personality traits, other personality traits of high levels of self- and other-directed perfectionism are early predictors of negative affect. Their research supports the hypothesis that perfectionism is strongly associated with mortality. Jopp et al.’s research directs attention to the issue of how traits of self-efficacy, optimism, or the will to live contribute to a substantial variance in older adults’ life satisfactions. Collectively, these research papers suggest the need for further work focusing on the theoretical and empirical implications of the role of personality traits in old age.

### PERSONALITY TRAITS AND PSYCHOLOGICAL STRENGTHS IN OLD AND VERY OLD AGE: THEIR CONTRIBUTION TO LIFE SATISFACTION

D.S. Jopp[1], D. Wozniak[2], C. Rott[2], F. Oswald[3], *1. Psychology, Fordham University, Bronx, New York, 2. Heidelberg University, Heidelberg, Germany, 3. Frankfurt University, Frankfurt, Germany*

We investigated whether psychological strengths and personality aspects such as self-efficacy or optimism gain importance for life satisfaction with advancing age relative to resources such as health and social factors. Community-dwelling individuals aged 65 to 94 years (N=356) rated their life satisfaction, resources (income, health, network), and psychological strengths/personality (self-efficacy, optimistic outlook, meaning, will to live). Mean levels of resources, psychological strengths, and life satisfaction were lower in the fourth compared to the third age. In the total sample, psychological strengths and health explained substantial amounts of variance in life satisfaction, but sociodemographic and social indicators made no independent contribution. In the young-old, health and psychological strengths were equally strong predictors; psychological strengths were the only significant predictor block and explained substantially more variance in the old-old. Findings suggest that health becomes less important for life satisfaction with advancing age while psychological strengths gain in importance despite declining mean levels.

### PERSONALITY, FUNCTIONAL CAPACITY, AND WELL-BEING AMONG CENTENARIANS

P. Martin[1], J. Cho[1], M. MacDonald[2], L. Poon[3], *1. Iowa State University, Ames, Iowa, 2. Kansas State University, Manhattan, Kansas, 3. University of Georgia, Athens, Georgia*

It is now well established that personality traits play an important role in the well-being of old and very old adults. What has received very little attention is whether these traits predict well-being outcomes independently of functional limitations and whether personality traits serve as moderators in the functional capacity – well being relationship. Using data from the Georgia Centenarian Study, we assessed activities of daily living, personality traits, and positive and negative affect among persons 98 years and older (N=234). Multiple regression analyses were computed including demographic variables, functional capacity, and personality traits as predictors of affect. Results indicate that functional capacity ($\beta = .22, p < .01$), Extraversion ($\beta = .34, p < .001$), Neuroticism ($\beta = -.22, p < .01$), Openness ($\beta = .24, p < .01$), and Conscientiousness ($\beta = .32, p < .01$) all predicted positive affect, whereas Extraversion ($\beta = -.26, p < .001$), Neuroticism ($\beta = .48, p < .001$), Agreeableness ($\beta = -.20, p < .01$), and Conscientiousness ($\beta = -.18, p < .05$) predicted negative affect. Openness served as a moderator suggesting that centenarians’ positive affect score was more likely to be influenced by functional capacity if they were open-minded.

### PERFECTIONISM, CONSCIENTIOUSNESS AND NEUROTICISM TRAITS AS PREDICTORS OF WELL-BEING IN OLD AGE

P.S. Fry, *Graduate Psychology, Trinity Western University, Langley, British Columbia, Canada*

The relationship between perfectionism as a personality trait and general happiness, positive and negative affect and longevity versus mortality were explored in a longitudinal study of 450 community-based older adults. Following baseline assessments of happiness, affect, and personality traits of perfectionism and other five-factor traits of conscientiousness, extraversion and neuroticism etc., findings from the Cox regression analysis showed that risk of death is significantly greater for very high scorers in perfectionism, compared to low scorers. As a function of high scores in perfectionism and neuroticism at baseline, median happiness levels were significantly lower for decedents compared to survivors. As a function of high scores in conscientiousness and extraversion, happiness levels were higher in survivors. Results suggest the protective and positive influence of personality traits of conscientiousness and extraversion on well-being, and the negative influence of perfectionism and neuroticism. Implications of the impact of personality traits on well-being are discussed.

## SESSION 230 (SYMPOSIUM)

### DIGITAL INCLUSION FOR SENIORS: TRAINING, INTERNET ACCESS, AND SOCIAL ENGAGEMENT

Chair: *B. Harootyan, Senior Service America, Silver Spring, Maryland*
Discussant: *S. Fox, Pew Research Center's Internet & American Life Project, Washington, District of Columbia*

Computer illiteracy is most prevalent among persons aged 65+ and those with low educational attainment. Pew Internet Project national surveys indicate that 74% of adults aged 18+ use the internet, compared to only 38% of those aged 65+ and 39% of adults without a high school diploma. Older adults suffer most from the digital divide, yet computer literacy is increasingly important in everyone's personal and work lives. Internet-based information and communication is synonymous with empowerment. It also provides opportunities for social engagement in diverse "communities," including family and friends. This symposium presents information about applied research designed to reduce the digital divide among elders. Czaja reports on older workers' attitudes toward communication technologies, their preferences for specific types of computer instruction, and training that helps older adults adapt to workplace technologies. The importance of seniors as peer coaches for older learners is discussed by Harootyan and Slobig. Attendees will learn about the instrumental and psychosocial outcomes of a computer/internet training program serving over 7,000 seniors at more than 150 public coaching sites. Cotten presents results from a randomized controlled trial for training older adults to use communication technologies in assisted and independent living communities, including measures of quality of life. The role of computer access and the internet to promote social engagement among very old adults is reviewed by Cutler. Attendees will learn how touch-screen technologies allow easy internet access for email, information retrieval and entertainment for older retirees in an assisted living residence and a NORC.

### THE IMPLICATIONS OF WORKPLACE TECHNOLOGIES FOR OLDER WORKERS

S. Czaja, C. Lee, *Psychiatry and behavioral sciences, university of miami miller school of medicine, Miami, Florida*

The number of workers aged 55+ will increase significantly in the next few decades. This paper will present findings, from focus groups and surveys, regarding use of technologies in the workplace and perceptions regarding the impact of these technologies on work processes and outcomes from a diverse sample of older adults. Thirty-seven persons aged 50-80 years participated in the focus groups and completed a job history, computer experience, computer attitude questionnaires. The majority of participants reported being comfortable using technology at work and perceived that technology helps them work more efficiently and productively, facilitates communication with colleagues and access job information. However, the participants also indicated that technology often results in information overload, makes their more stressful, and results in a loss of social interaction. Further, many participants indicated they did not receive adequate training to use new technologies. Findings regarding preferred characteristics of "ideal jobs" are also discussed.

### PROMOTING DIGITAL INCLUSION: PEER COACHES AND SENIOR LEARNERS

B. Harootyan, F. Slobig, *Senior Service America, Silver Spring, Maryland*

To help bridge the digital divide among seniors, Senior Service America created the Digital Inclusion Initiative (DII) through its Senior Community Service Employment Program (Title V: OAA). The DII involves 60 SSAI subgrantees with >150 public sites (libraries, senior centers, service agencies) that provide tutorial sessions overseen by >135 SCSEP participants who were trained to be "peer coaches." They assist other seniors to use the self-paced Generations on Line tutorial to master each step of computer/internet literacy. Average age of the first 2,500 learners: 68; peer coaches: 63. Two-thirds of each group are women. Outcomes include effectiveness of the DII sessions, including peer coaches' perceptions of the most challenging aspects of coaching seniors (e.g., overcoming fears; mistrust of the internet) and what worked best (e.g., repetition, pacing, example). Coaches' and learners' changes in attitudes about and use of computers/internet, self-efficacy, morale, and general well-being are discussed. Individual testimonials are highlighted.

### USING ICTS TO ENHANCE QUALITY OF LIFE AMONG RESIDENTS OF INDEPENDENT AND ASSISTED LIVING COMMUNITIES

S.R. Cotten, *Sociology, UAB, Birmingham, Alabama*

Depression, physical health decline, loneliness, and social isolation are key issues of concern for older adults. With increasing numbers of older adults going into long term care facilities and declines in quality of life as individuals age, we need innovative ways to decrease these negative impacts and to enhance quality of life. Older adults are the least likely to use information and communication technologies (ICTs), yet the potential to help them connect with members of their social networks to enhance social support and quality of life is substantial. Results of a large randomized trial designed to teach older adults in assisted and independent living communities to use ICTs are presented. Details concerning key recruitment strategies, technological modifications, training procedures, and quality of life changes are included.

### THE MOTION PICTURE & TELEVISION FUND'S COMPUTER-ASSISTED SOCIAL ENGAGEMENT PROJECT (CASE): AGING IN PLACE NEED NOT BE HOME ALONE

N.E. Cutler, *Center on Aging, Motion Picture & Televison Fund, Woodland Hills, California*

Aging in place need not be aging in isolation. It's not Home Alone. To combat the negative health and social effects of isolation the Motion Picture & Television Fund is developing the CASE project: Computer-Assisted Social Engagement. CASE hardware/software uses large format touch-screen computers and an elder-friendly Windows desktop so Participants can easily access email (by typing, voice, or video), Internet, music and games, and photos with no prior computer, keyboard, or mouse experience. In Phase I CASE is being installed in the homes of ten 80-year-old entertainment retirees, half aging in place in the Westside Los Angeles entertainment NORC and half on the MPTF assisted living campus. Beyond Participant experiences we are assessing such basic yet critical issues as overall cost, involvement of social workers, internet installation, ongoing technical assistance, family response, and how CASE precipitates Participant demand for additional modes of social engagement.

## SESSION 235 (PAPER)

## DISCHARGING FROM NURSING HOME TO COMMUNITY CARE

### TRANSITIONING FROM NURSING FACILITIES TO HOME: PREDICTORS OF COMMUNITY DISCHARGE

Z.D. Gassoumis, K. Thomas, S. Enguidanos, K. Wilber, *Davis School of Gerontology, University of Southern California, Los Angeles, California*

In recent decades, long-term care research and policy have focused on reducing nursing home placement by providing home and community-based services. Over the last decade, however, policies have also been directed at transitioning patients from nursing homes back to community settings. Despite the strong emphasis on nursing home transition, there has been little research on either the individual predictors of transition or the outcomes of various policies. In response, this paper analyzes the predictors of transitioning to the community using data from the nursing home Minimum Data Set 2.0 (MDS), collected from four California counties between 2001 and 2003. Admission characteristics for 4,635 episodes of care are analyzed using two models: (1) comparing residents who transition to the community within 90 days of admission with those who remain in the nursing home at 90 days; and (2) comparing residents who transition to the community between 91 and 270 days with those who remain in the nursing home at 270 days. Independent variables include predisposing (e.g., sociodemographics), need (e.g., health status), and enabling characteristics (e.g., health insurance, preference to transition). Results indicate that almost all discharges to the community (91%) occurred within the first 90 days. Moreover, enabling characteristics (e.g., preference, having a support person who is positive toward discharge) are strong predictors of community discharge within 90 days but do not predict discharge between 91 and 270 days. Implications are discussed for the allocation of transition-oriented services as well as policy programs such as Money Follows the Person.

### AN ANALYSIS OF BARRIERS TO NURSING HOME DISCHARGE: CREATIVE STRATEGIES TO GOING HOME

E. Kahoe, R. Meador, K. Pillemer, *Human Development, Cornell University, Ithaca, New York*

Deinstitutionalization has become a national priority in the United States, with states seeking cost-savings through “rebalancing” long-term care funding for older adults away from nursing homes. Although many nursing home residents may be candidates for transition to community living, the diverse backgrounds, financial and social resources, and medical needs of this population limit the utility of a one-size-fits-all approach. Understanding the needs of this community and documenting successful strategies to meet these needs are important steps in promoting nursing home discharge. We report on an evaluation of an enhanced discharge planning program that targeted long-term care nursing home residents. Barriers faced by clients during the discharge planning process were gathered from social worker case notes then grouped into three major themes (complex medical conditions, lack of family or social support, and inability to obtain suitable housing) that summarized 22 specific obstacles. Although some client needs — like nutrition or home care services — could be met by existing resources in the community, a surprising number of the barriers fell outside of this range and required the development of new strategies by intervention staff. Barriers were also ranked according to the effect they had on patient discharge, as some were more likely than others to prevent patients from going home. We present case studies from the intervention to illustrate the impact of seemingly minor obstacles and to demonstrate how an enhanced, patient-centered approach can effectively promote nursing home discharge.

### SUCCESSFUL DISCHARGE STRATEGIES FOR MEDICAID NURSING FACILITY RESIDENTS WITH MENTAL HEALTH NEEDS

R.K. Chapin, S. Leedahl, B.A. Baca, L. Hasche, G. Townley, R. Rachlin, J.F. Sergeant, *University of Kansas School of Social Welfare, Lawrence, Kansas*

With two decades of federal grant support, state initiatives to promote discharge of Medicaid residents in nursing facilities (NFs) have generated new knowledge on how to successfully discharge people from NFs to community settings. Yet, little is known about specific strategies required for transitioning Medicaid residents with mental health diagnoses. This study describes the characteristics, patterns, and successful strategies for older NF residents with mental health diagnoses who discharged to the community. Method: Using MDS data from 2005 to 2008 for Kansas, we examined the characteristics and patterns of discharge for 372 older adults with anxiety disorder, bipolar disorder, or schizophrenia who discharged from the NF to a community setting. Through in-depth interviews, NF discharge staff recommended strategies for ensuring successful discharge. Results: The sample was predominately female (78.2%), Caucasian (91.4%), and low income (all Medicaid recipients), with an average age of 77. Many of the residents had multiple nursing home admissions and discharges within the three-year period, yet 43% did remain in the community after their first discharge. In interviews, NF staff identified effective strategies including: (1) utilizing community resources (e.g. community mental health centers, support groups) prior to discharge, (2) consulting mental health professionals, (3) identifying a support person and meaningful social activities, (4) setting goals with residents and family members, and (5) training informal caregivers to manage mental health needs. Implications: This evidence indicates that NFs are successful in discharging residents with mental health needs and highlights specific community supports needed in planning for the discharge.

## SESSION 240 (SYMPOSIUM)

### EXPLORING THE FOURTH AGE: PERSPECTIVES FROM THE SOCIAL SCIENCES

Chair: *P. Higgs, Research Strategy, UCL, London, United Kingdom*
Discussant: *J. Twigg, Kent University, Canterbury, United Kingdom*

Within social gerontology, there is increasing use of the terms the third and the fourth age. These refer to distinct aspects of growing older, one focusing upon agency the other upon dependency. This symposium addresses one aspect of a more general fragmentation of old age in late modern society, that embodied by the term ‘the fourth age’. The ageing body forms a central motif in social science discussions of old age and this theme will be addressed by each of the papers. The first paper situates this theme in relation to the linked concepts of frailty and abjection. This will bring together the biomedical formulation of frailty alongside the subjective framework provided by the idea of abjection as key elements in shaping the fourth age. The second paper focuses on the shifting meanings attached to the normal, the normative and the natural in the social construction of old age. Changes in society as well as changes in ageing, the paper will argue, have challenged the unitary nature of agedness. The final paper examines the specific example of falls and falling as sources of contested narratives over age and identity. In particular the author will discuss the role of bodily transitions in configuring the inside and outside of ageing. Our discussant will synthesise these contributions bringing a critical perspective to the issues of embodiment and the fourth age.

### THE NATURAL AND THE NORMAL: CONFLICTING DISCOURSES OF AGEING

I. Jones[1], P. Higgs[2], *1. Bangor University, Bangor, Gwynedd, United Kingdom, 2. Research Strategy, UCL, London, United Kingdom*

The potential to overcome or significantly reduce the age-associated effects of bodies growing older has led many social gerontologists to argue for a return to a more 'normatively' based conception of ageing and old age. Drawing on the theoretical work of Ulrich Beck and Zygmunt Bauman this paper argues that the normalization of diversity leads to a reworking of the idea of normativity which in turn is reflected in profound transformations at the level of institutional arrangements and legal systems. Such changes not only lead to more discussion of what is legally and socially acceptable but also potentially lead to greater calls for regulation concerning outcomes. In this paper we argue that we need to distinguish between the newly reconfigured domains of the natural, the normal and the normative now being utilised in the understanding of ageing if we are to understand this important field of health.

### FRAILTY AND ABJECTION IN DEFINING THE SOCIAL IMAGINARY OF THE FOURTH AGE

C.J. Gilleard, P. Higgs, *Research Strategy, UCL, London, United Kingdom*

Within social gerontology, there is increasing use of the terms the third and the fourth age. These refer to distinct aspects of growing older, the former focusing upon social agency the latter upon personal dependency. The ageing body forms a central motif in social science discussions of old age, particularly in relation to the fourth age. This paper situates this theme in relation to the linked concepts of frailty and abjection. The biomedical formulation of frailty treats the aged body as a risky entity defined by its vulnerability and potential collapse, while abjection reflects oppression and extreme subjectivity. Both share a concern with risky boundaries viewed however from two distinct interpretive frameworks. We suggest that both concepts should be brought together in order to provide a more incisive understanding of the fourth age as a social imaginary.

### HOLD ON!: FALLING, EMBODIMENT AND THE MATERIALITY OF OLD AGE

S. Katz, *Sociology, Trent University, Toronto, Ontario, Canada*

The theoretical neglect of aging bodies in social gerontology has been challenged by writers who emphasize the materiality of embodiment in everyday practices. This paper applies this emphasis to the example of falls and falling, and how falls embody old age physically and biographically. Bodies fall. But falls by older bodies are experienced, narrated, and treated in ways that can dramatically change health status from independent to dependent, cause a transition in place from home to care institution, shift a resilient identity to a vulnerable one, and configure a new frontier between the inside and outside of aging. Conclusions consider the theoretical importance of falls to research on the body and aging.

## SESSION 245 (POSTER)

## HOUSING, NURSING HOME, RESIDENTIAL AND COMMUNITY CARE

### A STUDY OF ALCOHOL USE AMONG LOW-INCOME ELDERLY RESIDENTS AT SUPPORTIVE HOUSING

J. Min[1], J. Clapp[1], S. Woodruff[1], B. Martell[1], M. Piwowarski[2], M.U. Mazyck[2], E. Ko[1], *1. School of Social Work, San Diego State University, San Diego, California, 2. Senior Community Center of San Diego, San Diego, California*

Alcohol use and abuse among older individuals remains a neglected research and clinical topic. With the rapid growing older population, increasing attention has focused on their alcohol use. The consequences of alcohol abuse for the elderly can be severe and even fatal, especially among elders with low socioeconomic status. A cross-sectional survey was conducted with 174 residents at two supportive housing facilities (i.e., Single Room Occupancy (SROs)) in San Diego metropolitan areas. A face-to-face interview survey was conducted at the facilities. Alcohol use by the residents were assessed by standardized assessment tools such AUDIT, DAST, and Geriatric Version of Michigan Alcoholism Screening Test (MAST). Results indicated that half of the residents were living under poverty, and about 86% of them reported to live alone. Forty-one percent of the residents were identified as drinking alcohol and 10% of them were in hazardous and harmful/high risk for alcohol use based on AUDIT scale. Based on the Surgeon General Guidelines, 16.7% of those who report drinking alcohol showed alcohol use risk problems. Study findings are discussed to highlight the need and strategies for alcohol use or prevention intervention better targeted and tailored not only for older adults, but for those with low SES.

### IS SUPERVISORY SUPPORT ASSOCIATED WITH JOB SATISFACTION AMONG NURSING ASSISTANTS? A MULTILEVEL ANALYSIS

J. Choi, M. Johantgen, *University of Maryland School of Nursing, Baltimore, Maryland*

Purpose: The relationship between Certified Nursing Assistants (CNAs) and their supervisors are assumed to be associated with CNAs' job satisfaction in nursing homes. The study examined the impact of supportive supervision on job satisfaction among CNAs working in nursing homes while accounting for the nested nature of data. Methods: Two-level hierarchical linear models were examined using 2004 data from the National Nursing Home Survey and the National Nursing Assistant Survey (U.S. NCHS, 2007). The sample included 2,897 CNAs who were still employed in the sampled facilities (n = 582) at the time of the 2004 NNAS. Results: Job satisfaction among nursing assistants significantly varied across nursing homes (ICC=.062). Controlling for individual and nursing home characteristics, supportive supervision, organizational value, and benefits were positively associated with CNAs' job satisfaction. Furthermore, the interaction of organizational value by supportive supervision was significantly related to CNAs' job satisfaction; for CNAs with more supportive supervision, the positive relationship between organizational value and job satisfaction was increased. Conclusions: While the supervisory support is often cited as important to worker satisfaction, the findings that more supportive supervision and organizational value contribute to higher job satisfaction among CNAs provide needed evidence. Organizational attributes such as management, supervision, and leadership in nursing homes are not understood well since there are few studies that have explored them. Further research is necessary to develop or test strategies to improve the quality of supervision.

### ASSESSING NURSING HOME CULTURE CHANGE PRACTICES USING THE CMS ARTIFACTS OF CULTURE CHANGE TOOL

A. Kelly, *Florida Southern College, Maitland, Florida*

Using the CMS Artifacts of Culture Change (ACC) Tool, a Florida Pioneer Network (FPN) Project explored culture change practices in 40 Florida nursing homes that were self-described as "on the culture change journey". Inclusion criteria were the administrator/owner's willingness to participate and the presence of a Culture Change Leadership Team (CCLT) that was comprised of all departments, all levels of staff as well as residents. All homes had some familiarity with culture change. The ACC, a 79-item instrument covering six domains, created and made widely available by CMS in 2008, was used with some adaptations with permission for this project. The 18-month project included initial visits, in-depth CCLT work with the ACC instrument, and discussion of barriers and challenges to the adoption of these practices. Themes were developed from the first round of visits and a Forum was held "Advancing Culture Change in Florida", attended by teams from all from participant homes. Expert presentations, including the authors of the ACC instrument, and Spotlight presentations to highlight Florida success stories, were featured. Return visits to each home by the same FPN culture change coaches elicited another round of ACC instrument measures. Five ACC domains were analyzed for this project. There was a significant increase (p=<0.05) in four domains and a positive trend in the fifth domain over the intervention time frame. Analysis of this assessment of nursing home culture change resulted in organizational and state policy recommendations that were widely disseminated. This project was funded by the Retirement Research Foundation.

### TRANSITIONING NURSING HOME RESIDENTS BACK TO THE COMMUNITY: A PERSON-CENTERED APPROACH

R. Meador, K. Pillemer, E. Kahoe*, Cornell University, Ithaca, New York*

The poster will report on qualitative research conducted to evaluate an intervention focused on transitioning current nursing home residents back to the community. It will provide information from a rigorous evaluation of data from the case notes from 60 participants of the program, which provided a rich source of qualitative data about the barriers and attributes associated with going home or staying in the nursing home. Results of the quantitative evaluation revealed that the strategies that addressed these barriers. These strategies included knowledge of local resources, role as client advocate, and ability to work with a client over many months. Overall, results indicate that a flexible, goal-orientated, person-centered approach was central to the success of the program because it transcended many assumptions about client needs, and, in doing so, provided valuable and unique assistance in the transition process.

### HOMELIKENESS IN NURSING HOMES: PERSPECTIVES OF FAMILY CAREGIVERS AND STAFF

L. Strain, D. Wanless*, Sociology, University of Alberta, Edmonton, Alberta, Canada*

Increasing emphasis is being placed on the importance of creating homelike environments in nursing home settings. This study focuses on homelikeness from the perspectives of family caregivers and staff in a rural Canadian nursing home that experienced a transition from an old institutional-style facility to a new cottage-style, purpose-built facility. Prior to the move, 37 family caregivers and 56 staff members were interviewed in person and asked to rate the homelikeness of the facility, provide an explanation of their rating, and discuss elements that were homelike or not homelike to them. These questions were repeated four months and 12 months after the move. In addition, the Therapeutic Environment Screening Scale for Nursing Homes (TESS-NH) (Sloane et al. 2002) was completed in both settings. The new facility was rated as more homelike than the old facility by 67% of family caregivers and 83% of staff. Both the physical and social/care environments were taken into account in their assessments. Private rooms, personal decorations and the smell of the food were common elements of homelikeness. Rules/routines, time schedules, and institutional beds made the facility less homelike. Staff members were identified by some family caregivers as contributing to homelikeness. Scores on the homelikeness sub-scale of the TESS-NH showed marked improvements. The multidimensionality of the concept of homelikeness is discussed as are implications for future research and for the design of homelike living environments for frail older adults in residential care settings.

### PLACE-MAKING INTERVENTIONS AND AGING-IN-PLACE IN SMALL DYING TOWNS: A REPORT FROM THE GREAT PLAINS

R.J. Scheidt*, School of Family Studies and Human Services, Kansas State University, Manhattan, Kansas*

Chronic and acute economic forces threaten the physical, social, and cultural viability of many small towns in the U.S Heartland. Depopulation and loss of their economic, service, and physical infrastructures deeply affect over half of the small towns (2,500 and under)in Kansas (Kulczar, 2009). Older residents who seek to successfully age-in-place in these severely declining environments increasingly adopt the emerging role of indigenous "place-maker" (Rowles, 2010 )to sustain these towns. This involves actively preserving as well as shedding existing place meanings and place attachments as environments change. This session uses selective photographic and narrative responses from three dozen long-time older residents (65 + years) across 4 prototypical Kansas towns (Pop. 100 to 250) to illustrate the processes and products of the making and re-making of place. Goldsmith's (2008) Complex Adaptive System is used to order the elements(people, spaces), interactions (experiences), and outcomes (emergent places at individual and community levels) of local place-making. Five primary interventions are visually illustrated: reculturation, e.g., the introduction of new rituals to reverse perceived deculturation created by "junk people" (new, younger, and poorer in-migrants); intentional place deconstruction and memorialization ("place grieving"); re-assignment of place meanings and place attachments to remaining places following setting loss ("place compensation"); the reinvention of community identity to replace stigmatizing town images ("place covenant"); and strategies for budgeting limited social capital among dwindling pools of older volunteers . The relevance of place-making for "place therapies" (Scheidt & Schwarz, 2010)involving elders at the individual and community levels is highlighted.

### DO HOME AND COMMUNITY-BASED SERVICES PROGRAMS PROVIDE COST SAVINGS TO STATES ? A PROSPECTIVE EXAMINATION OF FLORIDA NURSING HOME RESIDENTS' DIVERGENT PATHS

A. Shapiro, C. Loh*, Sociology & Anthropology, University of North Florida, Jacksonville, Florida*

Despite the fact that there is evidence of the efficacy of home and community-based services (HCBS) to improve quality of life, reduce institutionalization, and decrease mortality, the cost-effectiveness of these HCBS programs is still unclear. Using data from the Minimum Data Set (MDS) and the State of Florida's Client Information and Registration Tracking System (CIRTS) this study is designed to provide estimates of Medicaid and General Revenue cost-savings resulting from the use of HCBS. We employ a quasi-experimental design using a three-group approach (those who utilized HCBS, those who applied for services but did not receive, and those who neither received nor applied) to track individuals prior to and after nursing home entry. Our findings suggest that HCBS enrollees have aggregate cost savings relative to non-enrollees. These findings buttress those from earlier studies in Florida make a strong case for the cost efficacy of HCBS programs.

### MEASURING OUTCOMES FOR RESIDENTS OF CARE HOMES

A. Netten[1], B. Trukeschitz[2], J. Beadle-Brown[1], A. Towers[1], E. Welch[1], J. Forder[1]*, 1. University of Kent, Canterbury, United Kingdom, 2. University of Vienna, Vienna, Austria*

An innovative approach to measuring outcomes, which identifies current and expected social care related quality of life (SCRQOL) in the absence of services and relates these to low burden or routinely available data, has been developed for care homes as part of the Adult Social Care Outcomes Toolkit (ASCOT). A study of 741 residents in 173 care homes for older people and people with learning disabilities in England collected in depth information about their experiences and current and expected SCRQOL. The fieldwork, which was multi method including structured observation, was conducted close to the inspections of the homes and data collected about quality ratings. Inter-rater reliability was tested and multilevel modelling used to relate individual and home characteristics, including quality ratings, to outcomes. Inter-rater reliability was reasonable with percentage agreement close to 0.8 and detailed information collected that could be used to improve this in future. Expected SCRQOL was more reliably measured than current SCRQOL and was highly associated with individual measures of activities of daily living, communication problems and mental state. While a high level of outcome was identified in basic areas of SCRQOL such as personal cleanliness, food and safety, they were more limited in 'higher order' domains such as social participation, occupation and control. Outcomes were associated with care home quality ratings, but to a limited degree and the same relationship was not found for nursing homes for older adults, which were associated with poorer SCRQOL outcomes. The results of the study are feeding into the new English regulatory regime.

### THE NEIGHBORHOODS FOR ALL AGES: AN INITIATIVE FOR SENIOR SUPPORTIVE NEIGHBORHOODS

A. Cohen-Callow[1], B.L. Casado[1], R. Edds[2], J. Macgill[3], A. Jones[1], *1. School of Social Work, University of Maryland Baltimore, Baltimore, Maryland, 2. Edds Consulting, LLC, Baltimore, Maryland, 3. Association of Baltimore Area Grantsmakers, Baltimore, Maryland*

Many low-income older adults face potential loss of their homes, their most important asset, because of financial burdens related to repairs of declining housing stock. This is exacerbated by the high cost of food, utility and health care bills, challenging their ability to remain comfortably and independently in their homes. The Neighborhoods for All Ages Initiative is a pilot program implemented by two grantees each doing so in a uniquely different manner. Both targeted issues faced by low-income older adult city dwellers by helping them to make their homes safer and energy efficient, to gain access to services and benefits, and to strengthen the connections to neighbors. This study examined whether this program contributed to desired outcomes for older adult participants (N = 151) of the program. The AdvantAge Initiative Model provides a framework for the study and stipulates four elements of an age friendly environment: meeting basic needs, optimizing physical and mental health, maximizing independence, and addressing social and civic engagement. Urban participants were a mostly female (75.2%), African Americans (92.6%), and low income (56.2% less than $1,500/month). Dependent t-tests for both grantees' clients indicated decreased unmet needs for services, improved self-report of health and quality of life, improved perceptions of their home environment, and a significant decrease in social isolation (measured by the proxy of civic engagement). The theoretical framework, program implementation along with the outcome measurement process utilized in this study provides knowledge to program developers and policymakers to promote aging in place initiatives in urban settings.

### UNMET NEEDS FOR HOME AND COMMUNITY-BASED SERVICES AMONG FRAIL OLDER AMERICANS AND THEIR CAREGIVERS

K.S. van Vulpen[2,1], B.L. Casado[2], *1. Social Work, Salisbury University, Salisbury, Maryland, 2. University of Maryland, Baltimore, Baltimore, Maryland*

Home and Community-Based Services (HCBS) emphasize the role of informal caregivers and are designed to alleviate burden so that they can assist their disabled older adults to remain living in their homes and communities. The purpose of this study is to explore reasons why family caregivers of older Americans do not utilize HCBS services and to identify predictors of unmet needs for seven types of HCBS; including temporary and respite care, community-based programs; personal and nursing care at home, caregiver support groups, housework services, home delivered meals, and transportation services. A sample of 1,021 direct family caregivers was drawn from the 1999 National Long Term Care Survey. Results of the study indicated that although about one-third of the family caregivers utilized personal/nursing care services, the other types of HCBS went largely underutilized (utilization for other HCBS ranged from 4.2% to 16.6%). Caregivers reported lack of awareness and reluctance to have an outsider coming in their home as the main reasons for not using the services. A hierarchical logistic regression identified similarities in predictors of unmet needs across most types of HCBS: black ethnicity, greater ADL/IADL limitations, more severe care recipient behavior problems, lack of substitute caregiving support, and less family agreement. Findings from this study provide knowledge to policy makers and service providers to better understand the reasons for unmet HCBS needs, identify the risk factors for unmet HCBS needs, and consider strategies to address such risk factors.

### CREATING A COMMUNITY OF GENERATIONS IN RURAL AREAS AND INDIAN RESERVATIONS

C. Mehrotra[1], Z.L. Bail[2], L.M. Haglin[2], *1. The College of St. Scholastica, Duluth, Minnesota, 2. Northland Foundation, Duluth, Minnesota*

Following a region-wide study to examine civic engagement among people 55 and older in northern Minnesota rural communities and Indian Reservations, the Northland Foundation launched AGE to age: Bringing Generations Together. Research revealed that older adults were highly concerned regarding the well-being of young people. Clearly, there was a need to create a community of generations where older adults and youth pool their unique strengths to ensure community vitality. The Foundation worked with 10 communities to develop locally-driven civic engagement projects that meet their unique needs. These sites range in population from 400 to 11,000 with high poverty rates. Foundation staff guided older people, youth, and other adults through a planning process to identify needs and opportunities, engage in community dialogue, craft a local vision, and develop an action plan. Activities initiated to date include: learning to use information technology, sharing cultural traditions, promoting health and wellness, implementing environmental projects, and participating in social and recreational activities. A regional learning community has been created to promote networking relationships, offer continuing education, and share lessons learned. Formative evaluation indicates: (a) Improved health and well-being of older adults and young people; (b) Increase in their leadership capacity; (c) Development of new relationships between older adults and youth; (d) Improved understanding of American Indian culture and traditions; and (e) Reduced isolation and age-segregation. Given the outcomes already achieved to date, a number of funding agencies are now providing support to help sustain the momentum of the program has generated in rural communities. [Support for this program is provided through the Community Experience Partnership, an initiative for U.S. community foundations from The Atlantic Philanthropies, along with additional funding from the Blandin Foundation, Bush Foundation, Communities for All Ages, an initiative of Temple University funded by the W.K. Kellogg Foundation.]

### TRANSLATING RESEARCH INTO PRACTICE IN NURSING HOMES

A. Rahman, *Scripps Gerontology Center, Miami University, Cincinnati, Ohio*

A gap between research and practice in many nursing home care areas persists despite efforts by researchers, policymakers, and consumers to close it. The reasons are many, including lack of knowledge among staff, staffing challenges, and inconsistent regulatory practices. Two barriers that have received scant attention are the development of evidence-based improvement interventions and the translation process itself. This poster examines these two elements through the lens of innovation dissemination. Decades of research across disciplines has led to the identification of a body of generalizations that, for the most part, have held true across studies. This poster applies these dissemination principles to known characteristics of the nursing home system to make initial assumptions about nursing homes' ability to use new information or adopt new interventions. Findings suggest, for example, that nursing homes are characteristically slow to innovate. This and other underlying assumptions should then drive the development of translation strategies. The poster then critiques various translation strategies reported in the nursing home literature to identify what works. Findings indicate, for example, that some recommended care interventions may be more effective than they are feasible for nursing homes to implement and that information dissemination, perhaps the most commonly used innovation adoption strategy, is less effective than ongoing interaction between change advocates on the one hand and nursing home providers on the other. Drawing from lessons learned in multiple disciplines, including acute and public health care, the poster reviews promising translation strategies for speeding the adoption of evidence-based practice in nursing homes.

## SESSION 250 (SYMPOSIUM)

### KNOWLEDGE TRANSLATION TO SUPPORT OLDER DRIVERS: A MULTI-FACETED PROCESS

Chair: *M. Bedard, Public Health Program, Lakehead University, Thunder Bay, Ontario, Canada*
Co-Chair: *M. Berg-Weger, St. Louis University, St. Louis, Missouri*
Discussant: *D.W. Eby, University of Michigan, Ann Arbor, Michigan*

The creation of new knowledge is an important part of the research process. However, the dissemination of this knowledge and eventual translation into practice are equally important. The translational aspect of research relevant to older drivers is particularly difficult, whether it relates to the creation of guidelines for assessment, policy changes, or the development of products to support safe driving. It also has potentially important consequences for society and the quality of life of older drivers. Ultimately, society, and especially older drivers, should be better off following knowledge translation than they were before. To ensure this goal, the readiness of the new knowledge for translation must be confirmed, and the necessary steps to translate knowledge need to be clearly delineated, communicated, and applied vigilantly. Failing to do so may result in little, if any, advancement, ultimately questioning the ethical value of the knowledge translation. Hence, adhering to accepted principles and best practices for knowledge translation, and implementing safeguards to ensure the process results in the desired changes, are essential. The goal of this symposium is to introduce these issues. Specifically, we will discuss how universities emphasize and support knowledge translation, the different steps in the knowledge translation process, and the guidelines and safeguards that should be in place to ensure the end results of knowledge translation truly make a difference for society and older drivers.

### THE SAFE DRIVING BEHAVIORS MEASURE: READINESS OF THE NEW KNOWLEDGE FOR TRANSLATION

S. Classen, *University of Florida, Gainesville, Florida*

This presentation will address the readiness of the new knowledge for translation. We will provide a systematic overview of the research process to develop, test, and improve upon a 68-item self/ proxy report Safe Driving Behaviors Measure. This measure was developed to be applied, eventually, to the broader population of older drivers and caregivers in North America. We used a multi-method approach for assessing the readiness of knowledge for translation. These included safe driving frameworks, limitations of existing self-reports, modern test theories, principles of community based participatory research, and a reliability and validity typology. We will share the feedback from community partners, expert raters and peer reviewers, and converge the evidence from six empirical studies to focus on the next step: translation of knowledge.

### TAKING IT TO THE STREETS: LESSONS LEARNED FROM THE REACH OUT TRANSLATION TRIALS

L. Burgio, *University of Michigan, Ann Arbor, Michigan*

REACH OUT is an evidence-based translation of the REACH RCT developed through clinical trials to support dementia caregivers living at home. More specifically, REACH OUT was adapted for implementation by case managers in Area Agencies on Aging (AAAs). Many lessons have been learned during our efforts to transfer REACH knowledge and skills to the community. Implementation in multiple AAAs required the coordination of activities among administrators and clinical staff across these Agencies. Program planners and coordinators must contend with real world challenges such as budget constraints, limited human resources, and competing missions. Through the use of Community-based Participatory methods, the program was well-received by dementia family caregivers, and by the staff implementing the program. Examples will be presented of various barriers confronted during the trials, and procedures used to overcome these barriers.

### TRANSLATIONAL RESEARCH ON AGING AND MOBILITY

K. Ball, L.A. Ross, *Department of Psychology, University of Alabama at Birmingham, Birmingham, Alabama*

Translational research has become an increased focus for many funding agencies in recent years. This term means more than “bench to bedside,” and now encompasses the movement of basic theoretical research conducted in a university laboratory to community settings, and ultimately to changes in policy and government practices. This session will provide a discussion of how to achieve translation in the area of transportation and older drivers, using examples from the UAB Roybal Center for Translational Research on Aging and Mobility. Transitions from laboratory-based studies, to clinical trials, to efficacy studies in field sites and collaborations with state agencies and private industry will be outlined. The methods employed to evaluate translational research targeted to improve the safety and mobility of the older driver will be discussed.

### BEST PRACTICES AND ETHICAL ISSUES IN KNOWLEDGE TRANSLATION

M. Bedard, *Public Health Program, Lakehead University, Thunder Bay, Ontario, Canada*

There is an ever-increasing focus placed by academic institutions on the translation and commercialization of research knowledge produced by academics. The Canadian Institutes of Health Research define knowledge translation as “…a dynamic and iterative process that includes synthesis, dissemination, exchange and ethically-sound application of knowledge to improve the health of Canadians, provide more effective health services and products and strengthen the health care system.” A key ethical aspect of this statement is that the health of seniors should be improved after knowledge translation. In this presentation the author will discuss best practices and safeguards to ensure that knowledge translation achieves its objectives. Specifically, that it leads to better outcomes for seniors.

## SESSION 255 (SYMPOSIUM)

### MAKING MEANING THROUGH THE TRANSITIONS OF CARE AT LIFE’S END

Chair: *D. Waldrop, School of Social Work, University at Buffalo, Buffalo, New York*

People who are in the advanced stages of chronic illness and their families move through key transitions in care as death approaches. Significant physical and functional changes accompany the dying process, often with manifestations of psychosocial, spiritual and existential distress. Existential distress is exacerbated by feelings of hopelessness, futility, disappointment, and remorse, as well as ongoing changes in social roles and relationships, which can contribute to a sense of meaninglessness. This symposium will address the critical importance of making meaning out of all that is occurring to address existential distress in end-of-life transitions. The first paper identifies aspects of distress in older African Americans who are living with heart failure and illustrates how elders make sense of their illness and demonstrate resilience through their spirituality. The second paper presents the process of integrating the perspectives of terminally ill elders and healthcare professionals in the development of an instrument for assessing the psychosocial and spiritual distress and needs of elders who are dying. The third paper conceptualizes the point of reference as key to understanding decision-making in transitions of care in nursing homes and applies the concepts of Prospect Theory to illuminate the resolution of distress as comfort with dying. The fourth paper explores relational dynamics in caregiver dyads, who renegotiate subjective and intersubjective meanings throughout the course of progressive chronic illness. The fifth paper presents interventions (e.g. the use of the environment and rituals) as ways of creating meaning for families of people who die in hospice house care.

### MEANINGFUL PLACES: USING ENVIRONMENT AND RITUAL IN HOSPICE HOUSE CARE

D. Waldrop, *School of Social Work, University at Buffalo, Buffalo, New York*

Most people express the wish to die at home but not all deaths can be managed this way. Hospice houses have emerged as an alternative, “home-like” environment for care when a dying person can no longer remain at home. The purpose of this study was to identify the similarities and differences in hospice house care in different communities. Ethnography or systematic observation was conducted in 8 hospice houses followed by in-depth interviews (N=225) with hospice house staff members and volunteers. The results indicate that hospice houses are uniquely characteristic of the community with distinct environmental features that: (a) reflect the development of the individual house and, (b) illustrate shared meaning about the importance of “environmental serenity” – a peaceful place for dying. In addition, hospice houses develop rituals: (a) interpersonal and (b) nonverbal to ease the dying process for families and staff. Implications for transitions in end-of-life care will be discussed.

### RELATIONAL MEANING-MAKING AMONG CAREGIVER DYADS IN PALLIATIVE AND END-OF-LIFE CARE

D.S. Gardner, *Silver School of Social Work, New York University, New York, New York*

Much of the empirical and clinical literature on living with chronic and terminal illness examines the psychosocial impact of infirmity on the caregiver and the care receiver separately, essentially splitting the dyad in order to understand a shared experience. This paper explores dyadic processes among older care partners, and suggests that a deeper understanding of the caregiving dyad’s subjective and intersubjective perceptions can yield enhanced insight about the needs of older couples living with life-threatening illness. Based on findings from two studies, one of older couples living with advanced cancer and the other of dementia patients and their family caregivers, the paper moves beyond an individualistic caregiving paradigm to develop a conceptual model of shared and co-constructed meaning in palliative and end-of-life care. By analyzing relational narratives of communication, mutuality, conflict, and meaning-making, the studies highlight clinical practice and research that honors the dyadic, familial, and social contexts of care.

### URBAN ELDERS AND THEIR CAREGIVERS: MEANING MAKING IN THE CONTEXT OF ADVANCED HEART FAILURE

F.P. Hopp, N. Thornton, *Social Work, Wayne State University, Detroit, Michigan*

Purpose: To obtain more information on the lived experience of African American elders with heart failure and adult daughter heart failure caregivers. Method: Focus groups and individual patient interviews for African Americans age 60 and over with advanced heart failure (n=35) and seven adult daughter caregivers living in Detroit, Michigan. Qualitative data was analyzed for relevant themes. Results: For caregivers, meaning making include valuing their role as caregivers and taking charge of the caregiving experience. Meaning making for the elders included making sense of their condition, self care, and resilience. Meaning making for both elders and caregivers involved drawing on spiritual strengths. Conclusion: Elders and caregivers engaged in both contrasting and parallel meaning making strategies. These contrasting styles reflect their different roles and experiences. Spirituality emerged as a powerful meaning making strategy for both elders and caregivers, reflecting the salience of spiritual strengths in the African American community.

### ASSESSING TERMINALLY ILL ELDERS’ PSYCHOSOCIAL AND SPIRITUAL NEEDS

T.A. Schroepfer, *School of Social Work, University of Wisconsin-Madison, Madison, Wisconsin*

A fundamental task of end-of-life healthcare professionals is the assessment of terminally ill elders’ psychosocial and spiritual needs; however, quality assessment instruments are necessary to perform this critical task accurately. The purpose of a four-part study is to create an assessment instrument based on information gathered from terminally ill elders and healthcare professionals. In Part One, in-depth face-to-face interviews were conducted with 100 terminally ill elders, and data content analyzed to identify main themes. In Part Two, 100 additional elders were interviewed using a survey that included newly developed measures informed by Part One findings, as well as new open-ended exploratory questions. Part Three, which is in progress, seeks to gather information from professionals in the field who conduct assessments. The results of parts two and three will be discussed, as well as their implications for Part Four: the testing of the newly created assessment instrument.

### PROSPECT THEORY AND END-OF-LIFE DECISION-MAKING IN THE NURSING HOME CONTEXT

M. Bern-Klug, *Social Work, University of Iowa, Iowa City, Iowa*

Using an adaptation of qualitative descriptive methods (Sandelowski, 2000), data from 24 family members of nursing home residents with cancer were analyzed through the lens of Tversky & Kahneman’s (1981) Prospect Theory (PT) (a model for understanding decision-making in the context of risk). Findings suggest that these family members use a “big picture” approach to medical decisions and that the respondents’ reference point is affected by their experience with this resident under the context of earlier cancer diagnoses, and other family members’ cancers, as well as the sense that the resident had already lived longer than expected. Family members were working toward comfort –rather than fighting death. The findings underscore that the reference point of the decision maker is crucial to understanding decision-making, and suggest that family members of NH residents with cancer may differ in their reference point from family members of residents with organ failure and frailty.

## SESSION 260 (PAPER)

## NATIONAL POLICY ISSUES AND AGING I

### HOW PUBLIC-PRIVATE PARTNERSHIPS ARE MAKING AN AGE-FRIENDLY NEW YORK CITY

K.M. Meade, R. Finkelstein, D.E. Block, *New York Academy of Medicine, New York, New York*

Age-friendly New York City, affiliated with the World Health Organization (WHO), is a public-private partnership between The New York Academy of Medicine (NYAM), the New York City Mayor’s Office, and New York City Council. The initiative is led by a public-private Commission, engaging multiple sectors in an ongoing effort to build on the existing strengths of the City to maximize the health and participation of New Yorkers of every age, in every neighborhood and community.

Now in its 3rd year, a newly appointed high-level Commission comprised of business leaders, civic leaders, and elected officials has identified age-friendly models and principles and are beginning to implement them. For example, administrators from private and public universities, community colleges and schools across the city are developing principles and models for age-friendly schools; city agencies and business leaders across sectors are developing principles for age-friendly employers and customer service; and a work-group of health care professionals, aging service providers, leaders of cultural institutions and city council members, are further developing and piloting the concept of "aging improvement districts," neighborhood-level projects to organize community improvements for and by older adults. This symposium will include a dynamic discussion of the concept of an "age-friendly city" and the role of public and private partnerships in obtaining buy-in and ensuring the success of such an initiative. Participants will leave with concrete examples of such partnerships and how they may be replicated.

### THE MEDICARE PART D COVERAGE GAP: MEDICATION ACCESS, ADHERENCE, AND FACTORS IMPACTING COMPLIANCE

L. Bakk[1], A.T. Woodward[1], J. McGuire[2], *1. Social Work, Michigan State University, Novi, Michigan, 2. Area Agency on Aging 1-B, Southfield, Michigan*

Prescription drugs are increasingly important in older adults' treatment regimen. However, cost-sharing requirements associated with the Medicare Part D coverage gap can inhibit medication access and use. While 26 percent of Medicare Part D enrollees experience the coverage gap, only 4 percent of those reaching this benefit threshold incur enough out-of-pocket spending to receive catastrophic coverage. The reasons for this are not completely clear, but likely to include older adults rationing their own medications to lessen financial hardship. This exploratory study examined the effect of the Medicare Part D coverage gap on medication access and adherence. Data were collected from 22 enrollees over the age of 50 in Medicare Part D plans that experienced the coverage gap. Qualitative, semi-structured interviews were utilized to determine problems faced by enrollees and factors impacting compliance. Data were analyzed using NVivo. Results indicate that medication adherence varies and is affected by the coverage gap. The most common themes suggesting reasons for nonadherence are drug cost, number and type of prescribed medications, and the enrollee's gender, income, and health status. Medication samples and prescription assistance programs were frequently utilized to avoid or delay the coverage gap, and were critical factors in maintaining compliance. However, restrictions imposed by these resources can limit the amount and type assistance available, and subsequently impact adherence. Additionally, the complexity of the benefit can act as a barrier to medication access. These results support previous research suggesting that the Medicare Part D coverage gap is problematic for older adults.

### A TASTE OF WHAT'S TO COME: CHANGES IN INDIVIDUAL EXPECTATIONS ON AGEING AND LATER LIFE IN TIMES OF WELFARE STATE REFORMS AND ECONOMIC CRISES

A. Motel-Klingebiel, J. Simonson, *German Centre of Gerontology (DZA), Berlin, Berlin, Germany*

Resources, needs and evaluations are dimensions of quality of life and pre-conditions for autonomy and life planning. Projections of older people's future living standards in Europe predict declining levels and increasing inequality due to pension reforms and changing employment patterns. Effects of ongoing economic crises need also to be considered as well as changing needs, expenditures and values of older people. Recent data from the German Ageing Survey (DEAS) demonstrate stable socio-economic resources and increasing inequalities among retirees. The most important trend is an increase in concerns about future living standards which is very significant from a social policy as well as from a gerontological perspective. Based on this data, the presentation calls for its sources and conclusions to be drawn. It presents descriptive information and results from multi-level modelling. It heightens awareness of changes in later life due to reforms and crises and will contribute to a wider understanding of multi-level interactions between individual resources, evaluations and societal development. The DEAS is a representative cross-sectional and longitudinal survey of those aged over 40 (n=8200 in 2008) in Germany, funded by the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth (BMFSFJ). Three hypotheses – a) hypothesis of social structure effects, b) hypothesis of cohort change of later life, c) hypothesis of differentiation of inequality patterns – are tested and mostly supported by the study. Analyses show that increasing concerns interact with income and portfolio structures but are partly independent of education and gender. Moreover, differences between regions mirror context effects.

### UNMET NEEDS OF CLIENTS WHO TRANSITION TO NURSING HOMES FROM A MEDICAID HCBS ELDER WAIVER

J. Robison[1], L. Curry[2], R. Fortinsky[1], M. Porter[1], N. Shugrue[1], D. Lambert[3], *1. University of Connecticut Health Center, Farmington, Connecticut, 2. Yale School of Medicine, New Haven, Connecticut, 3. CT Department of Social Services, Hartford, Connecticut*

Long term care services use and costs will skyrocket as the baby boomers age, demanding creative solutions to address long term support needs. Most states have implemented Medicaid Home and Community-Based Services (HCBS) waivers to allow people with long term support needs to remain in the community rather than move to a nursing home. Connecticut's HCBS waiver for older adults, the CT Home Care Program for Elders (CHCPE), serves over 15,000 clients. However, over 50% of CHCPE clients who leave the program enter a nursing home. We sought to identify unmet needs and service gaps in the CHCPE for this group of individuals. Methods: This mixed methods study, part of the Money Follows the Person Rebalancing Demonstration, had three components: a) systematic review of CHCPE administrative data for all clients discharged to a nursing home in 2008 (n=1468), b) in depth review of a 15% random subsample of care manager case notes (n=224), and c) focus groups with care managers to identify program gaps leading to nursing home admission (n=3 groups, 24 participants). Results: Focus group and case notes identified similar gaps in the CHCPE: e.g., lack of informal and formal support on nights and weekends, inadequate means of managing mental health and substance abuse issues, and lack of an intermediate level of provider such as personal care assistance. Hospitalizations, rehabilitative nursing home stays, falls, and worsening chronic conditions were common triggers. Conclusions: Findings can guide efforts to restructure financing and delivery of Medicaid HCBS programs aiming to prevent institutionalization.

## SESSION 265 (SYMPOSIUM)

### NIA SYMPOSIUM: CARE TRANSITIONS-BENCH TO BEDSIDE-ADVANCES & TRAINING OPPORTUNITIES IN AGING RESEARCH

Chair: *R.J. Hodes, National Institute on Aging, Bethesda, Maryland*
Co-Chair: *M. Bernard, National Institute on Aging, Bethesda, Maryland*

Organizers: R.J. Hodes, Director, and MA Bernard, Deputy Director, National Institute on Aging, NIH, Bethesda, MD. Participants: RJ Hodes, Director, NIA; RA Barr, Director, Extramural Activities. Additional Roundtable Participants include MA Bernard, Deputy Director; F Sierra, Aging Biology; E Hadley, Geriatrics and Clinical Gerontology; R Suzman, Behavioral and Social Sciences; M Morrison-Bogorad, Neuroscience; JT Harden, Office of Special Populations, and C Hunter, Training Office. The symposium includes two podium presentations and roundtable discussions. Participants in this interactive symposium will provide an overview of recent research advances, across the continuum of care, from bench to bedside, addressing aging research as an answer to challenging questions about aging biology, Alzheimer's disease, geriatric conditions, and health and retirement issues of older adults. The National Institute on Aging conducts and supports biomedical and behavioral research with a focus on understanding basic processes of aging, improving prevention and treatment of diseases and conditions common in later years, and improving the health of older persons. An overview of NIA appropriations and recent advances in aging research will be highlighted in the first podium presentation. The NIA also supports training and career development of scientists focusing on aging research and the development of research resources. This topic will be the focus of the second podium presentation, followed by interactive roundtable discussions.

### NIA SYMPOSIUM: INTERACTIVE ROUNDTABLE DISCUSSIONS ON RESEARCH AND CARE ACROSS THE AGE CONTINUUM

J. Harden*, National Institute on Aging, Bethesda, Maryland*

Organizer: J Taylor Harden, Assistant to the Director for Special Populations, National Institute on Aging, NIH, Bethesda, MD. Participants include: RJ Hodes and MA Bernard, Office of the Director/Deputy Director; F. Sierra, Aging Biolog; E Hadley, Geriatrics and Clinical Gerontology; R Suzman, Behavioral and Social Sciences; M Morrison-Bogorad, Neuroscience; JT Harden, Office of Special Populations; and C Hunter, Training Office. This interactive symposium affords participants the opportunity to meet with the leadership and staff of NIA extramural research divisions and offices. The roundtable discussions may focus on latest advances in research at the NIA, career development plans and concerns, questions about review, and pre/post award management. Participants may prepare a one-page abstract to discuss and leave with staff for follow-up or use the time for mini-mentoring sessions as many of the leaders in extramural research communities attend this symposium. The NIA conducts and supports biomedical and behavioral research with a focus on understanding basic processes of aging, improving prevention and treatment of diseases and conditions common in later years, and improving the health of older persons. Come join the fun and talk about why aging research, and why you care.

### NIA SYMPOSIUM: TRAINING OPPORTUNITIES IN AGING RESEARCH - A RUN THROUGH THE NIA AND NIH MAZE

R. Barr*, National Institute on Aging, Bethesda, Maryland*

Organizers: RJ Hodes and RA Barr, National Institute on Aging, NIH, Bethesda, MD. Participant: RA Barr, Director, NIA Division of Extramural Activities. The presentation will focus both on updates on the changing structure of the NIH peer review and application process and on grant opportunities available for research and research training at NIA. It will also offer some tips on navigating the current funding climate for research support at NIA and elsewhere at NIH.

## SESSION 270 (SYMPOSIUM)

### ENDOCRINE FUNCTIONS IN LIFESPAN AND DISEASE

Chair: *G.J. Lithgow, Buck Institute for Age Research, Novato, California*

Many of the major modulators of lifespan in simple animals are involved in the production or sensing of endocrine signals. Such signals often modulate metabolism in response to altered nutrition state. Consequently, such endocrine signals are associated with major human chronic disease such as Type II diabetes and metabolic syndrome. Other signals regulate bone remodeling with profound healthcare implications. Can we begin to optimize endocrine signaling to maximize successful aging? We will explore a number of endocrine systems and their significance at the aging/disease interface. Speakers: Ronald C. Kahn, M.D., The Joslin Diabetes Center, Harvard Medical School. Vijay Yadav, Ph.D., Columbia University William Sonntag, Ph.D., Reynolds Oklahoma Center on Aging

## SESSION 275 (SYMPOSIUM)

### AGE DIFFERENCES IN DECISION MAKING: THE ROLE OF MOTIVATION AND EMOTION

Chair: *C.E. Loeckenhoff, Cornell University, Ithaca, New York*

Discussant: *J. Strough, West Virginia University, Morgantown, West Virginia*

A growing body of research documents systematic age differences in various aspects of choice and decision-making. Research further suggests, that such effects are not fully explained by cognitive decline. Age-related variations in motivational states and emotional responses appear to play an important role as well. The individual presentations in this symposium illustrate such effects in the context of choice preferences, intertemporal choice, and health-related decisions. First, Reed, Mikels, and Loeckenhoff present a series of studies demonstrating that advanced age is associated with a preference for smaller choice sets and that motivational priorities contribute to this phenomenon. The following two presentations convey converging evidence for a role of affect in age differences in intertemporal choice: Loeckenhoff, O'Donoghue, and Dunning examine age differences in temporal discounting for gains and losses in a life-span sample. With advanced age, individuals make more patient choices and their anticipated emotions are less sensitive to delay. Consistent with these findings, Samanez-Larkin, Carstensen, and McClure report that older adults are less likely to discount delayed rewards than younger adults. Moreover, neuroimaging analyses suggest that the mesolimbic reward system is less sensitive to delay among older versus younger adults. Next, Nothoff and Carstensen discuss the use of message framing to encourage physical activity among older adults. Their findings suggest that gain-framed messages are more effective than loss-framed messages – particularly among older adults who are high in self-efficacy. Finally, Strough will integrate these findings with the aging and decision making literature and discuss directions for future research.

### CHOICE ACROSS THE ADULT LIFE SPAN: WHO WANTS IT, HOW MUCH, AND WHY?

A.E. Reed, J. Mikels, C.E. Loeckenhoff*, Cornell University, Ithaca, New York*

The proliferation of choice in modern society is ubiquitous, but is it equally welcomed by adults of different ages? The present studies examined age differences in preferences for, valuation of, and interest in varying degrees of choice in decision-making, as well as underlying influences on these age differences. Participants (N = 457, age range = 18-94) completed novel measures of choice preferences and valuation, self-efficacy, and motivational priorities, as well as validated measures of decision strategies, personality factors, and cognitive abilities. Results indicate that the desire for choice wanes with age across a variety of decision domains, with larger choice sets especially aversive to older versus young adults. Additional results suggest that age differences in choice preferences reflect a constellation of changes in motivational and cognitive processes across the adult life span. Implications for theories of aging and decision-making, as well as public policy, are discussed.

### AGE DIFFERENCES IN TEMPORAL DISCOUNTING OF REALISTIC MONETARY GAINS AND LOSSES

C.E. Loeckenhoff, E. O'Donoghue, D. Dunning*, Cornell University, Ithaca, New York*

We examined age differences in temporal discounting, the tendency to devalue delayed outcomes relative to immediate ones, with particular emphasis on the role of affective responses. Participants (N=98, aged

19-91, M=50, SD=20, 58% female) completed an incentive-compatible temporal discounting task involving both gains and losses. They also rated affect at baseline, anticipated affect in response to immediate and delayed gains and losses, and affective responses to the choice scenarios. Age was negatively associated with the tendency to discount the future, although this effect only reached statistical significance in conditions involving delayed gains ($p < .05$), but not in conditions involving delayed losses ($p > .2$). Age was not associated with baseline or choice-related emotions. However, whereas younger adults anticipated that they would feel less positive about future gains and less negative about future losses, older adults' anticipated emotions did not differ across delay intervals ($p < .001$).

### NEURAL MECHANISMS UNDERLYING INTERTEMPORAL CHOICE IN YOUNGER AND OLDER ADULTS

G.R. Samanez-Larkin, L. Carstensen, S.M. McClure, *Psychology, Stanford University, Stanford, California*

Many of the decisions that affect quality of life as we age involve a trade-off between instantaneous gratification and long-term good (intertemporal choices). This study investigated the neural mechanisms supporting intertemporal decisions in younger and older adults. We hypothesized that for relatively infrequent events, such as those in which an action leads to a reward after a long delay, significant experience may be necessary to learn how to appropriately value delayed rewards. Thus age-related experience may contribute to the tuning of neural reward systems which may result in behavioral increases in patience. Consistent with this hypothesis, we found that older adults were more willing to wait for delayed monetary rewards. Neuroimaging analyses revealed that intertemporal decisions activate mesolimbic regions in both age groups. However, whereas younger adults show greater activity for immediate than delayed choices, older adults show similar activation in these reward-related regions for both immediate and delayed choices.

### DECIDING TO EXERCISE: THE ROLE OF MESSAGE FRAMING AND SELF-EFFICACY

N. Notthoff, L. Carstensen, *Department of Psychology, Stanford University, Stanford, California*

Very few older people decide to be physically active, despite widely advertised scientifically documented positive effects on aging outcomes, possibly because information is not communicated to them effectively. In two studies (n1=57; n2=59), we examined whether emphasizing potential gains may lead to increased choice of physical activity among older adults since they attend more to positive over negative information as a result of socioemotional changes that occur with age. Gain-framed messages were more effective in encouraging older adults to walk more ($t(58)=2.291, p<0.05$; $t(56)=2.23, p<0.05$). This change was linked to self-efficacy, such that participants with higher compared to lower levels of self-efficacy particularly decided to walk more after having received gain-framed information, whereas the level of self-efficacy did not make a difference for participants who had received loss-framed messages ($t(54)=2.158, p<0.05$). This supports the idea that in order to influence older adults' decisions, information framing has to match their emotional goals.

## SESSION 280 (SYMPOSIUM)

### AGEING & TECHNOLOGY: HOW THE USE OF TECHNOLOGIES CAN DEFINE, FULFIL & ENHANCE LIVING, WELL-BEING & COGNITIVE MEMORIES

Chair: *H.R. Marston, Teesside University, Middlesbrough, North Yorkshire, United Kingdom*

Discussant: *H. Moody, AARP, Washington DC, Washington*

The symposium will address the typology of technologies from philosophical perspectives, paradigms versus inflection points in describing and understanding the evolving, growing use and roles of technology in the ageing process and ageing experience. Furthermore concepts which digital technologies are being used to develop artefacts to aid older adults to document their lives which in turn may support and share the recall of memories of childhood by individuals with family members, thus building upon intergenerational relationships and in addition stimulate cognitive decline. Reminiscence through digital technology can support all individuals concerned and potential tailor built developments for the individual can create and shape positive emotions, memory, engagement and enjoyment through communication with the developer, family and friends. The digital medium of video gaming has been researched in recent years through a variety of works, bringing gaming and ageing together for the benefit of a current and future ageing population is an area which requires and crosses over into many disciplines to formulate and comprehend the wider picture. Research projects implementing digital technologies and software for the development of virtual environments and games has the potential to reward an optimistic therapeutic response in individuals. It has been suggested, software such as the Nintendo Brain Age has the ability, through training to aid mild/short term cognitive impairment, yet this is still a young notion and requires further studies. This concept has the notion of contributing a positive affect to a person's quality of life, cognitive stimulation, reaction time and enjoyment of individual(s).

### TOWARD "POST-AGING": THE VARIOUS ROLES OF TECHNOLOGY IN AN AGING SOCIETY

S.D. Wright, K. Felsted, *Gerontology Program, University of Utah, Salt Lake City, Utah*

This presentation will offer a typology for understanding the emergent and expanding role of technologies that hold both promise and peril for transforming the aging process in this century. This presentation is for participants who wish to review the continuum of varied intersects and constructs of technologies, that range from purporting to enhance the "activities of daily living" in older adults to those that propose to extend longevity and make senescence negligible, and ultimately claim to transcend "aging" itself - moving toward a transhumanist domain. It is proposed that we have reached critical mass in both the literature and in technological outcomes, and therefore, we can begin to address the actual and speculative impacts on the aging experience. It is further claimed that advances in technology has already - and will further - affect the epistemology and ethics, the expectations and educational practices for the aging experience in our lifetime.

### PROJECT SENELUDENS: MAINTAINING ANTICIPATORY CHARACTERISTICS FOR QUALITY OF LIFE IN THE AGING

M. Nadin, *AT 10, ante-Institute for Research in Anticipatory Systems, Richardson, Texas*

The hypothesis informing this work is that aging entails a decrease in the anticipatory characteristics needed for independent life. To mitigate the consequences of reduced anticipatory performance, brain plasticity is addressed through games. The perspective of anticipatory processes for evaluating specific gaming needs of the aging and providing games with anticipatory features will be introduced. Since anticipation is expressed in action, the games conceived, designed, and produced for triggering brain plasticity need to engage the sensory, cognitive, and motoric. The AnticipationScope, i.e., integration of motion-capture data and physiological sensors, is the quantifying platform for identifying individual characteristics and for validating the results of game participation. The output is the Anticipatory Profile. Implementations inspired by this original scientific framework are presented. This presentation will 1) inform the audience of an often unknown aspect of aging; 2) enable them to define goals in mitigating the effects of aging.

### DIGITAL MEMORIES: USING TECHNOLOGY TO CREATE REFLECTIONS OF LIFE AS PART OF THE AGEING PROCESS

J. Samuels, *Film and Media, Sussex University, Brighton, United Kingdom*

Digital media technologies can be used to document the life course of individuals' at different points during the lifecycle of human existence – life, death and afterlife as digital stories. This paper highlights the importance of preserving the past through the documentation of life as a digital artefact of an elderly artist in the form of a treasure chest, part for the public to enjoy her art but more as a legacy for her family to interact with and enjoy. The collation of symbols to represent the individual's life might also be viewed as a gift bestowed to future generations. After attending this symposium, participants will be able to explore the artefact and gain an insight into the therapeutic process of creating a digital memory as a documentation of life. In addition delegates will understand further how digital technologies can aid individuals both practitioners, users and carers' through the ageing process.

## SESSION 285 (SYMPOSIUM)

### ASSESSMENT IN ENVIRONMENTS FOR OLDER ADULTS

Chair: *H. Chaudhury, Gerontology, Simon Fraser University, Vancouver, British Columbia, Canada*
Discussant: *J.A. Sanford, Georgia Institute of Technology, Atlanta, Georgia*

Environmental assessment/evaluation feed into practice decisions, provides research directions and informs conceptual understanding of the built environment's role in older adults' behaviors and experiences. The primary objective of this symposium is to present recent advances in assessment research in environments for older adults. The collection of studies represents multiple settings (e.g., home, neighbourhood, dementia care setting), functioning abilities (e.g., high functioning older adults, persons with cognitive loss) and the associated realities. The study by Gretchen and colleagues employed a community participatory approach engaging older adults in assessment of neighbourhood walkability in Portland, Oregon. This study raises the potential variation or divergence in environmental assessments conducted by experts and older adult. Chaudhury and Cooke will introduce the newly developed physical environmental assessment component of the well-known dementia care assessment and practice development tool Dementia Care Mapping (DCM). The new tool substantially expands the scope of the existing DCM incorporating coding schemes that identify possible environmental influences on observed behaviours in persons with dementia. In the following study, Oswald and colleagues address housing accessibility and control belief issues in very old age. Although the complexity of interrelations between and assessment of objective and perceived person-environment measures and quality of life has been acknowledged in the literature, very little empirical research has been conducted in this area. The final study by Teaford and Zavotka presents a comprehensive assessment tool to evaluate universal design aspects in the home environment. The study presentations will lead to a discussion on ongoing challenges in theory, methods and practice.

### OLDER ADULT VOLUNTEERS CONDUCTING ASSESSMENTS OF NEIGHBORHOOD WALKABILITY: PROCESS AND PRACTICAL IMPLICATIONS

G. Luhr, M.B. Neal, J. Dill, D.A. Lund, A. Adkins, V. Shandas, *Portland State University, Portland, Oregon*

Environmental assessments of the physical and social contextual features of neighborhoods that may both inhibit and promote physical activity have been increasing in popularity as data in gerontological studies. Assessing the features of residential neighborhood environments that are thought to promote physical activity may be important for encouraging active aging. We present the process utilized for implementing an assessment of the walking environment in four Portland, Oregon neighborhoods, particularly the inclusion of older adults (55+ years) as volunteer research assistants for completing the assessments. The project's advisory council, which was composed of representatives of stakeholder organizations, made suggestions regarding recruitment of older volunteers and aided in the distribution of recruitment materials. This presentation showcases the volunteer recruitment process, training protocol, findings regarding the reliability of volunteers' ratings as compared to project staff's, and practical recommendations for future studies wishing to involve older adults as volunteer research assistants.

### DEVELOPMENT OF A PHYSICAL ENVIRONMENTAL COMPONENT OF DEMENTIA CARE MAPPING (DCM-ENV)

H. Chaudhury[1], H.A. Cooke[2], *1. Gerontology, Simon Fraser University, Vancouver, British Columbia, Canada, 2. University of Victoria, Victoria, British Columbia, Canada*

The physical environment of people with dementia is considered an important contributor to psychosocial, behavioral, and health outcomes in institutional settings. Dementia Care Mapping (DCM) is a valid tool for evaluating quality of life for people with dementia from a person-centered care philosophy. However, a major limitation of DCM is it does not contextualize the observed behaviors with the features and aspects of the physical environment of a care setting. This study is based on the development of an evaluative component for the physical environment (DCM-ENV) to be integrated within the current DCM tool. DCM-ENV strengthens DCM by grounding residents' behaviors and quality of care indicators in the built environment of the setting, and identifying areas for positive environmental modifications. Results from the pilot testing of the DCM-ENV will be presented.

### WHO IS IN CHARGE HERE? THE ROLE OF ACCESSIBILITY PROBLEMS AND HOUSING-RELATED CONTROL BELIEFS IN VERY OLD AGE

F. Oswald[1], H. Wahl[2], O.K. Schilling[2], S. Iwarsson[3], *1. Interdisciplinary Ageing Research, Faculty of Educational Sciences, Goethe University Frankfurt, Frankfurt, Germany, 2. Institute of Psychology, Dept. of Psychological Ageing Research, University of Heidelberg, Heidelberg, Germany, 3. Dept. of Health Sciences, Faculty of Medicine, Lund University, Lund, Sweden*

To comprehensively address person-environment relationships, the objective environment and the subjective experience of the setting need to be assessed. Our aim is to analyze the role of the magnitude of accessibility problems (MAP) at home and external housing related control beliefs (HCB) for outcomes of quality of life (e.g., ADL, depression). Data were drawn from the European project ENABLE-AGE survey study including 847 single-living and community-dwelling individuals aged 80 to 89 years (at T1) in urban regions in Sweden and Germany, 636 of whom were re-assessed one year later (T2). Cross-sectional analyses showed that MAP and HCB were consistently associated with quality of life outcomes. In the longitudinal analysis, MAP at T1 was predictive for T1-T2 change in ADL and depression, while HCB did not show substantial relations with any change in outcomes. Our study underlines the importance of understanding relations between objective and perceived person-environment measures and quality of life in very old age.

### APPLYING UNIVERSAL DESIGN AND HEALTH TO HOME ASSESSMENTS

M.H. Teaford, S. Zavotka, *The Ohio State University, Columbus, Ohio*

When considering relocation or aging in place, older adults need tools that include both a personal assessment and an assessment of the home in order to make decisions about future housing. The authors developed a survey based on Andes and Beamish (2005) which includes a) 50 item personal assessment of abilities, health status, services received, prior modifications to the home, changes in activities, demographic data, and homeownership/house; and b) 183 item home assessment that identified universal design features for 3 entrances, hallways and stairs, living area, kitchen, 2 bathrooms, 2 bedrooms, and laundry. From the results, total universal design score and subtotal scores for safety, accessibility, and convenience were calculated. Final scores were adjusted with negative points for missing key accessibility and safety features such as a first floor bath, stairs, and lack of handrails. They will discuss how results can be used to predict interest in making home modifications.

## SESSION 290 (SYMPOSIUM)

### COGNITIVE AND PSYCHOSOCIAL DETERMINANTS OF AWARENESS OF IMPAIRMENT IN EARLY-STAGE DEMENTIA

Chair: *L. Clare, Bangor University, Bangor, Gwynedd, United Kingdom*
Co-Chair: *R.G. Morris, Institute of Psychiatry, King's College London, London, United Kingdom*
Discussant: *M. Martin, University of Zurich, Zurich, Switzerland*

Awareness can be conceptualised as the accuracy with which a person appraises his/her functioning and situation. Disturbances of awareness are common even in early-stage dementia, and appear to develop through an interaction between cognitive decline and psychosocial factors. It is important to try to identify the relative contribution of cognitive, psychological and social factors to disturbances of awareness, and to understand the implications for care. This symposium reports initial findings from the Memory Impairment and Dementia Awareness Study (MIDAS), a comprehensive, longitudinal, multi-method approach to exploring awareness in early-stage dementia. Participants were 101 individuals with early-stage Alzheimer's (n=50), vascular (n=31) or mixed (n=20) dementia (mean age 78.66 years; mean MMSE score 24.17). People with dementia (PWD) completed questionnaire measures, experimental tasks, neuropsychological tests and an in-depth interview. Carers provided informant ratings, completed questionnaires, and engaged in an in-depth interview. Awareness of functioning was assessed in relation to memory, activities of daily living, and social behaviour, using participant-informant discrepancy measures. Awareness of performance was assessed in relation to memory by comparing participant post-dictions with objective test scores. Linda Clare's talk will discuss the relative contribution of neuropsychological, psychological and caregiver factors to scores on discrepancy measures of awareness. Robin Morris will focus on the association between awareness and neuropsychological functioning. Sharon Nelis will outline findings regarding awareness of social and emotional functioning. Anthony Martyr will present evidence to show that awareness may be retained at an implicit level in the absence of explicit awareness. Implications for care will be discussed.

### TESTING A BIOPSYCHOSOCIAL MODEL OF AWARENESS IN EARLY-STAGE DEMENTIA

L. Clare[1], S. Nelis[1], A. Martyr[1], I.S. Markova[2], I. Roth[3], R.T. Woods[1], C.J. Whitaker[1], R. Morris[4], *1. School of Psychology, Bangor University, Gwynedd, United Kingdom, 2. University of Hull, Hull, United Kingdom, 3. Open University, Milton Keynes, United Kingdom, 4. Institute of Psychiatry, King's College London, London, United Kingdom*

The relative contributions of neuropsychological, psychological, and caregiver factors to scoring on measures of awareness were explored with the aim of identifying predictive variables. Awareness of functioning was assessed in relation to memory, activities of daily living, and social behaviour using participant-informant discrepancy measures. Awareness of performance was assessed in relation to memory by comparing participant post-dictions with objective test scores. People with dementia also completed questionnaire measures and a brief neuropsychological battery. Carers provided informant-ratings and completed questionnaires assessing their own well-being. Discrepancies were substantial in the domain of activities of daily living, moderate for memory and slight in relation to socio-emotional functioning. Different combinations of variables predicted discrepancies in each domain. The results support a biopsychosocial model of awareness, indicating that scores on discrepancy measures in different domains are significantly predicted by varying combinations of individual psychological, neuropsychological and caregiver variables.

### NEUROPSYCHOLOGICAL CORRELATES OF AWARENESS OF COGNITIVE OR BEHAVIOURAL DYSFUNCTION IN EARLY-STAGE DEMENTIA

R. Morris[1], L. Clare[2], S. Nelis[2], A. Martyr[3], I. Roth[4], I.S. Markova[1], R.T. Woods[2], C.J. Whitaker[2], *1. Institute of Psychiatry, Kings College London, London, United Kingdom, 2. Bangor University, Bangor, United Kingdom, 3. University of Hull, Hull, United Kingdom, 4. Open University, Milton Keynes, United Kingdom*

The association between neuropsychological impairments and loss of awareness of neuropsychological or behavioural difficulties in early-stage dementia was explored with reference to the CAM model which outlines different neurocognitive mechanisms underlying disturbances of awareness. Awareness of memory loss was investigated in 101 people with early-stage dementia, using the MARS procedures, with a battery of neuropsychological tests to explore executive function, memory, language and semantic memory. For the MARS awareness of memory function procedure worse performance on the Rey AVLT, GNT, Category fluency and SART errors of commission were associated with lack of awareness. For the MARS memory performance awareness procedure, the associations were with the Rey AVLT, GNT and the Pyramids and Palm Trees. Deficits in episodic and semantic memory and attention may contribute to loss of awareness of cognitive dysfunction. Awareness may be influenced by method of measurement when rating the performance of people with dementia.

### AWARENESS OF SOCIAL AND EMOTIONAL FUNCTIONING IN EARLY-STAGE DEMENTIA AND IMPLICATIONS FOR CAREGIVERS

S. Nelis[1], L. Clare[1], A. Martyr[1], I.S. Markova[2], I. Roth[3], R.T. Woods[1], C.J. Whitaker[1], R. Morris[4], *1. Psychology, Bangor University, Bangor, United Kingdom, 2. University of Hull, Hull, United Kingdom, 3. The Open University, Milton Keynes, United Kingdom, 4. King's College London, London, United Kingdom*

Impairments in social and emotional function are a feature of early-stage dementia. This study explores the extent to which awareness of social and emotional function is also reduced, and whether this has an impact on the quality of life of the person with dementia (PwD), the quality of the dyadic relationship between PwD and carer, and carer levels of stress. People with dementia rated their ability to recognize emotions, show empathic reactions and appropriate behavior in social situations. Carers gave parallel ratings and an adjusted discrepancy score provided an index of awareness. Neuropsychiatric symptoms, quality of life in the PwD and carers, the dyadic quality of the relationship and stress in the carer were also assessed. People with dementia tended to overestimate their socio-emotional functioning. Reduced awareness was related to poorer perceived quality of relationship for the carer and greater carer distress.

### THE EMOTIONAL STROOP EFFECT FOR MEMORY-RELATED WORDS IN PEOPLE WITH DEMENTIA AND THEIR CAREGIVERS: INVESTIGATING THE IMPLICIT AWARENESS SYSTEM

A. Martyr[1], L. Clare[1], S. Nelis[1], J.L. Roberts[1], I.S. Markova[3], I. Roth[2], R.T. Woods[1], R.G. Morris[4], *1. Bangor University, Bangor, United Kingdom, 2. Open University, Milton Keynes, United Kingdom, 3. University of Hull, Kingston upon Hull, United Kingdom, 4. Institute of Psychiatry, King's College, London, United Kingdom*

This study explored whether people with dementia (PwD), and their carers, show a processing bias to dementia-related words in an emotional Stroop task, and whether the presence of such a bias is related to level of explicit awareness of the condition in the PwD. Seventy-nine PwD and 85 caregivers participating in MIDAS completed an emotional Stroop task. Time taken to colour-name dementia-related and neutral words was compared within and between groups. Ratings of explicit awareness shown by PwD, made on the basis of a detailed interview with each PwD and his/her carer, provided an index of explicit awareness. Both PwD and carers showed increased response times to salient compared to neutral words. In the PwD this effect was unrelated to degree of explicit awareness of the condition. The results indicate that preserved implicit awareness of the condition can be elicited in PwD even where there is reduced explicit awareness.

## SESSION 295 (SYMPOSIUM)

### DIFFERENCES IN HEALTH IN LATER LIFE: HOW IMPORTANT ARE COUNTRY LEVEL INFLUENCES?

Chair: *G. Ploubidis, London School of Hygiene & Tropical Medicine, London, United Kingdom*

Objectives: To investigate country level variation in later-life somatic health in Europe and the extent to which this is accounted for by policy related – and thus amenable to change- indicators. Methods: We employed data from 14 European countries included in the second SHARE measurement wave (N = 33,576). Results: Twenty percent of the variation in later life somatic health in Europe appears to be due to country level differences. Older people in the Scandinavian countries along with Germany, the Netherlands and Switzerland appear to have the best somatic health, whereas those in Spain, Italy and Poland have the worst. This country level variation was largely associated with differences in the level of egalitarianism of each country as well as differences in the prevalence of obesity within each country. Discussion: A substantive amount of systematic macro level variation in later life somatic health in Europe appears to be amenable to change.

### VARIATIONS IN HEALTH CARE UTILIZATION IN EUROPE: A MULTILEVEL ANALYSIS

Z. Or[1], F. Jusot[2,1], N. Sirven[1], *1. IRDES, Paris, France, 2. LEGOS, Uni. Paris-Dauphine, Paris, France*

Objective: to explore the role of health-care systems and individual socio-economic characteristics in health-care utilization. Methodology: Data from SHARE and the British Household Panel Survey are employed. Multilevel binominal models examine the country-specific effect of selected utilization measures on health care utilization. Differences in national health-care systems are tested to explain country specific effects. Finally, a multilevel model considers the impact of health care systems on the influence of individual socio-economic characteristics on utilization. Results: The results suggest that the organization and the modes of financing health care have an impact on both the level of health care utilization and the degree of inequity in utilization. The GPs position in the system, the organisation of primary care and cost sharing arrangements are particularly important. Discussion: The analysis clarifies the contribution of health care systems to national differences in health care utilization and to cross-country differences in social inequalities in utilization.

### TRANSITIONS IN FORMAL AND INFORMAL CARE UTILIZATION: A EUROPEAN ANALYSIS

J. Geerts[1], K. Van den Bosch[2], *1. Federal Planning Bureau, Brussels, Belgium, 2. Centre for Social Policy, University of Antwerp, Antwerp, Belgium*

Objective: To explore how long-term care systems influence formal and informal care utilization dynamics. Method: The sample includes persons 65+ from 11 European countries, participating in SHARE wave 1 and 2 (N=7,769). The effects of changes in health and in household composition on formal and informal care transitions were estimated, allowing these effects to vary across countries. Results: In all countries, formal and informal care are more often complements than substitutes. The likelihood of becoming a formal or informal care user differs significantly between countries. In the Scandinavian and Continental European countries the transition to formal care is more strongly related to informal support unavailability. We found little evidence of country differences in the effect of health variables. Discussion: Findings suggest a common trend towards targeting of formal services to single persons. We will discuss the consequences of this for the quality of life of elderly persons and their carers.

### SUPPORT TO OLDER PEOPLE, GENDER, AND THE WELFARE STATE

M. Brandt[1], K. Haberkern[2], T. Schmid[2], *1. MEA, University of Mannheim, Mannheim, Germany, 2. Institute of Sociology, University of Zurich, Zurich, Switzerland*

Aim: This study examined the societal organization of instrumental help and personal care to older people in Europe. It considered the influence of contextual structures on inter-generational support and the effect of these features on gender (in)equality. Method: Intergenerational support was regressed on contextual factors such as family obligations, social service supply, and female labor market participation. Control variables included opportunity, need and family structures. Results: Distinct differences were found between the types of support examined. Contextual structures influenced intergenerational transfers. Both crowding in and crowding out were seen, depending on the type of support. The analyses also showed that professional services reduce gender inequality in inter-generational support. Discussion: The findings support the specialization hypothesis in which family and state collaborate, taking on different tasks. They also show that family norms preserve gender inequality in informal support, whereas a developed welfare state contributes to greater equality.

### DIFFERENCES IN HEALTH SERVICES UTILIZATION AMONG DEPRESSED AND NON-DEPRESSED ELDERS IN EUROPE

K. Ladin, *Health Policy, Harvard University, Cambridge, Massachusetts*

Objective: I examine the influence of prevalence versus impact of covariates (demographic, socioeconomic, geographic, chronic disease, self-reported health, etc.) on differences in health services utilization between depressed and non-depressed respondents. Methods: Sample includes 31,115 respondents, aged 50+, in 11 countries (SHARE, Wave 1 Release 2, 2004). Blinder-Oaxaca decomposition methods for multivariate linear regression models were used to examine the influence of prevalence and impact of covariates on utilization. Results: The prevalence effect accounted for 57.7% of the utilization gap, whereas the impact effect explained 42.3%. Despite differences in quality and coverage of health services, in all countries the prevalence effect was explained entirely by need based factors. The impact effect varied cross nationally, but was entirely explained by enabling factors, particularly socioeconomic status and urbanity. Discussion: Gaps remain in understanding how to mitigate disparities in utilization among depressed persons. Increasing screening and depression treatment could mitigate disparities in most countries.

## SESSION 300 (POSTER)

## DEMENTIA

### TRAINING NURSING HOME RESIDENTS WITH DEMENTIA TO SERVE AS GROUP ACTIVITY LEADERS: PRELIMINARY RESULTS OF A RESEARCH STUDY

M.J. Skrajner, C. Camp, J.L. Haberman, *Hearthstone Research and Development, Willoughby, Ohio*

In an ongoing NIMH-funded research study, nursing home activity staff members are learning how to train residents with dementia to lead small-group activities for other residents. Researchers are measuring the extent to which residents can fill the role of group leader, and gauging the effects of resident-led activities on the engagement/affect of resident-players. Two programming methods are being used: Montessori Programming (MP-experimental) and Zgola Programming (ZP-control). To date, activity staff members have trained four nursing home residents to be leaders (two for each programming type). Thirteen participants have taken part in resident led-activities (seven MP participants and six ZP participants). Most resident-leaders and players have moderate levels of dementia. Residents have been able to serve as leaders for both programming types with some staff assistance. For MP, 82% of sessions have required less than 1 minute of assistance. For ZP, 25% of sessions have required less than 1 minute of assistance. For both programming types, engagement of participants has been greater in resident-led activities, as compared to baseline, standard activities. In particular, there have been significant increases in Constructive Engagement (CE; $\underline{p}<.01$) and decreases Non-Engagement (NE; $\underline{p}<.05$). CE showed a significantly greater increase from baseline in MP than in ZP. A significant increase in Pleasure ($\underline{p}<.05$), as compared to baseline, was observed in ZP, but was not observed in MP. Persons with dementia are capable filling meaningful social roles even after being placed in nursing homes, and these results can be obtained through programs created by nursing home staff.

### SEEKING COMMON GROUND: UNDERSTANDING MEANING MAKING AMONG FAMILY CAREGIVERS AND PERSONS WITH AD

J. Small[1], M.B. Fried-Oken[2], *1. College of Medicine, UAMS, Little Rock, Arkansas, 2. Oregon Health and Sciences University, Portland, Oregon*

Background: Propositional grounding is the coordinated process where the speaker/addressee dyad updates common knowledge on a moment-by-moment basis to create shared meaning. Method: A descriptive cross-sectional study was conducted to describe the types of grounded propositions produced by dyads composed of family caregivers (FCG) (n=24) and persons with AD (P-AD) and elders with no dementia and conversational partners (CP) (n=20).. Participants were recruited from the patient database at Oregon Health and Science University Alzheimer's disease Center. Participants selected a topic and engaged in three 10-minute videotaped conversations. The data was analyzed using a conversational analysis protocol. Results: FCG/P-AD dyads when compared to elder/CP dyads, were only able to ground 62.94% vs. 83.26% of their utterances. Nine percent (9.26% vs. 8.65% elder/CP) of P-AD/FCG utterances were facilitated-grounded and (16.89% vs. 11.87% elder/CP) of utterances were not grounded. FCG/P-AD in contrast to elder/CP dyads, used main and collateral track language behaviors to ground propositions. Under main track signals, 78.74% of P-ADs' vs. 94.15% of elders' utterances were maintained. Eighty-two percent (82.21% vs. 93.38 elders') of P-ADs' turns were filled. Among collateral track signals, 8.67% of P-ADs' turn contained overlapping or interrupted turns and 7.69% of P-ADs' vs. 0.15 of elders' turns were abandoned/no-response. Eighteen (18.32% vs 0.46% elder) of the utterances produced by P-ADs contained no referent. Forty-three (43.77%) of P-ADs vs. 8.31% of elder's utterances contained some type of trouble indicating behavior. Main study findings indicate that FCG + P-AD conversations were markedly different from the conversations of the contrast group.

### MATCHED AND MISMATCHED APPRAISALS OF THE EFFECTIVENESS OF COMMUNICATION STRATEGIES BY FAMILY CAREGIVERS

M.Y. Savundranayagam[1], J.B. Orange[2], T.L. Meyer[1], R.K. Garrett[1], *1. University of Wisconsin-Milwaukee, Milwaukee, Wisconsin, 2. University of Western Ontario, London, Ontario, Canada*

Communication problems stemming from Alzheimer's disease (AD) often comprise breakdowns in information exchange which are linked with problem behaviors and increased caregiver stress. Communication breakdowns can result from caregivers' use of ineffective strategies which, paradoxically, are perceived as helpful. This study examined whether caregivers' appraisals of strategy effectiveness (survey data; N=84) were consistent with effective strategies found in the literature and in video-recorded mealtime conversations from a subsample (N=15) of AD family caregiver dyads. Conversations were analyzed using the trouble-source repair paradigm which identifies and assesses the effectiveness of caregiver communication strategies to resolve breakdowns. Effective strategies in the conversations which were appraised correctly by family caregivers included: "repeat", "simplify", "rephrase", and "try to figure out meaning". "Continue talking" was the only ineffective strategy in the conversations and appraised as such by caregivers. Discrepancies occurred between caregivers' appraisals of strategy effectiveness and assessments of strategy effectiveness using the video data and existing literature. Caregivers appraised "speaking slowly" as effective but the literature demonstrates the opposite influence. "Give more information", "ask to repeat", and "ask for clarification" were used frequently as effective strategies in the conversations but were appraised as less than moderately effective. Other strategies inaccurately appraised by caregivers as ineffective included: "write", "pretend to understand", "say 'I don't understand'", "give choices of what you think he/she means", "ask questions", and "gestures". Although caregivers correctly appraised the effectiveness of some strategies, instances of a mismatch illustrate the need for continued communication education and training.

### A PRINCIPLE-BASED CONCEPT ANALYSIS OF COGNITIVE REHABILITATION IN PEOPLE WITH DEMENTIA

N.L. Hill, *School of Nursing, Penn State University, University Park, Pennsylvania*

Non-pharmacological, cognition-based interventions for people with dementia have shown promise in their ability to improve functional status and quality of life outcomes. Although attempts have been made to differentiate the variety of intervention types, significant conceptual confusion persists in the scientific literature, particularly in regard to cognitive rehabilitation. A principle-based concept analysis was conducted to determine the current state of the science regarding cognitive rehabilitation in people with dementia. A comprehensive literature search was conducted in PubMed, CINAHL, PsycINFO, and the Cochrane Library. Data were evaluated according to the four key philosophical principles (epistemological, pragmatic, linguistic, and logical), resulting in a theoretical definition of cognitive rehabilitation in people with dementia: a holistic intervention that uses a variety of techniques to target a range of practical, person-centered outcomes, rather than cognition alone.

### EDUCATION AND DEMENTIA: A SYSTEMATIC REVIEW OF PUBLISHED STUDIES

E.S. Sharp, M. Gatz, *Psychology, University of Southern California, Los Angeles, California*

The purpose of this study was to conduct a systematic review of the literature on the relationship between education and dementia. A systematic literature review was conducted of all published studies examining the relationship between years of formal education and dementia listed in the PubMed and PsycInfo databases from 1990 to 2010. The inclusion criterion was dementia diagnosis by a published standardized diagnostic procedure. The two dementia outcomes included were Alzheimer's disease and any type of dementia combined. A total of 76 studies (from 67 articles) met inclusion criteria. Overall, 27 studies reported a significant effect of education on risk for dementia, 23 studies reported both significant and nonsignificant findings, and 26 studies reported no significant relationship. Geographical region moderated the results such that the effect of education on risk for dementia was more consistent in developed regions compared to developing regions. When studies compared multiple levels of education, the results were largely nonlinear such that no or low education levels were significant but middle levels of education were not significant. This finding suggests that more years of education alone may not attenuate risk for dementia. The results of this review indicate that the relationship between education and dementia may be less consistent than previously presented in the literature.

### DIFFICULT DIAGNOSES: EXAMINING CAREGIVERS EXPERIENCES WITH DEMENTIA DIAGNOSIS

A.K. Gibson, K.A. Anderson, *College of Social Work, The Ohio State University, Columbus, Ohio*

Memory loss disorders, such as Alzheimer's disease and other dementias, are difficult to diagnose and the information and support that individuals and families receive during and following such diagnoses is often incomplete and inadequate. In some cases, individuals and families can wait years to finally receive a definitive diagnosis, further hampering their ability to connect with disease-specific community resources, such as those offered through the Alzheimer's Association. The majority of the existing research that has been conducted on the diagnostic process for dementia has focused specifically on the role of the physician. As such, little is known regarding the needs of individuals with dementia and their family caregivers following this often devastating diagnosis. In this ongoing study, the researchers examine family caregivers' experiences during and after the diagnosis of dementia and the paths by which caregivers access information and community resources. In this presentation, the researchers will discuss their sampling strategies, methods for data collection, and initial findings from the study. Emerging strategies for improving the exchange of information during and following the diagnosis of dementia will also be introduced, as well as suggestions for enhancing the process of connecting caregivers to support services.

### HOW NURSES DECIDE TO PROVIDE ANALGESIC TREATMENT TO LONG TERM CARE RESIDENTS WITH DEMENTIA

A.L. Gilmore, B.J. Bowers, *University of Wisconsin-Madison, Madison, Wisconsin*

Nearly eighty percent of nursing home residents regularly experience pain that is either untreated or inadequately treated. Efforts to identify and treat pain are complicated by dementia. Research suggests that even when pain is identified in people with dementia, it is often treated less aggressively. However, little is known about the reasons for this inadequacy and the relationship between pain identification and decisions to treat. The purpose of this study was to examine what factors influence nurses' decisions to provide analgesic interventions and what processes they use to identify pain in people with dementia. This study consisted of interviews with nurses (n=8) from 3 nursing homes. Data were collected and analyzed using a qualitative research methodology, Dimensional Analysis. Results suggest that the number and type of strategies used by nurses to identify pain and the urgency with which they provide analgesic interventions varies based on different resident characteristics. Resident characteristics that nurses acknowledged as influencing identification of pain and subsequent analgesic intervention included type of pain (chronic/acute), type of resident (long term/short term), ability to communicate, and perception of drug-seeking behaviors. Nurses identified several barriers to prompt treatment after having identified pain. The results of this study have implications for future research aimed at addressing misconceptions about pain assessment and treatment in nursing homes.

### THE RELATIONSHIPS BETWEEN LEISURE ACTIVITY AND BEHAVIORAL PROBLEMS AMONG DEMENTIA PATIENTS

C.N. Huang, Y. Chiu, S. Lee, W. Hsu, C. Li, *Nursing, Chang-Gung University, Taoyuan, Taiwan*

Leisure activities were an effective intervention on behavioral problems for demented adults in Western countries. However, there are few related studies conducted in Taiwan. Objective: The purpose of this study was to explore the sum of leisure activity types, and Behavioral and Psychological Symptoms of Dementia (BPSD) among early to moderate demented patients in Taiwan. Method: It was a descriptive correlation study, recruiting 34 community-dwelling demented patients. Types of individual and group leisure activities in the past month were measured by the Restorative Activity Questionnaire (RAQ). BPSDs were measured by Neuropsychological Inventory (NPI). Result: The men and women ratio was 11/23 with a mean age 78.03 ± 8.64 and mean educational years 5.68 ± 5.48. The major diagnosis was Alzheimer's disease (n=33, 97.1%). The mean of leisure activity types was 5.73 ± 3.56; most of the cases did not participate in group leisure activities. The most participated individual leisure activities were: watching television (97%), walking (85.3%) and planting vegetables (52.9%). There was a significant gender differences in individual RAQ (t= -3.25, p=0.04). Individual RAQ was significantly and negatively correlated with delusion (r=-0.49, p<0.01), hallucination (r = -0.42, p = 0.01), excitement/aggression (r=-0.44, p<0.01), depression / bad mood (r = -0.45, p <0.01), and irritability /emotion (r = -0.42, p= 0.01). Conclusions: The study found that sum of individual leisure activity types was negatively correlated with patients' BPSDs. In the future, leisure activities can be an appropriate intervention for early to moderate dementia patients to reduce their BPSDs.

### DEMOGRAPHIC AND CONTEXTUAL FACTORS RELATED TO KNOWLEDGE ABOUT ALZHEIMER'S DISEASE

S.M. Zoller[1], B. Carpenter[1], M. Gatz[2], *1. Psychology, Washington University in St. Louis, St. Louis, Missouri, 2. University of Southern California, Los Angeles, California*

Accurate knowledge about Alzheimer's disease (AD) is essential for effective dementia care. This study examined knowledge among 794 people who completed the Alzheimer's Disease Knowledge Scale (ADKS; Carpenter, Balsis, Otilingam, Hanson, & Gatz, 2009) and questions about their background and experience with AD. Across the entire sample, knowledge about AD was fair (average proportion correct = 72%, $SD$ = 58% - 86%). Knowledge was highest for dementia professionals (91% correct), lower for older adults (80%) and dementia caregivers (76%), and the lowest for senior center staff (67%) and undergraduates (67%), $F(4,752) = 86.28, p <.001$. Respondents knew the most about assessment, treatment, and management (82% correct), less about caregiving (78%), prevalence, symptoms and course (77%), life impact and legal matters (74%), and the least about risk factors and prevention (62%). Knowledge about AD tended to increase with age ($r = 0.30$) and education ($F(2,422) = 68.60$). Other factors correlated with increased knowledge were having family members with AD, attending a related class or support group, working with AD patients, and acquiring information from professional sources rather than popular or personal sources. Those who had provided direct care to someone with AD were no more knowledgeable than those never providing direct care. Results from a multiple regression confirmed that demographic characteristics and exposure to information about AD had the most significant associations with knowledge about dementia. Understanding where gaps in dementia knowledge exist can guide education initiatives to increase disease awareness and improve supportive services.

### PREVENTING AGGRESSION IN VETERANS WITH DEMENTIA

S. Shrestha[1], A. Bradford[1,2], A. Snow[4], N. Wilson[1,2], M. Stanley[1,2,3], M.E. Kunik[1,2,3], *1. Houston Center for Quality of Care and Utilization Studies, Baylor College of Medicine, Houston, Texas, 2. Houston Center for Quality of Care and Utilization Studies, Houston, Texas, 3. Michael E. Debakey Veteran Affair Medical Center, Houston, Texas, 4. University of Alabama, Tuscaloosa, Alabama*

The prevalence of aggression among Veterans with dementia is estimated to be about 40%, and this condition often remains untreated (Kunik et al., 2007). There is a pressing need for more research on non-pharmacologic treatment of aggression in persons with dementia (PWD). A recent study on aggression in PWD showed that pain was the strongest predictor of aggression (Kunik et al., 2009). Among PWD, prevalence of pain is known to be about 50% (Sawyer et al, 2006). Therefore, better management of pain can be a preventative approach towards reducing aggression in PWD. Preventing Aggression in Veterans with Dementia (PAVeD) is a home-based, psycho-educational intervention for pain aimed at reducing the incidence and severity of aggression in community-dwelling Veterans who have mild to moderate dementia. PWD who have clinically significant pain have been recruited from both primary care and specialty clinics in the Michael E. DeBakey VA (Houston, Texas). The intervention is, directed to the caregiver and, to the extent possible, the PWD, consists of six skill-based visits that include information on recognition and treatment of pain, communication, and behavioral activation. The proposed poster will present the development of the treatment and the manual, and case examples from an ongoing pilot study.

### FIELD TESTING A BEHAVIORAL MEASURE OF EXCESS DISABILITY THROUGH AN UNDERGRADUATE TRAINING PROGRAM

C. Catlin, J. Fisher, C. Drossel, C. Rummel, C. Garrison-Diehn, *Psychology, University of Nevada Reno, Reno, Nevada*

This paper will describe a dementia care training program administered with an undergraduate geropsychology field experience course. The program is designed to promote the detection of excess disability in older adults with dementia. Undergraduate students receive training in a restraint free model of dementia care and the monitoring of normal and abnormal behavior change in verbally impaired older adults with dementia. Students then participate in weekly home visits with socially isolated persons with dementia. Individualized behavioral monitoring data are collected to assess any unexpected change in behaviors that have been historically frequent and stable (e.g., story-telling, smiling, or making eye contact). Preliminary data indicate that even subtle changes in adaptive behaviors often signal an acute medical, psychological, or environmental problem. Problem behaviors tend to emerge shortly after the change in adaptive behavior. The results of this study indicate that early detection of excess disability can significantly improve client care and outcomes.

### DISCOMFORT BEHAVIORS BETWEEN BLACK AND WHITE NURSING HOME RESIDENTS WITH CANCER AND DEMENTIA

T. Monroe, M. Carter, *Nursing, The University of Tennessee Health Science Center, Memphis, Tennessee*

Aims: The aim of this study was to determine if discomfort related pain behaviors were different between Black and White nursing home residents with dementia who died from cancer. Residents with dementia are often poorly able to report their pain levels and nursing stuff rely on pain behaviors for assessing pain and pain treatment. Methods: Decedent records from 2003-2009 were assessed for cause of death as cancer and diagnosis of dementia. Fifty-five decedents from 10 nursing homes in west Tennessee were included in the final sample. Three instruments were used: the Minimum Data Set (MDS), Cognitive Performance Scale (CPS), and Discomfort Behavior Scale (DBS). The study received exempt status from the office of human protection. Results: Mean DBS scores were significantly higher (p =.009; 95% CI 1.934 - 12.614) among Black nursing home decedents with cancer and dementia. Conclusions: We demonstrated that discomfort related pain behaviors among Black nursing home residents with dementia who died from cancer may be significantly higher than White residents. This study suggests that Black nursing home residents with dementia who die from cancer may be at increased risk for under treatment of pain.

### INDIVIDUALS WITH EARLY ONSET DEMENTIA AND THEIR CAREGIVERS: PROGRAM ACCEPTABILITY AND FEASIBILITY

S. Orsulic-Jeras, H. Menne, C.J. Whitlatch, S. Schwartz, J. Johnson, *Benjamin Rose Institute, Cleveland, Ohio*

In the United States there are approximately 500,000 individuals under the age of 65 who are living with dementia or Alzheimer's disease (Alzheimer's Association, 2009). These individuals and their families often report difficulty in getting a diagnosis, receiving appropriate medical care, and facing many barriers when trying to access services. This poster will describe the implementation of an intervention previously developed and tested with individuals with early to moderate stage dementia with typical onset (over the age of 65) and discuss the acceptability of this intervention by individuals with early onset dementia and their family caregivers. The goals of the Early Diagnosis Dyadic Intervention (EDDI) are to: -Help care partners develop positive communication patterns -Increase the care partners' knowledge and understanding of available services, care values, and preferences for care -Increase the individual with dementia's active participation in his/her care plan -Improve care partners' well being and sense of self-efficacy in managing disease related issues We will discuss the acceptability of the EDDI intervention for those diagnosed with early onset dementia. Important issues that arise when working with individuals with early onset dementia and their families include: 1) assessing each person's readiness to accept their diagnosis and/or the challenges they face; 2); tailoring the intervention to fit the dyad's current stage of acceptance; and 3) applying what is learned to their current challenges.

### HEALTH BEHAVIORS AMONG OLDER ADULTS WITH MILD COGNITIVE IMPAIRMENT

A. Gentry, G. Morgan, J.H. Lingler, *School of Nursing, University of Pittsburgh, Pittsburgh, Pennsylvania*

Background: Although no specific interventions have been show to prevent progression from Mild Cognitive Impairment (MCI) to dementia, anecdotal evidence suggests that clinicians may make various recommendations to affected individuals at the time of diagnosis. The purpose of this investigation was to characterize the range of health-related activities adopted by persons with MCI following diagnostic disclosure. Method: Sixty MCI participants were recruited from a memory disorders clinic and completed a one-time interview. Participants were asked about their intention to adhere to clinical recommendations and to report if they planned to adopt any further health-related activities as a direct result of their MCI diagnosis. Results: Clinical recommendations included returning for yearly follow-up cognitive testing (96.7%) and pharmacologic (73.3%) and nonpharmacologic (20.0%) treatments. Patients invariably reported a high degree of intention for adherence. Most patients (61.7%) also reported planning to adopt health-related activities that exceeded clinical recommendations. These included behaviors to minimize the impact of symptoms (e.g., cognitive stimulation or cueing and reminder systems) (55.0%), health promotion activities (e.g., physical activity and nutritional adjustments) (20.0%), and increasing general activity (e.g., socialization) (16.7%). Participants who were more likely to report adopting health behaviors that went beyond clinical recommendations were college educated (p<0.05), and had greater perceived control over their memory problems (p<0.001). Conclusion: Many MCI patients report intention to adopt protective behaviors in response to their clinical diagnosis in lieu of known therapies.

## ALTERNATING WORD FLUENCY IN DEMENTIA

S. Engel, R. Rupprecht, R. Mahlberg, *Institute of Psychogerontology, Friedrich-Alexander-University of Erlangen-Nuremberg, Erlangen, Germany*

There is broad evidence that already in the earliest stages of dementia the access to semantic knowledge, measured by tasks of semantic fluency is affected as well as the performance in set-shifting-tasks, e.g. on the Trail Making Test Part. We suppose that a combination of the switching task paradigm with semantic fluency could discriminate between persons with mild dementia and cognitively healthy persons more accurate than either task alone. The combination of set-shifting and categorical verbal fluency is called «alternating word fluency» (AWF). It requires the subject to recall words from two (or more) semantic categories strictly alternating in a given time (usually 60 seconds). N=138 (58.7% female; age; M=73.9; SD=7.03) patients of the Erlangen memory clinic were included in the study and diagnosed according to ICD-10 criteria to one of the following groups: subjective memory complainers (SMC; N=60 (43.5%); MMST: M=29.5; SD=.72); mild cognitive impairment (MCI; N=37 (26.8%); MMST: M=27.9; SD=1.13) and people with dementia, mostly SDAT (PWD; N=41 (29.7%); MMST: M=25.0; SD=2.92). The AWF-Score (number of correct switchings) correlates significantly with the MMSE-total score (r=.54, p<.001) as well as with MMSE subscores Orientation (r=.41, p<.001) and Recall (r=.53, p<.001). Furthermore an analysis of variance (ANOVA) revealed a significant main effect of diagnosis (F2;135=46.7; p<.001). Thus members of the three different diagnosis groups scored differently in the AFW-Test (SMC: M=16.5; SD=3.72; MCI: M=12.5; SD=4.00; PWD: M= 8.2; SD = 5.01). Ordinal logistic regression analysis confirmed the potential of the AWF-Test for early diagnosis of beginning dementia.

## THE EFFECT OF DEMENTIA EDUCATION PROGRAM ON NURSE AIDES IN KOREAN NURSING HOMES

E. Kong[1], Y. Seo[2], *1. Kyungwon University, Seungnam, Republic of Korea, 2. Seoul Junggye Senior Care Center, Seoul, Republic of Korea*

Korea faces the problems related to rapidly increasing dementia population, increasing demands of nursing homes, and low quality of service of nurse aides. However, there is no published study regarding the effects of dementia education program on nurse aides caring for older adults with dementia in Korean nursing homes. The aim of this study was to evaluate the effects of dementia education program on nurse aides caring for older adults with dementia in Korean nursing homes with regard to dementia knowledge, dementia care, work satisfaction, and work stress. A total of 24 nurse aides participated in dementia education program and were evaluated at four points in time: before the program, immediately after the program, 1 month after the program, and 3 months after the program. Nonparametric test statistics were used to test the effects of the education program. Significant changes of dementia care were found($\chi2$ = 13.37, p = 0.004). Although the program improved dementia knowledge, no significant change of dementia knowledge was found($\chi2$ = 5.036, p = 0.169). There were no significant changes in work stress($\chi2$ = 6.618, p = 0.085) and work satisfaction($\chi2$ = 0.090, p = 0.993). Results indicated that dementia education program had statistically significant effects on nurse aide's dementia care. As the first study to test the effects of dementia education program on nurse aides in Korean nursing homes, the results of this study will contribute to improving education for nurse aides in nursing homes.

## THE CHALLENGES OF KOREAN IMMIGRANT DEMENTIA CAREGIVERS' PARTICIPATION IN RESEARCH

E. Kong, *Kyungwon University, Seungnam, Republic of Korea*

There is a dearth of research on Korean immigrant caregivers of elders with dementia in American nursing home due to the difficulties of recruitment of Korean immigrant dementia caregivers. There has been, however, no published study which explored the challenges of Korean immigrant dementia caregivers related to participation in research. The purpose of the study was to describe Korean immigrant dementia family caregivers' experiences related to the participation in research. A purposive sampling method was used to recruit informants. Ten Korean immigrant dementia caregivers participated in in-depth interviews. Symbolic interactionism and cultural models were used as theoretical frameworks. Using Atlas-ti program, qualitative content analysis was used for data analysis. Seven themes emerged: busy life, family matter, multiple roles, face saving, cultural stigma, limited interaction, and lack of experience. This study provides increased understanding of the experience of Korean immigrant dementia caregivers related to the participation in research as informants. This study adds to the knowledge of recruitment and retention of Korean immigrant family caregivers of elders with dementia.

## AN OUNCE OF PREVENTION: ALZHEIMER'S DISEASE AND STRATEGIES FOR COGNITIVE HEALTH

L.G. Hodgson[1], S. Cutler[2], *1. Sociology, Quinnipiac University, Hamden, Connecticut, 2. University of Vermont, Burlington, Vermont*

Increasingly, Alzheimer's disease (AD) is seen as a public health issue. Although acknowledging that much remains unknown about the efficacy of measures to promote cognitive health, governmental and private organizations have been seeking to raise public awareness about the types of "healthy body/healthy mind" activities that may help to preserve cognitive functioning into old age and forestall dementia. Using data from a larger study on middle-aged persons' concerns about developing AD, this paper focuses on a descriptive analysis of the types of and reasons for prevention strategies employed by the sample. In 2000, Cutler and Hodgson conducted a baseline study of 258 middle-aged men and women on their personal concerns about developing Alzheimer's disease (AD). In 2005, 2nd wave follow-up data were collected from 80% of the original sample (N=206). Of those Wave 2 respondents who reported a concern about memory functioning, 57% reported that they had employed at least one strategy aimed at promoting cognitive health, with "exercise" (83%) and "dietary supplements" (73%) as the most frequent strategies. In subsequent follow-up interviews with a sub-sample of the respondents, the rationale for undertaking prevention measures was explored in depth. Grounded theory was employed to discern patterns and themes within the data. Major themes include the primacy of the media as a public health promotion tool and a growing acceptance of the connection between physical and mental well-being. Understanding how people are receiving and acting on the message of cognitive health promotion will help to guide efforts in the future.

## THE REPEATED APPEAL TO RETURN HOME IN OLDER ADULTS WITH DEMENTIA: DEVELOPING A MODEL FOR PRACTICE

S. Fukui[1], H. Nelson-Becker[1], S. Okada[2], Y. Nishimoto[3], *1. Department of Social Welfare, University of Kansas, Lawrence, Kansas, 2. Osaka City University, Osaka, Japan, 3. The Oyamada Nursing Home, Yokaichi Mie, Japan*

Dementia care has been trapped in a "trial and error" type of practice due to difficulty understanding the needs of older adults with severe dementia. Behavioral and Psychological Signs and Symptoms of Dementia (BPSD) can be quite difficult for residential staff. However, some experienced care workers succeed in establishing effective relationships. The goal of this study was to: 1) develop a process to identify needs behind BPSD; 2) find solutions using a team approach; and 3) apply the results to educate new workers. The K-J method was employed to reach decision-making about best practices in residential dementia care. This qualitative method is used to organize group data collected in the field and is based in understanding complex situations. A group process of 12 Japanese care workers experienced in understanding and responding to the "repeated appeal to return home" of residents in nursing care facilities is highlighted along with an illustrative case example. The workgroup met over two years. The study revealed five steps in understanding the needs behind the appeal, which include: (1) listen to the voice and go with the flow of the behavior; (2) learn about the inner experience; (3) learn about the contextual environment of "here and now" situations; (4) reflect on the care environment; and (5) find the keyword. This needs identification process has application to other cultural contexts. The implications of this study for practitioners who work with people with dementia in residential settings will be discussed.

## SESSION 305 (PAPER)

## END-OF-LIFE DECISION MAKING

### INTER-DISCIPLINARY TEAM'S ROLE IN END-OF-LIFE CARE FOR INDIVIDUALS WITH DEMENTIA

C.E. McCarty, D.J. Dobbs, V. Molinari, *School of Aging Studies, University of South Florida, Tampa, Florida*

Within Skilled Nursing facilities, End-of-Life (EOL) care for individuals with dementia is provided in three settings: Hospice care, Dementia Special Care (as expressed in Dementia Special Care Units) and traditional care. Both hospice and Dementia Special Care Units (DSCU) are models of care with improved outcomes. A strong Inter-Disciplinary Team (IDT) with unique disciplinary input are key to both models. Both include the patient and family as the central focus. Members of the IDT make the determination of which care level and plan is most appropriate for the needs of the patient. Family overall satisfaction in hospice care has been shown to rely on the impact of the IDT. Regular and accurate communication about the patient's medical condition, provision of adequate emotional support, and the identification of one nurse as being in charge of their loved one were linked to family satisfaction. Using Structure-Process-Outcome theory, this study analyzed the structure and process factors of hospice and DSCU versus traditional care to determine their association with better EOL care scores. Hierarchical regressions with Comfort at Death and Satisfaction with Care showed the process variables of hospice, DSCU enrollment and IDT offered significant contribution to the variance in outcome. Interactions of enrollment in hospice and Strength of IDT showed significance supporting the hypothesis that IDT is a moderator of the predictive value of hospice enrollment on both Satisfaction with Care and Comfort at Death. Interactions of enrollment in DSCU and Strength of IDT showed significance with IDT also being the moderator.

### EFFECT OF TRUST IN PHYSICIANS AND CAREGIVER BURDEN ON END-OF-LIFE TREATMENT DECISIONS MADE BY AFRICAN AMERICAN DEMENTIA CAREGIVERS

G. Bonner, Y.J. Watkins, E. Wang, D.J. Wilkie, C. Ferrans, B. Dancy, *Biobehavioral Health Science, University of Illinois at Chicago, Chicago, Illinois*

Trust in physicians and caregiver burden are important concepts, but it is unknown if they influence end-of-life treatment decisions made by African American (AA) surrogates. Purpose: A pilot study was conducted to explore associations among trust in physician, caregiver burden and demographic characteristics on cardiopulmonary resuscitation (CPR), mechanical ventilation (MV) and tube feeding (TF) treatment decisions made by AA dementia caregivers. Methods: In a cross-sectional design, a battery of standard measures was administered in group sessions to a convenience sample of 68 AA dementia caregivers. Univariate and multivariate analyses were used to explore associations among the variables. Results: Caregivers reported relatively high trust (150±24, range 38-190) and moderate burden (31±8, range 12-60) scores. Male caregivers reported lower trust (144±27 vs. 151±23, respectively) and burden (29±7 vs. 31±9, respectively) scores than female caregivers. Caregivers with lower income (>$25,000) also reported lower trust (142±28 vs. 152±23, respectively) and higher burden scores (33±9 vs. 30±9, respectively). College graduates exhibited the lowest trust (139±25) and highest burden (38±9) scores. Shorter length of caregiving and severe disability of care receiver also resulted in higher reported burden scores. Although caregivers with higher burden and lower trust scores were more likely to make a decision to use CPR, MV, and TF for their care receivers, the differences were not significant in either univariate or multivariate analyses. Conclusions: Although not statistically significant, trends indicate that trust in physicians and caregiver burden are important factors to consider when planning interventions for AA dementia caregivers.

### TESTING A STRUCTURED PALLIATIVE CARE INTERVENTION IN THE NURSING HOME

J.P. Reinhardt, E. Chichin, L. Posner, *Research Department, Jewish Home Lifecare, New York, New York*

End-stage dementia is characterized by progressive cognitive and physical decline compounded by co-morbidities and increasing frequency of acute events. Patients' families need to make treatment decisions regarding interventions (artificial nutrition, hospitalization), often without adequate knowledge/support. Medical technologies may be used with patients with advanced dementia, yet much literature recommends avoiding them due to limited benefit and significant discomfort for patients. Families need education about potential benefits and burdens of interventions to make informed decisions. This paper presents results of an exploratory, randomized trial of a structured palliative care intervention versus a usual care control with social contact (50 per group) for nursing home residents with advanced dementia and their health care proxies (HCP). The intervention included an initial one hour meeting of the HCP and palliative care team (review care goals; work to achieve goals), followed by regular telephone contact with the HCP and resident visits. Telephone interviews are conducted with HCPs at baseline, 3 and 6 months later. Data from the 3-month follow-up are presented. Average age was 84 for residents (78% female) and 57 for HCPs (89% female). Residents were ethnically diverse with 45% African American, 33% Hispanic, and 22% Caucasian. HCPs were children (64%), other relatives (19%), spouses (11%), and friends (6%). Preliminary results showed that HCPs in the structured palliative care intervention group reported better outcomes for their elder relatives (e.g., better symptom management) and better outcomes for themselves (e.g., less perceived stress) compared to the usual care control group. Practice applications are discussed.

### THE RELUCTANCE TO BURDEN OTHERS AS A FACTOR IN END-OF-LIFE DECISION MAKING: DIFFERENCES BETWEEN ELDERS AND THEIR PROXIES

L. Winter, S.M. Parks, *Thomas Jefferson University, Philadelphia, Pennsylvania*

Most US patients are decisionally incapacited at the end of their lives, leaving final treatment decisions to proxies, usually family members. Unfortunately, proxies' subsituted judgment about elders' treatment preferences is often inaccurate. We explored reluctance to burden others (RB) as a factor in decision making about end-of-life (EOL)treatments among elders and their proxy decision makers and also examined RB as a possible source of proxy inaccuracy in substitued judgment EOL care preferences. Two hundred two elderly men and women responded to 3 questions about burdening others (emotional and financial burden and desire to be independent) and the Life-prolonging Treatment Preferences Questionnaire, and their designated proxies responded to the same questions using substituted judgment. Although RB predicted treatment preferences for both elders and proxies, it was significantly higher among elders than proxies, and RB differences between elder-proxy dyads were associated with elder-proxy discordance in EOL treatment preferences.

### SELF-PERCEIVED BURDEN: ITS ANTECEDENTS AND ASSOCIATION WITH ADVANCE CARE PLANNING

J. Hash-Converse, S. Bodnar-Deren, E.L. Idler, E.A. Leventhal, H. Leventhal, *Institute for Health, Health Care Policy, and Aging Research. Center for the Study of Health Beliefs and Behaviors, Rutgers, The State University of NJ, New Brunswick, New Jersey*

The extent to which a care recipient believes they are a burden may negatively affect treatment adherence, the use of end-of-life (EOL) medical interventions, and EOL decision-making. Since the co-occurrence of chronic conditions (Chronic Illness with Complexity, CIC) is increasingly prevalent (~65% of those +65 years) and problematic in the elderly, we postulate that CIC will relate to self-perceived burden (SPB) and the likelihood of making EOL plans. Using logistic regression, we found that for every increase in number of comorbidities, the odds of SPB increases by 50% (controlling for race), and self-perceived burden increases odds of engaging in advance care planning (ACP) for health. Further, the number of comorbidities explains 9.6% of variance in SPB. Understanding how CIC relates to burden may be the gateway by which physicians can initiate meaningful EOL conversations.

# SESSION 310 (PAPER)

## GERIATRIC AND GERONTOLOGICAL TRAINING

### EXAMINING A NEW GENERATION OF GERONTOLOGISTS: AN ANALYSIS OF GERONTOLOGY DOCTORAL STUDENTS

D.C. Carr[1], H. Ewen[2], *1. Scripps Gerontology Center, Oxford, Ohio, 2. Miami University, Department of Sociology and Gerontology, Oxford, Ohio*

Until recently, individuals who study aging have been trained in traditional disciplines. Over the last two decades, a growing number of interdisciplinary doctoral programs in gerontology have emerged, and are producing a new interdisciplinary scholar. At a time when aging research is gaining broader attention, it seems timely for the field of gerontology to examine the unique characteristics of this generation of “gerontologists.” In this presentation, we report results from four cohorts of doctoral students from all gerontology doctoral granting institutions in the United States who have participated in the Gerontology Education Longitudinal Survey (GELS). Specifically, we examine the educational and demographic characteristics of doctoral students, the training they are receiving, their career aspirations, and the types of scholarship they are producing. Analysis of these data reveals three dominant types of doctoral students who are studying gerontology: The first type includes individuals with social science and gerontology backgrounds seeking academic or research careers in gerontology ; The second type are those who have experience working with older adults in practical or applied settings with goals of securing employment in government or the private sector; The third type includes individuals with educational backgrounds in traditional disciplines and who plan to return to traditional disciplines upon completion of their education. We discuss these three types of gerontological scholars and implications for how these characteristics reveal ways that interdisciplinary training is shaping the purpose and scope of the field of gerontology.

### PARTNERING IN LONG-TERM CARE (LTC): A DEDICATED LEARNING UNIT FOR THE BSN STUDENT

K.F. Mullenbach, V. Burggraf, *Nursing, Radford University, Radford, Virginia*

This session will discuss the development of a partnership with academia and LTC in the development of Dedicated Learning Units (DLU). Such units have been popular in schools of nursing with students in their medical surgical clinical rotations, however none have been attempted in the US within the LTC environment. The purpose of the DLU is to provide an in-depth student immersion through a long-term care clinical experience with clinically adept/skilled gerontological nurse RN preceptors. The authors wll discuss their efforts in working with facilities to hire RNs, creation of site coordinators (graduate students), and the research initiatives to not only enhance clinical skills and improve resident quality of life but also provide the results of student pre and post test surveys. The unanticipated benefits for the univeristy, student and facility has led to an ‘adopt a student summer internship’ as well as future parterships in grants and programs. The DLU has created a positive environmnet in care of older adults for sstudetn nurses. The DLU and its positive results has the potential to ensure that the LTC workforce will be RNs in the future.

### EXTENDING OUR REACH: EFFECTIVE DISSEMINATION OF A GERIATRIC NURSING CLINICAL SIMULATION EDUCATION PROGRAM

V. Kowlowitz, K.R. Alden, C. Davenport, C. Durham, G.O. Mazzocco, M.H. Palmer, *School of Nursing, UNC at Chapel Hill, Chapel Hill, North Carolina*

Introduction: Successful dissemination of geriatric education programs will help meet the geriatric educational needs of nurses. Aim: To determine whether the Train the Trainer Model effectively disseminated a successful educational program to other sites. Methods: A continuing education (CE) offering that used clinical simulations, including human patient simulators (HPSs), to increase registered nurses’ (RNs) geriatric knowledge and skills was implemented at the UNC School of Nursing (SON) from 2004-2006. During 2006-2008, nurse educators at four North Carolina Area Health Education Centers (AHECs) received training to implement this workshop. The Train the Trainer Model included: how to use clinical simulations to teach nurses geriatric knowledge and skills; modifying case simulations; and accessing resource materials and simulation guides on an electronic course management system. Results: 172 nurses attended SON workshops and 176 attended AHEC workshops. Thirty-four counties were represented at the SON workshops and 33 at the AHEC workshops, with only seven counties represented at both. Mean age, ethnicity, and participants’ gender were comparable at SON and AHEC workshops. Although the pre-test and post-test scores on knowledge were significantly lower for participants at SON workshops (pretest: SON 60% versus AHEC 77%, $p = .00$; post-test: SON 75% versus AHEC 89%, $p = .00$), both groups showed significant improvement ($p = .00$) and the improvement between the groups was not significantly different. Participants rated their experience with clinical simulations very positively, with no differences among teaching sites. Conclusion: The train the trainer model successfully disseminated a geriatric nursing CE program for practicing RNs.

### PERCEIVED NEED FOR GERIATRIC TRAINING: DIFFERENCES IN TARGETED AUDIENCES

P. Sawyer[1], C. Ford[1], C. Ritchie[2,1], E. Kvale[2,1], P. Bosworth[1], A.G. Rothrock[1], *1. University of Alabama at Birmingham, Birmingham, Alabama, 2. Birmingham/Atlanta VA GRECC, Birmingham, Alabama*

To better plan for geriatric training, the UAB Geriatric Education Center developed and administered a needs assessment to three groups: members and affiliates of the Alabama Gerontological Society (AGS);

community physicians (CP); and nurses and social workers of the Alabama Department of Public Health (ADPH). Simple frequencies and t-tests for comparison of means from different samples were used to analyze results. There were 85 AGS respondents representing 14 disciplines; 25% of respondents were social workers. The ADPH respondents (N=202) included 61% social workers and 34% nurses. Thirty-three CP responded. Across all groups, topics most frequently selected for future geriatric training included depression/anxiety (65%); dementia/Alzheimer's disease (61%), falls/balance/mobility disorders (60%), diet and nutrition (57%), mild cognitive impairment (MCI) (47%). Highly ranked training needs were also identified for specific medical conditions including Arthritis/rheumotological disorders (49%) and diabetes (45%). There were significant differences between the three groups for perceived need. For example, the AGS (35%) did not rank falls/balance/mobility as highly as CP (73%) or ADPH (72%) (p<.001). MCI was a particular concern for the CP (64% vs. 38% and 39%; p=.012) as was pain management (61% vs. 33% and 14%; p<.001). Other topics with significant differences in interest by group included specific diseases, geriatric syndromes, psychological assessment and determining competency, end-of-life and ethical issues, physical fitness, substance abuse and polypharmacy, and community resources. Although there are common areas of perceived need for geriatric training, both professional setting and discipline-specific characteristics should be considered in the development of educational modules.

## SESSION 315 (SYMPOSIUM)

### HEALTHY AGING: WHAT CAN/DOES SCIENCE TELL US? WHAT (OR HOW) DOES THE PUBLIC WANT TO KNOW?

Chair: *G.H. DeFriese, Sheps Center for Health Services Research, University of North Carolina, Chapel Hill, North Carolina*
Discussant: *H.R. Moody, AARP, Washington, District of Columbia*

This symposium will address the challenge of amalgamating and translating the knowledge gained from scientific and applied research from multiple disciplines that can facilitate positive health improvement and the experience of healthy aging. Attendees at this symposium will (1) be able to describe some of the major research issues and themes being addressed in both the biology of aging and clinical geriatrics; and attendees will (2) better understand some of the anticipated issues involved in translating the extant science of aging and an understanding of the limits of contemporary knowledge in this field as part of an agenda for informing the public about these issues as AARP and AFAR jointly launch a new national communication initiative in this arena.

### WHAT ARE THE NEW DIRECTIONS AND CHALLENGES IN CLINICAL GERIATRICS?

W. Hall*, Medicine, University of Rochester, Rochester, New York*

This presentation will illustrate some of the most exciting new directions for clinical research in the field of aging and the potential for multidisciplinary approaches to common problems in this field. The presentation will also reflect upon the issues associated with efforts to translate basic science on the biology of aging for clinical application, as well as how lessons learned in clinical geriatrics can have influence in the way in which related basic research is conceptualized and carried out.

### WHAT DOES CURRENT SCIENCE IN THE BIOLOGY OF AGING TELL US ?

R. McCarter*, Penn State University, State College, Pennsylvania*

This presentation will summarize some of the most important issues and themes currently being addressed in the biology of aging, along with a description of the complexity of research programs related to several of the major strands of investigation in certain areas.

### LESSONS LEARNED ABOUT TRANSLATING RESULTS OF SCIENCE AND CLINICAL MEDICINE FOR PUBLIC DISSEMINATION AND USE

T. Prohaska*, Center for Research on Health and Aging, University of Illinois Chicago, Chicago, Illinois*

This presentation will offer a discussion informed by the social and behavioral science of public health of the important considerations in any attempt to effectively disseminate information of practical utility to the general public. The presentation will address required elements of the message critical to successful communication of advances in clinical, social behavioral health to the public. It will also provide strategies for successful translation and dissemination of advances in social and behavioral science into community based programs for improving the health of older adults.

## SESSION 320 (PAPER)

## HELP FOR CAREGIVERS

### HOW DID I SURVIVE A LONG-TIME FAMILY CAREGIVING CAREER? HANDLING CARE-RECIPIENT RESISTANCE

Y. Shirai, S.S. Koerner*, The University of Arizona, Tucson, Arizona*

In response to the well-documented negative impact of care-recipient problem behaviors on family caregivers (CGs), healthcare professionals have developed community CG support programs to help CGs manage and cope. However, regardless of whether CGs have participated in support programs, we are not certain about how individual CGs choose and/or develop their own survival strategies over a long-time caregiving career. By conducting semi-structured interviews with nineteen family caregivers reflecting on their long-time (mean, 9.4 years) caregiving experiences, this qualitative study documents CG experiences with an emphasis on a specific care-recipient behavior, care-recipient resistance during care provision (CR-resistance). The interviews captured individual CGs' (a) experiences of CR-resistance, (b) strategies for dealing with the CR-resistance, (c) strategies for coping with the emotional impact of CR-resistance, and (d) circumstances/background factors associated with their choices of survival strategies. Many of the participants (n=6) reported that they have attended a CG support group; the majority of those CGs viewed the support group as beneficial. However, our qualitative thematic analyses revealed that, over and beyond the professional support, certain circumstances/strategies seem to have a strong influence on CG resilience and survival in the face of long-time, persistent daily challenges such as CR-resistance: (1) CG attitude toward to the caregiving based on personal/family history (e.g., respect for care-recipient dignity); (2) CG's former work/personal experiences/skills that are applicable to the current caregiving situation; and (3) current social network and activities outside of caregiving. Implications for enhancing family CG support and professional CG training will be discussed.

### THE LEARNING NEEDS OF FAMILY CAREGIVERS WITH STROKE SURVIVORS DURING THE FIRST YEAR IN TAIWAN

C. Wu[1], L. Skemp[2]*, 1. Nursing, Meiho Institute of Technology, Kaohsiung County, Taiwan, 2. The Universtiy of Iowa, Iowa city, Iowa*

Family members' caregiving knowledge positively increases home care quality; however, the outcomes of educational interventions to increase caregiving knowledge, were inconsistently. This inconsistency may be because the educational content is often derived from health providers' views rather than from caregivers' views of their learning needs. The purpose of this descriptive qualitative study was to describe the learning needs of Taiwanese family caregivers who were caring for a family member who had experienced a severely debilitating stroke. Method: Seventeen family caregivers and 11 foreign care attendants who were caring for 16 stroke survivors were recruited from three hospitals in Southern Taiwan. Data collection included three formal interviews and one care activity observation. Findings: Family caregivers described learning needs presented before discharge, the first month after discharge, and when facing new care situations. Before discharge family caregivers focused on basic and immediately visible physical care problems. After discharge, they needed to learn how to deal with 15 caregiving challenges that arouse during the first month at home and when they faced new care situations. The most common challenges were diet, elimination and transportation. Caregivers also identified the need to manage their personal impact of being a caregiver and to deal with foreign care attendants' communication barriers and caregiving skills. All family caregivers were unprepared for the new care situations because of problematic discharge preparation and fragmented health care services after discharge. Recommendations: An organized and systemic discharge planning protocol and increasing in-home nursing, context specific caregiver education and rehabilitation services was recommended.

### MEMORY BANKING: A TOOL FOR CAREGIVING, QUALITY OF LIFE, AND LEGACY

A.F. Hosier[1], J.F. Watkins[2], F. Zanjani[2], *1. Family Studies, University of Kentucky, Lexington, Kentucky, 2. University of Kentucky-Graduate Center for Gerontology, Lexington, Kentucky*

Memory Banking is a five week interactive life history program designed to enhance empathic communications between a caregiver and care recipient through documenting and tracking personal life stories and health histories. This pilot study includes 60 caregiver dyads (120 participants) comprising one caregiver (18+ years) and one care recipient (65+). The cognitive competence of care recipients ranges from no cognitive impairment to clinically-diagnosed early stage dementia. By working with a caregiver to "bank" one's life story, care recipients are better able to guide healthcare decisions, person-centered options, and legacy. For caregivers, Memory Banking improves caregiver knowledge, including a greater understanding of behavior, mental health, and overall quality of care. This presentation highlights the process of Memory Banking, including the lesson plans and structure. In addition, the findings from the first group of participants (N=40) will be examined. The pre and post quantitative assessment battery and qualitative interviews measured participant perceptions of mental healthiness, cognitive ability, perceived stress, perceived support and quality of life.

### THE EFFECT OF WRITTEN EMOTIONAL EXPRESSION ON REDUCING STRESS IN CANCER FAMILY CAREGIVERS

H.K. Butcher, H.C. Bursch, Y. Perkhounkova, *College fo Nursing, University of Iowa, Iowa City, Iowa*

The purpose of this randomized clinical trial was to evaluate the effect of structured written emotional expression (SWEE) in decreasing the emotional and physiological burdens in 20 family caregivers (Mean age=63) of persons with cancer that were randomly assigned to an experimental or comparison group who wrote for 20 minutes on 6 alternating days. Experimental group family caregivers (N=11) wrote about their deepest thoughts and feelings about caring for their family member while those in the comparison group (N=9) wrote about non-emotional topics. Saliva cortisol was measured 4 times a day for two days at pretest, on the 4th and 5th and again at the 30th and 31st days after the first day of writing. A linear mixed model was used to analyze the data on all outcomes, a repeated measurement factor (session=pretest, posttest 1, and posttest 2) was modeled as a fixed effect. The model for cortisol included an additional repeated measurement factor, modeled as a fixed effect (time of saliva collection=awakening, 30 minutes after awaking, 4PM and bedtime). For Pennebaker Inventory of Limbic Languidness, a measure of physical symptoms of stress, treatment by session interaction was statistically significant (p=0.0193) and the difference between pre-test and second post-test was statistically significant for the SWEE group (p=0.0287), showing the decrease in average scores. Results for other outcome measures including saliva cortisol, caregiver burden (Caregiver Reaction Assessment Scale and Brief Assessment Scale for Caregivers showed trends in the hypothesized direction. Depression (CES-D), and Finding Meaning Through Caregiving Scale were not significant.

## SESSION 325 (POSTER)

## INTERVENTION TRIALS AND PROGRAMS

### UTILIZING CAREGIVER APPRAISALS IN THE DEVELOPMENT OF ADAPTIVE INTERVENTIONS

M. Barrineau[1], J. Lee[1], S.H. Zarit[1], E. Femia[1], C.J. Whitlatch[2], *1. Penn State University, University Park, Pennsylvania, 2. Benjamin Rose Margaret Blenkner Research Institute, Cleveland, Ohio*

Background: Assessments of family caregivers are widely used to identify stressors and aid in development of treatment plans. Caregivers' reactions to the assessment may effect subsequent engagement in treatment, but have never been systematically investigated. Methods: As part of an adaptive intervention, 32 family caregivers of people with dementia completed a comprehensive assessment including daily care challenges, degree of support and secondary stressors. Using an algorithm from pilot work, the research team constructed 7 stress scores and individualized recommendations for treatment components and dosage. Caregivers were asked the extent to which they agreed or disagreed with each score and treatment recommendation. After completion of treatment, caregivers evaluated the components and amount of treatment they received. Results: Caregivers showed high levels of agreement with the assessment results, reporting that 86% of stress scores were accurate, and agreeing with 97% of the recommended components of their treatment plan. Following completion of treatment, participants reported they were highly satisfied with the amount of each treatment component they received and rated components as helpful to them. Ratings of satisfaction were not related to number of sessions (dosage) that caregivers received ($r = .314$, $p > .05$). Conclusions: Results suggest that it may be possible to enhance a caregiver's engagement in an intervention program if s/he is encouraged to provide feedback and input about the recommended treatment options. The weak association between dosage and satisfaction suggests that getting the amount of treatment that participants believe they need is more important than how much treatment they receive.

### TREATMENT INTEGRITY OF AN ADAPTIVE INTERVENTION FOR CAREGIVERS USING MULTIPLE PERSPECTIVES

J. Lee[1], M. Barrineau[1], S.H. Zarit[1], E. Femia[1], C.J. Whitlatch[2], *1. Human Development and Family Studies, Penn State University, University Park, Pennsylvania, 2. Benjamin Rose Margaret Blenkner Research Institute, Cleveland, Ohio*

The Adaptive Caregiver Education and Support (ACES) intervention for family caregivers used an adaptive approach, assigning treatment modules and dosage depending on the initial risk profile of clients in three areas: behavior management, caregiver role strain and need for formal services. The present study investigates treatment integrity, specifically, were counselors able to implement the type and amount of treatment as planned and did they demonstrate competence in implementing treatment? Multiple perspectives (trained coders, counselors' ratings, caregivers' ratings) were used to assess treatment integrity. Codes were developed to rate interventions used in treatment sessions and the counselors' competence in implementing treatment. Four coders achieved satisfactory reliability (ICC=.84). Following each session counselors rated what treatments they implemented while caregivers (n=32) evaluated the sessions and their counselor's competence. Coders' ratings were correlated with counselors' ratings for the same sessions and were found to be highly related (r=.64). An ANOVA was performed to relate the amount of treatment actually given in each area across all sessions to the initial adaptive plan. Findings showed that counselors were able to differentiate in the treatment given to caregivers and implement the recommended amounts of each treatment. Finally, both coders and caregivers rated counselors high on competence, and the association between these ratings was high (r=.75). These findings demonstrate treatment fidelity of an adaptive intervention with caregivers. Type and amounts of treatment matched the individualized plans for caregivers and counselors were able to implement treatment in a highly competent manner.

## SMOKING CESSATION TREATMENT OUTCOMES AND MOTIVES FOR QUITTING DIFFER AMONG OLDER AND YOUNGER ADULTS

N. Sachs-Ericsson, N. Collins, M. Gerend, B. Schmidt, *Psychology, Florida State University, Tallahassee, Florida*

Background: Smokers seeking treatment may present with different motives for quitting depending on their age. Older adults tend to experience greater smoking-related health problems than younger adults, and thus, may be more motivated and successful in quitting. On the other hand, according to the "selection hypothesis of smoking," those younger adults who are successful in quitting may have lower rates of distress or health concerns. We examined differences in motivation to quit smoking and treatment outcomes by age and whether health concerns moderate the effect of age on treatment outcome. Method: We compared older and younger smokers enrolled in a 12 session cognitive-behavioral smoking cessation program (N=84) on the Reasons for Quitting (RFQ) Questionnaire at baseline and on smoking outcomes one month post treatment. Results: Motives for quitting smoking varied by age. Older smokers were motivated due to health and practical concerns, whereas younger smokers were motivated due to desire for self-control. Treatment outcomes also differed by age. Older smokers had better treatment outcomes despite heavier smoking at baseline. Importantly, treatment efficacy among older and younger smokers was modified by health concerns. Among participants who reported high levels of health concerns at baseline, increasing age was associated with lower levels of smoking urges or craving. Conclusions: Health concerns may motivate some subgroups of smokers to quit more so than others. Among those with health concerns, older smokers may respond more favorably to smoking cessation interventions than younger smokers. Smoking cessation programs should be tailored to smokers' motivations for quitting.

## COMPARING DIFFERENT MEMORY TRAINING MODELS: THE EAST AND WEST PERSPECTIVES

T. Kuo, A. Lai, S. Daly, W. Liu, *Central Taiwan University of Science and Technology, Taichung, Taiwan*

The purpose of this paper was to compare different memory training models around the world. In the past 10 years, many memory training programs have been developed, and the effects on maintaining mind alertness or slowing memory decline were evident. In recent years, memory training has become popular in Asia because the population is aging rapidly, and the awareness of keeping the brain working remains one of the top priorities among the elderly. The methodology of this paper was to search for different models in memory training. A total of 12 models from "East and West" perspectives was found. The rationales behind each of the 12 training models were compared based on how the training affected six areas: attention, language, logical process, demand execution, time orientation and recall. The results from comparing 12 different models showed that those from the Western perspective focused more on linguistic training and overall balance of wellness (e.g. nutrition, exercise and brain aerobics), while those from Asia employed more geometric symbols, numeric and herbal remedies. The reasons why such differences occurred could be due to literacy and culture, making the comparisons intriguing, and generating implications for future practice and research. This paper concludes by discussing practice implications where the 12 models could be used or disseminated when applying to multi-cultural audiences from different communities or countries.

## CONCEPT AND EVALUATION PROCEDURE OF AN INNOVATIVE COUNSELLING PROGRAM FOR VISUALLY IMPAIRED ELDERS

I. Himmelsbach[1], F. Oswald[1], F. Esch[2], S. Driebold[1], K. Metzler[2], *1. Working Group Interdisciplinary Ageing Research, Goethe University Frankfurt, Frankfurt, Germany, 2. Foundation for the Blind and Visually Impaired, Frankfurt, Germany*

Due to increased life expectancy the rate of visual impairment in later life will raise by 30% until 2030. Today about 30 million persons worldwide suffer from age related macular degeneration, the predominant cause of age-related visual impairment. However, their support in terms of interventions (including counselling) is still rather poor and unstructured. This presentation aims to introduce a new project which develops and evaluates an innovative counselling program for visually impaired elders. The program builds upon three main goals: (1) Understanding visual impairment in old age as a challenge for psychosocial counselling rather than a problem to be overcome by the use of technology; (2) Replacing existing segmented interventions by an integrative and comprehensive concept; (3) Combining the program with other programs for community dwelling elders in order to better serve the complex and changing individual needs as people age. To achieve these goals, a trained expert counselling and monitoring the client is the pivot point of the program. As part of the scientific monitoring, the evaluation covers a qualitative program development (month 1-18) in order to specify in detail the clients' needs and the outcomes (e.g. quality of life, psychological well-being and adaptation to vision loss), as well as a quantitative outcome evaluation (month 19-36) including a pre-post measurement design. Findings from a first set of 15 interviews are presented already reflecting the complex needs structure due to the parallelism of ageing and vision loss. Based on our findings, the counselling program is planned to be finally implemented in the healthcare system.

## AN EXAMINATION OF DOSE EFFECTS IN A CLINICAL INTERVENTION TRIAL FOR CAREGIVERS

S. Clancy Dollinger, K. Chwalisz, K. Hand, E. Hlaing, S.L. Parks, *Psychology, Southern Illinois University, Carbondale, Illinois*

The Southern Illinois Rural Caregiver Telehealth Intervention Trial (R01NR008280-01) was a multi-component telehealth intervention designed to specifically meet the needs of informal caregivers in a rural area. Participants were randomly assigned to either an 8-week treatment condition or helpline treatment condition. Physical/mental health and psychosocial functioning were obtained at baseline, post intervention and 6 month follow-up. The current study examined the nature of therapeutic change related to dosage for caregivers participating in the intervention. The relations between time spent on each intervention component (Managing Feelings, Knowledge, Problem Solving, and Social Support) and client outcome at 6 months based on change scores on the Social Provisions Scale, OQ45.2, Social Problem Solving Inventory Revised, SF-36 and the Perceived stress scale were examined in a high dosage group (≥ 350 minutes) vs. a low dosage group (≤ 50 minutes). Total therapy minutes accounted for 21.3% of the variance on the Perceived Stress Scale. Time spent on specific components was related to different outcome measures. Minutes spent on problem solving ability in the high dosage group was positively related to scores on the Rational Problem Solving scale of the Social Problem Solving Inventory – Revised. Scores based on the Nurturance subscale of the Social Provisions Scale were positively related to minutes spent on the Managing Feelings component of the intervention in the high dosage group. Dosage by condition was significant for the Guidance subscale of the Social Provisions Scale. The implications of dose effects for tailored caregiver interventions are considered.

### CLINICAL PRACTICE AND RESEARCH TRANSLATION: TRYING NEW THINGS AND LEARNING TO DANCE

T. Wharton[1], L. Burgio[2], G. Harris[3], B. Schmid[4,3], R.S. Allen[3], *1. School of Social Work, University of Alabama, Tuscaloosa, Alabama, 2. University of Michigan, Ann Arbor, Michigan, 3. University of Alabama - Dept of Psychology, Tuscaloosa, Alabama, 4. VA Medical Center, Tuscaloosa, Alabama*

Making the shift from research to practice is anything but straightforward. Even after solid partnerships are in place and intervention programs are underway, keeping clinical practice and research in sync can be a challenge. Clinical practice decision-making and research studies are not necessarily framed from the same perspective, and decisions made to meet the goals of one set of stakeholders can present unexpected outcomes to the other. Even when research team members come from clinical backgrounds, assumptions are sometimes made about how things will fit together, and when these assumptions are challenged, researchers are required to join their partners in a dance of learning to adapt our needs and expectations to the flexibilities of clinical reality. Strong partnerships, flexible expectations, and an open mind to new discoveries can make translational projects a rich and rewarding endeavor, even with the sometimes unexpected tango. This poster uses the example of translation from RCT studies to the Resources for Enhancing Alzheimer's Caregiver Health- Offering Useful Treatments (REACH-OUT) pilot projects to explore lessons learned at the intersections of research and practice.

### PROFILING USERS AND NON-USERS OF SENIOR SERVICES

E.E. MaloneBeach, R.A. Heuberger, *Human Development and Family Studies, Central Michigan University, Mount Pleasant, Michigan*

Even as the number of older adults has increased, Title III service use has decreased in recent years. The reasons for this trend are unclear. The purpose of this study was to examine four categories of influence on service use: demographic, physical well-being and health, psychological, and social well-being. Rural older adults aged 60 – 103 (N=1065) were interviewed to profile those who use services. Results indicate that service users (N = 177) were older, more infirm, living alone and less able to perform Activities of Daily Living (ADL) and other physical activities than people who had not yet begun to use services. The non-service user group (N = 888) was not attracted to the current array of services or did not consider service use since they were doing well. Alternately, the trend toward a decrease in service use may reflect a compression of morbidity; demand for services will again increase when boomers age past their disability-free years. The non-service user group, however, also included a subset of elders who were infirm, malnourished, less active, and unable to perform all of the ADLs. These individuals appeared to be "graduates" of services who had not successfully transitioned to appropriate inhome services as their impairments increased. Most of these would benefit from involvement in Title III programming and should be targeted for service provision that is adapted to meet their higher levels of need. The description of this subset of nonusers may be useful to service providers and policy planners.

## SESSION 330 (POSTER)

## MANAGING CHRONIC ILLNESS

### AN EXAMINATION OF DAILY STRESS AND COPING WITH ARTHRITIS AMONG BLACK AND WHITE WOMEN

C.A. Mingo[1], M. Lunsman[1], J.M. McIlvane[1], E. Brown[2], K.S. Birditt[3], *1. School of Aging Studies, University of South Florida, Tampa, Florida, 2. University of Connecticut, Storrs, Connecticut, 3. University of Michigan, Ann Arbor, Michigan*

This study took an in-depth view of race and SES differences in daily stress (e.g., interpersonal, home, health) and coping with arthritis (e.g., relaxation, spiritual). Participants were Black (N=21) and White (N=20) women aged 48-89 (mean = 68.7). Stress and coping were assessed using 10 daily telephone interviews. The most common stressors for both Blacks and Whites, as assessed by percent of study days reported, were interpersonal (Blacks-25% of days, Whites-17% of days), network (Blacks-15% of days, Whites-13% of days), home (Blacks-4% of days, Whites-10% of days), and health (Blacks-4% of days, Whites-6% of days). A series of 2X2 (race X education) ANOVA's for stress and coping revealed Black women were more likely to use relaxation, try to see the pain in a different light, express emotions, and seek spiritual comfort compared to White women. Women with higher education had more network stress and were less likely to seek emotional support. Two race x education interactions showed that White women with lower education experienced more home stress, F (1,37) = 4.11, p= .05, and more health stress, F (1, 37) = 3.77, p= .06, while Black women with lower education experienced less home and health stress, although the effect for health stress was marginally significant. Results indicate that studies of the chronic illness experience should go beyond examining only illness-related stressors and consider the broader context in which people live. While this is an exploratory analysis, examining stress and coping among Blacks and Whites in "real-time" is a major strength.

### ACTIVITY EXPENDITURE AND ACTIVITY SELF-REGULATION IN THE CONTEXT OF ARTHRITIS SEVERITY AND HEALTH

J. Son[1], M. Janke[2], J.J. Jones[1], *1. University of Illinois at Urbana-Champaign, Champaign, Illinois, 2. University of South Florida, Tampa, Florida*

Arthritis is one of the most prevalent chronic health conditions in mid to late life. Participation in leisure activities is one way adults with arthritis can maintain physical health and psychological well-being. Participants completed a questionnaire on-site at subsidized apartment complexes, independent living centers, and recreation facilities. Our sample included 178 adults with arthritis aged 51 to 95 (M = 75), predominantly female (84%), White (91%), with approximately 28% characterized as resource-poor. The questionnaire included: leisure activity expenditure using estimated metabolic equivalents (METs); activity self-regulation using Baltes, Baltes, Freund, and Lang's (1999) 24-item selective optimization with compensation scale, modified in reference to leisure activities; health measured using the AIMS, an arthritis-specific health scale including activities of daily living (ADLs), social activities, pain, and depression; and arthritis severity. We examined activity expenditure and activity self-regulation as mediators of arthritis severity and health as well as activity expenditure as a mediator of activity self-regulation and health. We controlled for age, gender, race and resources in the analyses. Variables in the final reduced model explained 41% of the variance in health, with activity expenditure partially explaining the relationship between self-regulation and health. Activity self-regulation was positively related to activity expenditure which, in turn, was associated with better health. However, self-regulation was also directly related to poorer health. We provide a discussion of the possible reasons for these countervailing effects, in light of the process of selective optimization with compensation and with implications for arthritis self-management.

### USE OF COMPLEMENTARY AND ALTERNATIVE MEDICINE FOR MUSCULOSKELETAL AND CONNECTIVE TISSUE PROBLEMS

S.B. Laditka, J.N. Laditka, E.M. Tait, M.M. Tsulukidze, *Public Health Sciences, University of North Carolina at Charlotte, Charlotte, North Carolina*

Half of U.S. adults ages 50+ use complementary and alternative medicine (CAM). Little is known about reasons for CAM use. We examined reasons with data from the 2007 National Health Interview Survey and its CAM supplement for adults. Analyses, including logistic regression accounted for the survey design and were weighted for national representativeness. Outcome variables in separate logistic analyses included several reasons respondents gave for using CAM. Results identify the principal health conditions associated with each reason, adjusted for other factors. Controls included age, race/ethnicity, gender, education, marital status, income, health insurance, comorbidities, self-reported health needs, body mass index, health behaviors, and region. Among adults 50+ (n=10,104), 35% used CAM for musculoskeletal and connective tissue problems, including arthritis/rheumatism, back and neck problems, and other bone or joint problems; these conditions are often accompanied by chronic pain that may not respond well to conventional therapies. In adjusted results, those with musculoskeletal and connective tissue problems had higher odds of CAM use because: a provider recommended it (odds ratio 1.65, 95% confidence interval 1.47-1.86), family or friends recommended it (1.44, 1.28-1.61), traditional medicine did not help (2.63, 2.07-3.35), and traditional medicine was too expensive (1.77, 1.38-2.28). Health providers often recommend CAM to treat musculoskeletal and connective tissue problems. A substantial number of older adults with musculoskeletal and connective tissue problems use CAM because medical treatments do not help or are too expensive. CAM can interact with conventional therapies; providers should ask patients with these conditions about their CAM use.

## PILOT STUDY OF OLDER ADULTS LIVED EXPERIENCE OF TRANSITIONING FROM HOSPITAL TO HOME

S. Buckner, J.S. Wilson, *University of Oklahoma College of Nursing, Oklahoma City, Oklahoma*

Transitioning from the hospital to the home is a significant problem since many older adults (defined as those 65 years and older) return to the hospital once they are discharged, often due to unmet, complex healthcare needs. In one year alone, these unplanned hospitalizations resulted in over $17 billion dollars in costs to Medicare. Research in this area has focused on primarily three types of outcome measures: healthcare resource use (e.g., length of stay during hospitalization), demographic characteristics (e.g., age or gender), and physical factors (e.g., change in sensory or mobility) that might impact transitioning. Few studies included the client's perspective about this transitional time period. **Purpose:** This descriptive, qualitative study was designed to explore the lived experiences of older adults transitioning from the hospital to the home. This study served as a pilot to inform future doctoral work in this area. **Methods:** Using a phenomenological approach, participants included four urban older adults living in the Midwest who had been hospitalized in the previous year. The main research question was, "What are lived experiences of older adults (aged 65-90) when transitioning from the hospital to the home environment?" Data gathered from audio-recorded interviews were analyzed for significant statements and themes. **Findings:** Qualitative findings revealed challenges in self-management once discharged from the hospital to the home which included managing their medical regimen. These findings may help clinicians understand how an older adult perceives transitioning which may, in turn, help improve this period of time for older adults.

## SYSTEMATIC REVIEW OF SELF-MANAGEMENT OF CHRONIC ILLNESS INTERVENTIONS FOR OLDER ADULTS: A FOCUS ON GERONTOLOGICAL SOCIAL WORK PRACTICE

A. Roberts, K.B. Adams, *Case Western Reserve University, Cleveland, Ohio*

Self-management programs aim to reduce the rate of functional decline and enhance the health and wellness of older people through education and social support. Social work values and competencies are closely aligned with health promotion models which depend upon comprehensive self-care, self-efficacy, and empowerment strategies. The following research questions were addressed: To what extent are social workers involved in self-management programs for chronic illness? What roles did social workers play in self-management interventions? Finally, what is the efficacy and effectiveness of interventions that included social workers? A comprehensive literature search was performed to identify self-management with chronic illness interventions that met the following criteria: the average age of the participants with one or more chronic illness was 60 or older, outcome measures were reported, and the intervention was implemented by social workers. Methodological quality was assessed by standard criteria adopted by the American Psychological Association. Using this inclusion criteria with eight electronic databases, we found only three group and six individual studies published through February 2010. Studies varied in scope, type of chronic illness, target population, research methodology, sample size, and social worker roles. All described social workers functioning as part of an interdisciplinary team. The most frequent roles were: counselor, educator, group facilitator, and resource broker. Major outcomes included a reduction of depression and improved self-management behaviors. Three randomized clinical trials were evaluated as "possibly efficacious." Future research should replicate findings, use longitudinal designs and standard valid and reliable outcome measures, compare intervention intensities, and explore causal factors.

## PREDICTORS OF SELF-CARE BEHAVIORS AMONG TYPE 2 DIABETICS: RESULTS FROM A LOGISTIC REGRESSION TREE ANALYSIS

T. Yamashita, C.S. Kart, D.A. Noe*, Miami University, Oxford, Ohio*

Diabetes mellitus (DM) is a growing public health problem in the U.S. and puts individuals of all ages at risk for catastrophic consequences and death. Such consequences may be mitigated by effective clinical and self-management. Whereas some medical consensus exists about the behaviors necessary for effective DM self-management, less is understood about the demographic and health-related characteristics of those adults with the disease who practice the recommended self-care regimens. Using logistic regression tree methods, this study examines the CDC's 2005 BRFSS data to profile the characteristics of 21,305 individuals with type 2 DM (Mean age = 62.3 years, SD = 12.8) for three critical self-care behaviors: frequency of blood glucose monitoring, checking feet and Hemoglobin A1c test. The logistic regression tree method partitions data into meaningful subgroups with similar characteristics (e.g., female patients, aged 75+) and fits a different logistic regression to each subgroup. Unlike traditional methods, this analysis detects specific combinations of characteristics and a corresponding chance of practicing the recommended self-care behaviors. Results indicate that for blood glucose monitoring, individuals who have participated in a formal DM management education program and managed DM for greater than 7 years were most likely to meet the recommended self-care regimen. Those who have participated in a formal DM management education program and consumed more fruits/vegetables in their regular diet were most likely to practice regular feet checking. Finally, the strength of the tree-based logistic regression method as well as possible implications for future DM intervention and education programs will be discussed.

## ETHNIC/RACIAL DIFFERENCES IN DIABETIC CONTROL FOR OLDER ADULTS: IMPACT OF IMPORTANCE OF RELIGION

C. Guarnaccia*, Department of Psychology, University of North Texas, Denton, Texas*

Health and Retirement Study (HRS) 2003 Mail Survey on Diabetes data for 1042 diabetic individuals was analyzed to examine the relationship between glycated hemoglobin (HbA1c) level (a 60 to 90 day measure of diabetic control), and self-rated Importance of Religion and religious participation. These religiosity measures were taken from the 2002 and 2004 core interviews which bordered the 2003 off core-year Diabetes Survey. In these analyses, self-rated Importance of Religion and participation was extremely stable between the 2002 and 2004 core interviews, allowing these ratings to be extended to and used in conjunction with the 2003 survey data. In an ANCOVA analysis Importance of Religion as the covariate was found to statistically reduce the large racial, health disparity, preexisting difference between African American and non-Hispanic Caucasian older diabetic individuals (F=53.48, p<.001). The Hispanic diabetic individuals were not found to be different from the non-Hispanic Caucasian individuals. The impact of the self-rated Importance of Religion covariate reduced these health disparities (F=3.85, p<.05). These results suggest that greater religious affiliation has additional protective benefits for African American older adults. The examination of diabetes as a chronic illness requiring extensive self-management activity compared to other chronic illnesses, highlights such religious affiliation benefits. This Importance of Religion and religious participation benefit was only found for the diabetic individuals who did not require insulin therapy. These individuals with Type I diabetes and more severe Type II diabetes did not show the benefit of lower HbA1c levels with greater involvement in religious focus and participation.

## SOCIAL SUPPORT: PATHWAY TO SUCCESSFUL SELF-MANAGEMENT AMONG MID- TO LATE-LIFE AFRICAN AMERICAN WOMEN

I.S. Harvey, *Kinesology and Community Health, University of Illinois Urbana Champaign, Champaign, Illinois*

Social support is a complex multidimensional construct, and research indicates that social support can be beneficial to the recipients. However, research also suggests that without an optimal match, social support can also be less satisfying to recipients. Because social support involves both a provider and a recipient, the possibility of mismatch between the intention of the support giver and perception of the support receiver is likely to occur. The purpose of this study is to examine the relationship between support providers and those receiving support among mid- to late-life African American women with chronic conditions. In-depth, semi-structured interviews were conducted with 30 women to discuss what type of social support they received from their primary relationship [i.e., daughter (N=15) or best friend (N=15)] in managing their chronic conditions. Interviews were audio-taped, transcribed verbatim, and then conducted using a dyadic narrative analysis. Prior to each discussion, a quantitative questionnaire assessed the various type of social support received and type of self-management practices performed. The quantitative study analyzed social support as the mixed predictor variable, types of relationships as the between-dyads variable, and self-management practices as the outcome variable. Results indicated that age of the recipient, number of chronic conditions, and friends' social support were important predictors of the type of self-management practices. In addition, narrative analysis identified the different patterns of social support among relationships. Daughters provided more instrumental support while friends provided more emotional support. The results have implications in designing specific support programs among relationships for African American women with chronic conditions.

## SOCIAL RELATIONSHIPS, SELF-EFFICACY AND DIET-RELATED OUTCOMES IN ADULTS LIVING WITH DIABETES

L.A. Wray[1], M. Franks[2], C. Chiu[1], C.L. LaCoe[1], *1. Biobehavioral Health, Penn State University, University Park, Pennsylvania, 2. Purdue University, West Lafayette, Indiana*

Social relationships (and particularly marriage) and self-efficacy have long been documented as important predictors of enhanced health outcomes, including those related to diabetes management. Using data from the 2002 and 2004 core interviews of the nationally representative Health and Retirement Study (HRS) and the 2003 supplemental diabetes-specific mail survey for 1,481 adults living with diabetes, and structural equation modeling, this study examined how diet-related social support and self-efficacy influence adherence to diet-related management recommendations and, in turn, to HbA1c levels (as a measure of glycemic control), and if those relationships differ by marital status. Bivariate analyses showed that married/partnered adults significantly differed from their unmarried counterparts on diet support, diet efficacy, and diet behavior but not on HbA1c. Results of our structural equation model analyses indicated that: (1) greater diabetes support predicted better diet adherence, and more strongly in married or partnered adults than in unmarried adults; (2) higher levels of self-efficacy predicted greater diet adherence similarly in both married and unmarried adults; and (3) self-efficacy and diet adherence explained 10.6% of the effect of diabetes support on HbA1c levels. These results suggest that social support and self-efficacy play important roles in the diabetes management in adults with diabetes, and that these roles may differ by marital status. Further investigation is needed to clarify how marriage influences health outcomes in adults living with diabetes.

## HOW CRITICAL MEDICAL EVENTS PROVIDE OPPORTUNITIES FOR SOCIAL WORK INTERVENTION FOR THE OLDER ADULT PATIENT

D.K. Griffith, *Geriatrics, University of Michigan Health System, Ann Arbor, Michigan*

Critical medical events of the older adult patient provide excellent opportunities for interventions by medical social workers. Dr. Caroline Blaum, the Associate Chief of the University of Michigan Division of Geriatric Medicine, as well as a Research Professor in the University of Michigan Institute of Gerontology, developed the Transitional Care Clinic (TCC) which offers an outpatient alternative to exhausting emergency room visits and debilitating inpatient hospitalizations for older adult patients. Dr. Blaum chose a full time social worker to be part of her TCC medical team. Social work completes a psycho-social assessment. Unmet needs are identified. Social work helps the patient access area resources that can provide needed services. Educating patient and caregivers about disease progression and how it affects daily functioning provides opportunities for social work to discuss long term planning and advanced directives with the patient. Helping the patient determine how to handle future exacerbations of the chronic illness, and facing his/her overall functional decline, can help guide the patient toward Palliative Care and Hospice when needed. Providing encouragement and emotional support for caregivers helps them be more vigilant and observant. They are then more likely to call TCC and thus avoid costly ED visits and hospital stays. During the first quarter, 69 patients were seen in the TCC; compared to 158 patients seen last quarter. The success of the TCC in Geriatrics helped establish similar clinics in Ambulatory Psychiatry, Outpatient General Medicine, and in one of the Family Practice clinics All Geriatrics Center social workers have adopted the interventions of the TCC social worker when meeting with patients who have had recent hospital stays. Providing a link between inpatient and outpatient medical care has been the primary focus of the social work role in the Transitional Care Clinics at the Geriatrics Center and over the last 4 years has become the Model of Care for primary care patients.

## UNDERSTANDING HEALTHCARE MANAGEMENT TASK DIFFICULTY AMONG DIABETIC MULTIMORBID OLDER ADULTS

T.B. Hughes[1,3], E.R. Giovannetti[1,3], L. Reider[1], J. Wolff[1,2,3], C. Weiss[1,2], Q. Xue[1,3], C. Boult[1,2], C. Boyd[1,3], *1. Johns Hopkins University, Baltimore, Maryland, 2. Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, 3. Center on Aging and Health, Johns Hopkins Medical Institutions, Baltimore, Maryland*

Diabetes mellitus is common in older adults, and often co-exists with other chronic conditions. The application of disease-specific guidelines to older adults with diabetes and multimorbidity may result in complex regimens that impose significant "treatment burden." Methods: To explore the concept of treatment burden we examined self-reported difficulty in managing 8 health care tasks and the association between this difficulty and quality of life and quality of care in a cross-sectional secondary data analysis of older adults with diabetes (n=425). We generated and validated a scale (0-16) of self-reported difficulty with health care management tasks from 8 questions. Patient-reported quality of care (Patient Assessment of Chronic Illness Care) and mental and physical health (SF-36 scales) were examined; and associations with the difficulty scale were tested using regression analyses. Results: Number of chronic diseases was associated with increased treatment difficulty ($p<.05$). A statistically significant stepwise association was found between increasing level of difficulty with health care tasks and lower mean score on the SF-36 physical health scale (no difficulty (38.4), low difficulty (38.5), moderate difficulty (35.0), and high difficulty (32.2), Cuzick's test for trend $p<0.05$), mental health scale (no difficulty (51.5), some difficulty (47.6), moderate difficulty(46.2), and high difficulty (41.3), Cuzick's test for trend, $p<0.05$), and patient-reported quality of care (Cuzick's test for trend $p < 0.05$). Conclusion: Difficulty with health care tasks may have implications for quality of life and quality of care. Future research will investigate the importance of treatment burden for clinical decision-making.

### OBJECTIVE VS. SUBJECTIVE INDICATORS OF ADEQUATE EXERCISE AMONG HRS RESPONDENTS WITH DIABETES

M. Janevic, C.M. Connell, N. Janz, N. Clark, *Center for Managing Chronic Disease, University of Michigan, Ann Arbor, Michigan*

Regular exercise is one of the cornerstones of diabetes self-care. The American Diabetes Association (ADA) recommends at least 150 minutes/week of moderate-intensity physical activity and/or 90 minutes/week of vigorous exercise. However, the extent to which these guidelines line up with older adults' own assessments of the adequacy of their physical activity is not known. Data from the national Health and Retirement Study's mailed 2003 Diabetes Supplement (N=1803 individuals with diabetes, aged 51- 96 years) was used to calculate the proportion of individuals who reported that they exercised "the right amount" but did not meet ADA guidelines according to a summary variable of minutes/week spent in physical activity (including both household tasks and leisure). This analysis was repeated within gender, race, and education subgroups. Overall, 65% (n=1161) of respondents thought they exercised too little; 33% (n=593) the right amount; and 2% (n=30) too much. Among those who thought they exercised sufficiently, 46% (n=276) did not meet physical activity guidelines. This percentage was higher among women (55%) than men (39%); among Black (65%) compared to White (41%) and Hispanic (49%) respondents; and among respondents without a high school diploma (63%) compared to those with a diploma (44%) or at least some college (24%). Among people with diabetes, women, African Americans, and individuals with less formal education are at highest risk of erroneously believing that they get enough exercise. Efforts to effectively convey the actual activity guidelines to these groups are needed, along with strategies to reduce their barriers to exercise.

### MEDICATION MANAGEMENT, ADHERENCE AND HEALTHCARE UTILIZATION IN VISUALLY IMPAIRED AND NORMALLY SIGHTED VETERANS

K. Echt[1,2], M.D. Williams[3,1], L.P. Nadel[1], C.L. Jasien[4], A.B. Burridge[5], T. Munir[1], V. Phillips[6], W.R. De l'Aune[1], *1. Atlanta VA Rehabilitation Research & Development Center of Excellence for Aging Veterans with Vision Loss, Decatur, Georgia, 2. Emory University School of Medicine, Geriatrics & Gerontology, Atlanta, Georgia, 3. VA Blind Rehabilitation Service National Program Office, Decatur, Georgia, 4. Atlanta VA Health Services Research & Development, Decatur, Georgia, 5. University of Houston, Houston, Texas, 6. Emory University Rollins School of Public Health, Atlanta, Georgia*

Visual impairment is more prevalent in aging and may negatively impact medication management and adherence. This study investigated medication management, adherence and healthcare utilization in visually impaired and matched normally sighted individuals alongside vision, cognition and psychosocial predictors. Community-dwelling veterans (n=180) aged 34-94 years (M=68, SD=15) participated. These 90 visually impaired (corrected acuity≥20/60) and 90 normally sighted (corrected acuity≤20/40) participants completed measures of vision (i.e., acuity, fields), cognition (i.e., working memory, prospective memory, verbal ability) and psychosocial factors (i.e., patient activation, self-efficacy). Indicators of medication management and adherence included: self-reported adherence (Morisky), capacity with familiar (Drug Regimen Unassisted Grading Scale) and novel regimens (Hopkins Medication Scale), and calculated medication refill gaps using electronic medical record pharmacy data (Cumulative Medication Gap). Healthcare utilization was also determined from the medical record for the prior year. Current findings indicate that visually-impaired participants self-reported greater adherence than normally-sighted [$t(178)=-3.02$; $p<.01$], however differences in capacity (91% versus 94%) and refill gaps (16% versus 13%) were subtler, respectively. Cognition was most strongly correlated with the management and adherence indicators (r's=.30-.50), particularly with novel regimen capacity. Visually impaired participants utilized less healthcare in the prior year than the normally sighted (M cost=$12,000 versus $18,000; $p<.01$). Higher average daily number of medications for the prior year ($r=.36$) and worse self-reported adherence ($r=.25$) were significantly related to healthcare utilization. The findings characterize the differential contribution of vision, cognition and psychosocial factors on indicators of medication management and adherence and on healthcare utilization in persons with and without visual impairment.

## SESSION 335 (SYMPOSIUM)

### MEN'S EXPERIENCES WITH CANCERS

Chair: *E.H. Thompson, Sociology & Anthropology, College of the Holy Cross, Worcester, Massachusetts*

Co-Chair: *K. Davidson, University of Surrey, Surrey, United Kingdom*

A cancer diagnosis triggers a range of powerful emotions, from stoic acceptance to despondency to anger to fear. Men who experience cancer will be challenged as men. Their cancer is a biographical disruption. The man's pre-cancer sense of who he is is no longer the reference point. The guiding question for this symposium was 'What are men's experiences as men after their cancer diagnosis and treatment?' Men with cancer are compelled to (re)negotiate a self that is pinched between their now vulnerable body and the meaning of being a man in American society. The four studies presented in this symposium examine how men with prostate and breast cancers experience the liminal recognition they now embody marginalized, subordinate forms of masculinity. Major themes that emerged include the similarities across cancers in both negative impacts—a sense of needing to reconstruct masculine identities, lesser quality of life in large part based in sexual functioning—and the positive effects of re-establishing masculinities through new venues.

### HEALTH-RELATED QUALITY OF LIFE FOR GAY/BISEXUAL MEN WITH PROSTATE CANCER

D.W. Coon[1], S.L. Hart[2], M.A. Kowalkowski[3], D. Latini[3,4], *1. Arizona State University, Phoenix, Arizona, 2. Ryerson University, Toronto, Ontario, Canada, 3. Baylor College of Medicine, Houston, Texas, 4. Michael E. DeBakey VA Medical Center, Houston, Texas*

Over 5,000 gay/bisexual (GB) men are diagnosed with prostate cancer (PCa)annually and at least 50,000 are undergoing or have completed PCa treatment, but their quality of life (QOL) is unknown. Seventy-six GB men diagnosed with PCa in the prior three years completed an online survey that included validated general-(SF-36 v 1.0) and disease-specific (Expanded Prostate Cancer Index) QOL measures. We compared participants to published data from large community samples. Survey participants reported significantly lower urinary, bowel, and hormonal functioning, SF-36 Mental Composite Scores, and higher fear of recurrence than published data (all p < .001). No differences were seen in sexual functioning or bother. Most participants had primary partners (65%) but 29% said their partners were not included in healthcare decision-making. GB men treated for PCa report substantially lower QOL than other PCa survivors, indicating they may be a group with greater need for supportive interventions.

### BEING A PROSTATE CANCER SURVIVOR: STORIES OF CHANGES AND CHALLENGES RELATED TO MASCULINITY

T. Blank, *Human Development and Family Studies, University of Connecticut, Storrs, Connecticut*

Many men treated for prostate cancer feel their lives have taken a new trajectory. A significant aspect involves changes in how they feel about themselves as men; these reconstructions may begin at diagnosis and be intensified by treatment-caused erectile dysfunction and alterations in long-term relationships. This paper incorporates three data sources to explore the lived experience of a new trajectory: open-ended answers about changes and challenges of prostate cancer by 509 men diagnosed 1-8 years previously, interviews with 11 men diagnosed six months to three years earlier addressing the narrative of the man's prostate cancer experience, and personal experiences of the presenter. Major themes that emerged include both negative impacts—a sense of loss of feelings of masculinity, in large part based in sexual functioning—and positive ones of re-thinking and re-establishing views of masculinity and identity by accommodating to the changed physical and psychological context.

### DYADIC SUPPORT AFTER RADICAL PROSTATECTOMY: "MEN TELLING IT LIKE IT IS"

B.A. Weber, B. Roberts, B.J. Lutz, *University of Florida, Gainesville, Florida*

Men surviving prostate cancer treatment are reluctant to take part in support groups despite the benefit supports groups are known to have for patients with other types of cancer. Thus, a program of peer-to-peer support (dyadic) was developed with the hypothesis that it would be more appealing to men than large support groups. Results were favorable, but left several unanswered questions for understanding the efficacy of dyads. This secondary analysis used iterative thematic analysis to assess the dyadic discussions. Conversation was unstructured but discussion predominantly related to coping with the day-to-day consequences of radical prostatectomy included urinary incontinence and erectile dysfunction. Two domains were identified (friendship and information seekers) with the following overlapping themes (1) getting to know you, (2) somatic complaints, (3) hope, and (4) new perspectives on life. Results from this study will inform health care providers of the needs and concerns men have following radical prostatectomy.

### "YOU GOTTA BE KIDDING ME!": MALE BREAST CANCER

E.H. Thompson, A.S. Leichthammer, *Sociology & Anthropology, College of the Holy Cross, Worcester, Massachusetts*

The notion of breast cancer as a woman's disease parallels prostate cancer as an 'old man's' disease. But these gendered conceptions contribute to unawareness that breast cancer in men is possible, leads to later detection and higher mortality rates. Using the constant comparative method and coding paradigm of grounded research, interview data with 17 men give voice to the embodied experiences of men with breast cancer. Men revealed shock, not embarrassment with diagnosis and post-surgical hormonal therapy. Their 'identity talk' details strategies of stoic management, presenting the illness experience as 'just another hill to climb'. Findings also challenge the question that men would sense emasculation. Some divulged initial feelings of the indignity of having breast cancer, but most did the opposite of hide in shame; they sought to publicize their experience. Feelings of being medical, but not social oddities, they resisted marginalization.

## SESSION 340 (PAPER)

## OLDER WORKERS: INITIATIVE AND FITNESS

### WORK MOTIVATION AND REGULATORY BEHAVIORS OF OLDER MANAGERIAL EMPLOYEES

D. Yeung[1], H. Fung[2], D. Chan[2], *1. City University of Hong Kong, Hong Kong, Hong Kong, 2. The Chinese University of Hong Kong, Hong Kong, Hong Kong*

There is an increasing interest in investigating the impacts of developmental changes on job performance of middle-aged employees. This project aimed at comparing work motivation and self-regulatory behaviors between younger and older working adults. Study 1 consisted of 295 Chinese managerial employees aged between 23 and 60 years. Participants completed a set of questionnaires on work motives, regulatory strategies and job performance. Study 2 was an experience sampling study to assess on-the-job work motives and regulatory behaviors of 100 managerial employees. Participants were asked to carry a handheld computer for two weeks and their momentary responses at work were recorded. Preliminary analysis of Study 1 demonstrated that older employees reported a higher level of intrinsic motivation {$t(293) = -3.11$, $p <.01$} but less internally imposed motivation {$t(293) = 2.24$, $p <.05$} than did younger employees. Age differences were also found in the use of regulatory strategies: As compared with younger workers, older workers reported greater use of elective selection ($t(293) = -2.26$, $p < .05$) but less employment of compensation ($t(293) = 1.99$, $p < .05$). Multiple regression analysis demonstrated that the positive relationship between intrinsic motivation and job performance was stronger for older employees (age by intrinsic motivation interaction, $\beta = 1.479$, $p <.001$). Result findings of this project would provide important implications to employers for understanding work motives and adjustment of older employees.

### ENTREPRENEURSHIP AT THE OLDER AGES

J.C. Scott, J. Diebold, *Public Policy, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina*

Despite the current economic downturn, some older Americans are engaging in new business ventures. Bridging the literatures on entrepreneurship and the aging workforce, the research question for this project is what factors are associated with entrepreneurship at the older ages? After attending this session, participants will be able to identify possible determinants of, and discuss methodological issues related to, entrepreneurship in old age. Using all 9 waves of the Health and Retirement Study, we model the factors contributing to entrepreneurship for those 50 and older. We define three types of entrepreneurship: self-reported self-employment status, self-employment combined with supervisory responsibilities, and self-employment in so-called 'knowledge' occupations. Key explanatory variables include risk perceptions and perceptions of time horizons. Preliminary results suggest several factors that facilitate entrepreneurship. We find that more openness to risk is associated with entrepreneurship and self-employment. Moreover, resources in the form of household wealth and education are a significant if unsurprising contributors to entrepreneurship. Interestingly, those respondents who value work in and of itself are much more likely to engage in entrepreneurship at older ages, and individuals with stable work histories were also more likely to be entrepreneurs. Married or coupled respondents are more likely to be entrepreneurs relative to single, divorced, and widowed individuals. In general, these results suggest resources and stability combined with an openness to risk-taking lead to self-employment and entrepreneurship. However, these results suggest differential effects in terms of those who 'have to' work on their own and those who want to engage in self-employment.

### COMPENSATED WORK THERAPY AND OLDER VETERANS: A FIRST LOOK AT OLDER WORKERS IN VA VOC-REHAB SERVICES

M. Hunt[1,3], R. Kaczynski[2,3], S.G. Resnick[2,3], *1. VA Connecticut Healthcare System, West Haven, Connecticut, 2. VA Connecticut Healthcare System, Northeast Program Evaluation Center, West Haven, Connecticut, 3. Yale University, New Haven, Connecticut*

For over thirty years, the Veterans Hospital Administration has provided vocational rehabilitation services for Veterans with mental illnesses with or without co-occurring physical impairments. These services provided through Compensated Work Therapy (CWT) program that has three primary service components: sheltered workshops, transitional work experiences (TWEs), and supported employment (SE). CWT programs are evaluated nationally for program fidelity and outcomes by the Northeast Program Evaluation Center (NEPEC). To date, no thorough analysis of the data focusing on older (over age 50) workers has been conducted. This paper describes the population of older workers served by 163 CWT programs in VHA from FY 2006 – 2009 utilizing data from 21,795 Veteran admissions. General estimation equation analyses were used to identify correlates of three measures as indications of program success: obtaining community based work, achievement of constructive activity, and achievement of competitive employment. Characteristics and outcomes of older and younger workers are compared. Findings indicate that Veterans admitted to the program were predominantly male (96.0%). Two-thirds were employed at baseline (62.6%) or reported a serious mental health problem (63.9%). Compared to younger veterans, respondents were significantly more likely to be male (96.0% vs. 91.3%, X2=402.94, df=1, p<.001) less likely to be employed (62.6% vs. 74.0%, X2=643.70, df=1, p<.001) and more than twice as likely to be retired or disabled (8.4% vs. 3.8%, X2=416.18, df=1, p<.001). They were also significantly more likely to report having a disability (53.4% vs. 44.8%, X2=317.42, df=1, p<.001) and more likely to be homeless at (11.79%, X2=8.87, df=1, p<.01).

### IMPACT OF BENEFITS COUNSELING ON EMPLOYMENT TRANSITIONS FOR OLDER PEOPLE WITH DISABILITIES

K. Kellett, N. Shugrue, A. Kleppinger, J. Robison, *University of Connecticut Health Center, Farmington, Connecticut*

Background: Social Security Administration (SSA) disability beneficiaries often do not work or are underemployed due to the fear of losing benefits or because they misunderstand the work incentives that are part of SSA disability programs. One response to this problem has been to assist SSA disability beneficiaries in understanding their benefits and to encourage active engagement in productive roles, such as employment, as they age. Objective: This study, funded by the Centers for Medicare and Medicaid Services Medicaid Infrastructure Grant, examines the impact of benefits counseling services on consumer satisfaction and employment outcomes for individuals age 45 and older receiving SSA disability benefits and benefits counseling from a Community Work Incentive Coordinator (CWIC) through the Connecticut Bureau of Rehabilitation Services. Methods: Data from a mail survey to 571 SSA disability beneficiaries who received benefits counseling between 2007-2009 and follow-up phone calls to nonrespondents was used to explore how helpful benefits counseling was and if it enabled beneficiaries to start working, increase their hours, or increase their earnings. Results: Eighty-eight respondents met the age criteria for the study. Of these, 42% reported benefits counseling enabled them to start working, increase hours, or increase earnings. Seventy-seven percent reported they would recommend the BRS Benefits Counseling Program. Conclusion: In contrast to the stereotype of older adults as dependent unproductive members of society, our data demonstrates that benefits counseling is an important supplemental service that provides helpful employment support for older SSA disability beneficiaries who want to work and remain productive as they age.

## SESSION 345 (SYMPOSIUM)

### THE MARKETPLACE OF MEMORY

Chair: *A. Basting, UWM, Milwaukee, Wisconsin*
Co-Chair: *J.E. Graham, UWM, Milwaukee, Wisconsin*

Dementia is more than a diagnosis. It is also a complex marketplace. This symposium offers a dynamic, interdisciplinary questioning of the relationship between market forces and the experience of memory loss on several fronts. With an enormous rise in the numbers of those diagnosed with dementia predicted as the population ages, it is imperative that we examine the tensions and influences of the marketplace and the lived experience of dementia. Pia Kontos, Research Scientist at Toronto Rehabilitation, explores the tension between the regulatory landscape of long-term care, the experience, knowledge and reflective deliberations of health care practitioners and their supervisors, and the implications of this tension for person-centered dementia care. Jesse Ballenger, historian of science at Penn State University and author of The Self, Senility, and Alzheimer's Disease in Modern America, analyzes the pharmaceutical industry's marketing of drugs for memory loss. Danny George, Asst. Professor of Humanities at Penn State College of Medicine, analyzes the messages about memory loss inherent in the marketing of memory-enhancing video games/programs. Keith Diaz Moore examines the facilities created for people with memory loss and how these in turn shape a cultural understanding of the experience of dementia. Sally Chivers, Asst. Professor at Trent University, analyzes popular films and their representations of memory loss. Janice Graham, Canada Research Chair in Bioethics, will serve as discussant, with a special focus on the ethical issues entwined in the presentations.

### NEURONS IN NEIGHBORHOODS: FINDING A MORE SUSTAINABLE APPROACH TO COGNITIVE WELLNESS ACROSS THE LIFESPAN

D. George*, Penn State College of Medicine, Hershey, Pennsylvania*

In the marketplace of memory, the predominance of slogans such as "train your brain", "maintain your brain", and "optimize your neurons" contribute to a largely neuro-centric focus on late-life wellbeing. However, humans have evolved, not as disembodied brains, but as members of social networks. Therefore, the most successful pathways to cognitive (and general) wellness across the lifespan may be relational rather than obtained through mere isolated consumption of brain-training products. The language of the memory marketplace will therefore be deconstructed, and a more expansive, humanistic focus on concepts such as lifelong-learning, acting in the world with a sense of curiosity and wonder, and appreciating the value of social play will be developed. Emphasis will be placed on seeing beyond consumer products and taking advantage of the sustainable centers of learning in one's community. Ethnographic examples from The Intergenerational School in Cleveland and the Louvre in Paris will be shared.

### REFLEXIVITY, EMBODIED PRACTICES, AND REGULATORY REGIMES IN NURSING HOMES

P.C. Kontos[1,2], K. Miller[2], G. Mitchell[3,4], C. Cott[2,1], *1. Toronto Rehabilitation Institute, Toronto, Ontario, Canada, 2. University of Toronto, Toronto, Ontario, Canada, 3. York University, Toronto, Ontario, Canada, 4. York-UHN Nursing Academy, Toronto, Ontario, Canada*

Understanding point-of-care decisions in dementia care requires that embodied care activities of personal support workers (PSWs) be understood within a context of broader regulatory logics. Using qualitative methods we explored the experiences of PSWs (n=28) and administrators (n=11) on two Alzheimer support units in Ontario, Canada. Findings indicate that point-of-care decisions were the outcome of a discordant interrelationship between PSWs' tacit knowledge and reflective deliberations, and legislative and organizational care mandates. PSWs responded to discordance by rule-breaking in order to individualize care. Unbeknownst to PSWs, rule-breaking was contingent upon administrators' case-by-case complicity as they strove to balance fears of regulatory citations with evaluations of the soundness of PSW logic. These findings have important implications for initiatives to improve care practices, and to challenge regulatory mechanisms that impede quality care.

### FAMILIAR TASKS: MEMORY LOSS AND DEMENTIA ON THE SILVERING SCREEN

S. Chivers, *Canadian Studies, Trent University, Peterborough, Ontario, Canada*

This presentation will focus on popular films about memory loss that flood the contemporary cultural marketplace. Unique in their focus on older characters, these films are often either fictional love stories disrupted by the unusual behavior of a spouse (examples include *Iris*, *The Notebook*, *Away from Her*, and *A Song for Martin*) or personalized medical narratives that focus on care (examples include HBO's *The Alzheimer's Project*, PBS's *The Forgetting* and *The Future of Alzheimer's*, and the NFB's *Memory Adrift*). Both the fiction films and the documentary films highlight what dementia introduces into human relationships. Alongside the changing memory status of the "patient," film viewers witness family members' reminiscences that establish the centrality of conventional memory function. The paper will draw attention to how such films market themselves to and carefully shape the expectations of an aging audience. After attending the symposium, audience members will be able to evaluate how the films gently introduce viewers to possible futures while subtly emphasizing a desire to preserve memories. They will also be able to discuss other ways to situate memory that are counter to these dominant stories of loss.

### IN PLACE, OUT OF PLACE: THE ROLE OF PLACE IN SHAPING PERCEPTION OF THE DEMENTIA EXPERIENCE

K. Diaz Moore, *Architecture, University of Kansas, Lawrence, Kansas*

All too often, manifestations of dementia are viewed from an etiological perspective and yet the dementia experience is exceptionally varied. The progressive decline of dementia is documented through observable manifestations, and yet Gubrium (1978) identified thirty years ago that "what behavior is spoken of or recorded as senile depends on place." This presentation will focus on the hidden and often coercive role that place plays in the dementia experience. Focusing on the concept of place rules, which serve to summarize the recurring and expectant relationships between activity and setting, this presentation will discuss the situations in which we place people with dementia that may, in and of themselves, foster certain manifestations considered indicative of a decline in functional status. As such, place rules are a powerful, qualitative concept that highlights the relationship between the environment and observable functional competence as hypothesized by Lawton and Nahemow (1973).

## SESSION 350 (SYMPOSIUM)

### WHAT IS NEW ABOUT OLD AGE STEREOTYPES AND IMAGES OF AGING?

Chair: *D. Kotter-Gruehn, Department of Psychology, North Carolina State University, Raleigh, North Carolina*

Discussant: *T.M. Hess, Department of Psychology, North Carolina State University, Raleigh, North Carolina*

Negative images and stereotypes about age and aging are highly prevalent in Western societies and often result in age discrimination. Furthermore, age stereotypes and negative views of aging have been shown to negatively influence older adults' attitudes and behavior as well as their well-being, health, and longevity. The aim of this symposium is to present recent findings pertaining to age stereotypes and images of aging assessed in multiple contexts. Using questionnaire data from employees of several work teams, Bowen & Staudinger address the question whether images of aging in the work context moderate age-differences in the motivation to strive towards possible gains and improvements (promotion orientation). Kotter-Gruehn & Hess present results from an experimental study in which they examined whether young, middle-aged, and older adults' self-perceptions of aging can be manipulated through the activation of age stereotypes. Levy presents evidence for a stereotype matching effect (i.e., the effect that age stereotypes have a stronger impact on older individuals when the stereotype content corresponds to the outcome) and she discusses how this might generate expectations that become self-fulfilling prophecies. Wurm and colleagues use survey data to investigate the question whether the detrimental effect of a negative view on ageing depends on the attribution of health problems to age or to illnesses. Our discussant Thomas Hess will integrate the four papers and discuss the implications that age stereotypes and images of aging have at different ages and in different contexts of life.

### IMAGES OF AGING IN THE WORKPLACE MODERATE AGE DIFFERENCES IN PROMOTION ORIENTATION

C. Bowen, U.M. Staudinger, *Jacobs Center on Lifelong Learning and Institutional Development, Bremen, Germany*

It is a common finding in the adult development literature that the motivation to strive towards possible gains and improvements (promotion orientation) decreases with age. Building on experimental research that has found a relationship between activated stereotypes and motivational orientation, we investigated whether images of aging in the work context would moderate age differences in promotion orientation. Cross-sectional questionnaire data from $n = 337$ employees (aged 19 – 64 years) in $k = 36$ work teams indicated that perceptions of the *age climate* (i.e., the positivity of the image of older workers within an individual's company) moderated age-related differences in promotion orientation. Specifically, the typical pattern of lower promotion orientation at higher ages was only observed among those individuals who perceived a less positive age climate. Perceiving a positive age climate appeared to buffer against an age-related decline in promotion orientation.

### CONTRAST OR ASSIMILATION EFFECT? THE IMPACT OF AGE STEREOTYPES ON SELF-PERCEPTIONS OF AGING

D. Kotter-Gruehn, T.M. Hess, *Department of Psychology, North Carolina State University, Raleigh, North Carolina*

How satisfied people are with their age(ing) and how old they feel are important correlates of well-being and health in old age. Given these beneficial effects, the question arises whether positive self-perceptions of aging (SPA) can be promoted. The present study addressed this question by examining whether the activation of positive or negative age stereotypes leads to more positive or negative SPA, respectively. 60 young, 60 middle-aged, and 60 older adults were presented with either positive, negative or no age stereotypes. Before and after the stereotype activation, SPA was measured. Results indicate that especially in old age, the activation of negative stereotypes does not lead to more negative but to more positive SPA. Interestingly, the confrontation with positive age stereotypes did not make participants more satisfied with their own aging. Results will be discussed in terms of assimilation and contrast effects and the efficacy of stereotype priming.

### THE STEREOTYPE-MATCHING EFFECT: GREATER INFLUENCE ON FUNCTIONING WHEN AGE STEREOTYPES CORRESPOND TO OUTCOMES

B.R. Levy, E. Leifheit-Limson, *Yale University, New Haven, Connecticut*

Older individuals assimilate, and are targeted by, contradictory positive and negative age stereotypes. It was unknown whether the influence of stereotype valence is stronger when the stereotype content corresponds to the outcome domain. We randomly assigned older individuals to either positive-cognitive, negative-cognitive, positive-physical, or negative-physical subliminal-age-stereotype groups and assessed cognitive and physical outcomes. As predicted, when the age stereotypes corresponded to the outcome domains, their valence had a significantly greater impact on cognitive and physical performance. This suggests that if a match occurs, it is more likely to generate expectations that become self-fulfilling prophecies. Findings will be discussed in the context of newly-described stereotype embodiment theory.

### AGE OR ILLNESS – TO WHAT DO OLDER PEOPLE ATTRIBUTE SYMPTOMS AND DOES THIS AFFECT FUNCTIONAL HEALTH?

S. Wurm[1], B. Schüz[1], L. Warner[1,2], J.P. Ziegelmann[2], C. Tesch-Roemer[1], *1. German Centre of Gerontology, Berlin, Germany, 2. Freie Universität, Berlin, Germany*

Older people with chronic illnesses experience losses in their functional health (FH). Longitudinal studies showed that a negative view on own aging is detrimental to health. It is an open question whether this detrimental effect depends on the attribution of health problems to age or to illnesses. A longitudinal study in N = 309 older people (65+) with multiple illnesses assessed FH, self-perceptions of aging (SPA) and attributions of symptoms to age or illnesses. FH of people who viewed aging as accompanied by physical losses declined over a 6-month period ($\beta = -.11$; $p<.05$). Moderated regression analyses showed that this negative effect is smaller for those who attribute their health problems to age and not to illnesses ($\beta=.09$; $p<.05$). This emphasizes the role of SPA on health. The positive effects might be due to that people who expect aging-related rather than illness-related losses are better able to maintain beneficial health behaviors.

## SESSION 355 (SYMPOSIUM)

### ADVANCING MUSCLE MECHANISTIC KNOWLEDGE UNDERLYING CLINICAL PHENOTYPES IN ELDERLY WITH CHRONIC DISEASE

Chair: *B. Nicklas, Wake Forest University School of Medicine, Winston-Salem, North Carolina*
Co-Chair: *A. Ryan, University of Maryland, Baltimore, Maryland*
Discussant: *R. Fielding, Tufts University, Boston, Massachusetts*

Loss of muscle mass/strength is a common pathway contributing to physical disability in the elderly, regardless of the presence of chronic disease. While specific behavioral and/or pharmacological therapies in older persons may prevent sarcopenia, there are little data from clinical trials in the elderly designed to assess whether responses to an intervention are mediated by adaptations in skeletal muscle. This is due, in part, to the scarcity of inclusion of skeletal muscle acquisition/biopsy, and subsequent measurement of in vitro muscle characteristics, as secondary outcomes in randomized, clinical trials (RCT) with sample sizes large enough to detect effects on clinical outcomes. This symposium presents data from three Claude Pepper Centers that are assessing the role of lifestyle interventions on both clinical and mechanistic outcomes. The first presentation shows data on the acceptability, yield and safety of the biopsy procedure itself among older adults with diverse co-morbidities. The next presentation describes the utility of using gene microarrays to generate mechanistic hypotheses relating muscle properties to a unique clinical finding from a RCT in obese elderly. The third describes how altered skeletal muscle of the hemiparetic leg of stroke survivors is related to several clinical phenotypes, while the final talk presents data suggesting that an impaired anabolic response of aged muscle to overload is related to excess lipid infiltration. Collectively, these findings point to the importance of procuring muscle and measuring in vitro muscle characteristics as secondary outcomes in large-scale trials examining interventions to prevent sarcopenia in the elderly.

### FEASIBILITY, EFFICACY AND SAFETY OF SKELETAL MUSCLE ACQUISITION IN FRAIL ELDERLY WITH CO-MORBIDITIES

M.F. Lyles[1], K. Murphy[1], B. Nicklas[1], C. Hafer-Macko[2], A. Ryan[2], *1. Wake Forest University School of Medicine, Winston-Salem, North Carolina, 2. University of Maryland, Baltimore, Maryland*

Despite the importance of deficits in muscle metabolism/function as contributors to disability in the elderly, acquisition of muscle tissue via percutaneous needle biopsy has been historically used for research studies in young and/or healthy persons. Certain research groups are increasingly using this technique in the context of clinical trials in the frail elderly with chronic diseases; yet, there are presently little data on the feasibility, safety, and tissue yield of the procedure in this population. We will present such data from biopsies performed in >400 adults (65-85 yrs) with stroke, osteoarthritis, heart failure, COPD or obesity who were enrolled in separate clinical trials. The mean tissue yield differs by patient type and by paretic/nonparetic legs in stroke patients. To date, there have been no complications which required emergency treatment, and the overall rate of minor complications is <8%. The presentation will discuss adaptations used to make this technique more suitable for frail elderly.

### USING GENE MICROARRAYS TO DISCOVER SKELETAL MUSCLE MECHANISMS UNDERLYING CLINICAL RESPONSES TO DIET AND EXERCISE INTERVENTIONS

R. Loeser, J. Fetrow, J. Chou, B. Nicklas, S.B. Kritchevsky, *Wake Forest University School of Medicine, Winston-Salem, North Carolina*

In a clinical trial, we noted an interaction of pioglitizone use with resistance training (RT) and weight loss (DIET) such that the older (65-79 yrs), obese adults randomized to DIET+PIO+RT experienced a two-fold greater improvement in muscle power than those randomized to DIET+RT. The mechanism for this observation could be related to altered gene expression in muscle in response to stimulation of PPARgamma by pioglitizone. Thus, we performed gene microarrays (Affymetrix U133A 2.0) using RNA isolated from vastus lateralis muscle of 12 subjects. The raw expression data were normalized using the Systematic Variation Normalization (SVN) method. Genes with significant detection were evaluated for significant changes in expression between the pre- and post-intervention timepoints—107 genes were up-regulated and 119 genes were down-regulated. Two methods of computational analysis were performed to cluster genes based on intervention groups. Genes of interest (n=7) were then chosen for quantification by real-time PCR.

### ALTERED HEMIPARETIC SKELETAL MUSCLE OF STROKE SURVIVORS: RELATIONSHIP WITH CLINICAL PHENOTYPES

A. Ryan, C. Hafer-Macko, *University of Maryland, Baltimore, Maryland*

Stroke leads to persistent neurological deficits that impair function and promote physical inactivity. Low peak aerobic capacity is associated with reduced thigh muscle mass and greater gait deficits illustrating the importance of muscle mass to physical fitness in stroke. Our data indicate significant muscular atrophy of hemiparetic thigh compared to non-paretic thigh and higher intramuscular fat area. Myosin heavy chain (MHC) gel electrophoresis of bilateral vastus lateralis shows a remarkable shift in the proportion of fast MHC isoforms in the hemiparetic but not the non-paretic leg. The proportion of fast MHC isoform in the hemiparetic leg is strongly negatively associated with slower self-selected walking speed. Inflammatory pathways including TNFalpha mRNA levels are elevated in hemiparetic muscle compared to non-paretic and controls. New evidence indicates myostatin mRNA levels, a significant regulator of muscle development and size, are higher on paretic than non-paretic leg. Exercise rehabilitative strategies may improve these muscle alterations.

### DECREASED MUSCLE PROTEIN CONTENT IS ASSOCIATED WITH DEFECTIVE LIPID METABOLISM IN AGING SKELETAL MUSCLE

D.A. Rivas, E. Morris, R. Fielding, *Tufts University, Boston, Massachusetts*

Increased intramuscular lipid content has been noted in lean and obese elderly persons and is thought to be associated with insulin resistance and decreased muscle quality. Furthermore, the impaired anabolic response of aged skeletal muscle to muscle contraction may also be related to excess lipid infiltration. However, it is still unknown if lipid accumulation has a mechanistic role in the age-associated loss of muscle mass. We have determined the effect of 28 days of overload on the storage of intramuscular lipids and regulators of lipid synthesis in the plantaris of young and aged Fischer 344 x Brown Norway rats subjected to bilateral synergist ablation of two thirds of the gastrocnemius muscle or sham surgery. Data will be presented suggesting that the regulation of lipid metabolism is impaired in aging skeletal muscle and does not respond to mechanical overload via synergist ablation.

## SESSION 360 (SYMPOSIUM)

### BEING OUT OF SYNCH: INFORMAL CAREGIVERS' PERCEIVED NEEDS AND UNMET EXPECTATIONS IN END-OF-LIFE CARE TRAJECTORIES

Chair: *J. Penrod, The School of Nursing, The Pennsylvania State University, University Park, Pennsylvania*
Discussant: *J.E. Hupcey, The Pennyslvania State University, Hershey, Pennsylvania*

Informal caregivers are instrumental partners-in-care with health care providers who manage trajectories of life-limiting illnesses. In many cases, family caregivers provide or manage the everyday care that supports or comforts the person facing a complex trajectory toward the end of life. Despite their shared goals in care, the interface between the informal family caregiver and formal health care provider is often limited to brief office visits across the illness trajectory that target the medical management of the presenting illness. This ethnographic study examined the interactions between informal and formal caregivers during brief office visits in three distinct models of care for complex end-of-life care trajectories. Paper 1, Being Out of Synch, explores the notion of disconnects—that is, disruptive times when expectations regarding the role of the formal provider or perceived priorities of care are unmet. Paper 2, The Informal Caregivers' Journey, presents a model for understanding end-of-life caregiving and centers on disconnects between the phase-specific needs of the informal caregiver and the attributes of the formal care delivery system. Paper 3, Pathways to the End of Life, advances understanding of the course and duration of phases of caregiving in distinct death trajectories, then focuses on the types of disconnects related to timing. Finally, Paper 4, A Clash of Culture, examines characteristics of the culture of care in dominant models of end-of-life care delivery that opens opportunities to either connect or disconnect with family caregivers across the course of care.

### BEING OUT OF SYNCH

J. Penrod[1], J.E. Hupcey[2], S.J. Loeb[1], *1. The School of Nursing, The Pennsylvania State University, University Park, Pennsylvania, 2. The Pennsylvania State University, Hershey, Pennsylvania*

Despite the instrumental role of informal caregivers in prolonged end-of-life care trajectories, these partners-in-care are often neglected as care recipients. This paper describes a large ethnographic study of the interface between informal and formal caregivers across different trajectories of living with and dying from a life-limiting illness. Through an examination of ongoing office visits, the notion of disconnects—that is, disruptive times when the informal and formal caregivers fall out of synch with each other and their partnered roles diverge. Informal caregivers, living with care demands, perceive care needs that subsequently drive expectations of the provider and of care. Expectations of the formal care provider include the style of interaction and the scope of concern. Expectations of care include prioritization of the domains of care (e.g., symptom management or financial issues) and timing. Disconnects are highlighted as a divergence of perspectives when informal caregivers' expectations are unmet.

### THE INFORMAL CAREGIVERS' JOURNEY

M. Kanaskie[2], J. Penrod[1], J.E. Hupcey[2], S.J. Loeb[1], *1. The School of Nursing, The Pennsylvania State University, University Park, Pennsylvania, 2. The Pennsylvania State University, Hershey, Pennsylvania*

Understanding the divergence of perspectives that is manifest as a "disconnect" is contingent upon understanding the informal caregivers' experience of providing care during advanced illness and through death. End-of-life caregiving is a profound, life-altering experience that consists of a rather universal series of phases demarcated by standard transitions in the illness/care trajectory. A model of end-of life caregiving derived in a grounded theory study is presented to highlight the experiential features of end-of-life caregiving. Four phases, punctuated by three transitions, evolve around the core variable of seeking normal. From this perspective, disconnects are driven by uncertainties that are not addressed or pre-empted by the care providers. These disruptive occurrences are related to phase-specific needs of the informal caregiver and are often rooted in the attributes of the formal care delivery system.

### PATHWAYS TO THE END OF LIFE

P.Z. Shipley[1], J. Penrod[1], J.E. Hupcey[2], S.J. Loeb[1], *1. The School of Nursing, The Pennsylvania State University, University Park, Pennsylvania, 2. The Pennsylvania State Univ, Hershey, Pennsylvania*

In this paper, the model of EOL Caregiving is super-imposed on three distinct death trajectories to advance a deeper understanding of how the phases of caregiving are molded by care demands across the trajectory of living with and dying from varied life-limiting conditions. The Expected death trajectory features a recognized course toward death initiated by the diagnosis of a terminal illness. In the Mixed death trajectory, care initially focuses on the treatment of a life-threatening condition, then shifts dramatically toward supportive end-of-life care. In contrast, the Unexpected death trajectory is highlighted by repeated episodic care for a life-threatening condition that is known to limit life, but is not recognized as terminal. From this perspective, patterns of disconnects are related to timing—when the informal caregiver falls out of synch with the care providers' interpretation of the trajectory.

### A CLASH OF CULTURE

B. Baney[1], J. Penrod[1], J.E. Hupcey[2], S.J. Loeb[1], *1. The School of Nursing, The Pennsylvania State University, University Park, Pennsylvania, 2. The Pennsylvania State University, Hershey, Pennsylvania*

Understanding the informal caregivers' experiences across varied trajectories is necessary but insufficient for unraveling the complexity of being "out of synch." Typically, ongoing care is rendered through an outpatient delivery system that is organized around medical specialties that focus on the care recipient in the role of patient. Findings of the ethnography reveal that specialty care settings manifest a culture of care that reflects inherent values and beliefs regarding the illness experience, informal caregiving, and ultimately, the end of life. Three dominant models of end-of-life care delivery were identified: Dominant Provider; Cooperative Network; and Interdisciplinary Team. Informal caregivers are enmeshed in these models of care delivery. The characteristics of each model (including: the assumed role of the health care provider, conceptualization of the patient system, focus of the visit, and flow of care) opens opportunities to either connect or disconnect with informal caregivers across the course of care.

## SESSION 365 (PAPER)

## EPIDEMIOLOGY OF PHYSICAL FUNCTION

### KNEE OSTEOARTHRITIS AND RISK OF INDOOR AND OUTDOOR FALLS IN OLDER ADULTS: THE MOBILIZE BOSTON STUDY

U. Nguyen[1,2], Y. Zhang[2], L. Quach[1], D. Kiel[1,6], S.G. Leveille[3], R.H. Shmerling[4], C.A. Oatis[5], M. Hannan[1,6], *1. Hebrew SeniorLife Institute for Aging Research, Boston, Massachusetts, 2. Boston University School of Medicine, Boston, Massachusetts, 3. University of Massachusetts Boston, Boston, Massachusetts, 4. Beth Israel Deaconess Medical Center, Boston, Massachusetts, 5. Arcadia University, Glenside, Pennsylvania, 6. Harvard Medical School, Boston, Massachusetts*

Symptomatic osteoarthritis (SxOA) of the knee and falls are both common in older adults and limit mobility. A few studies have shown a link between knee SxOA and falls, and recent research suggests that risk factors may differ by outdoor and indoor falls. To our knowledge, no study has examined whether knee SxOA has a different effect on outdoor vs. indoor falls. We tested this hypothesis in the participants of the MOBILIZE Boston Study, a population-based cohort of community-dwelling older adults. Falls data, including where falls occurred, were collected using monthly calendars. We used negative binomial regression to estimate the effect of knee SxOA on risk of outdoor and indoor falls (separately and combined), adjusting for age, sex, BMI, co-morbidities, medications and falls history. Of 470 women and 269 men (mean age: 78 years; mean BMI: 27.3), 25% had ACR-defined clinical knee SxOA. Over 2.3 years of follow-up, 453 people had at least 1 fall. Mean annualized outdoor falls rates were 0.51 and 0.35 for participants with and without knee SxOA, respectively. The corresponding indoor falls rates were 0.55 and 0.40. Compared with people without knee SxOA, those with knee SxOA had a 30% increased risk of outdoor falls (RR=1.3, 95% CI:1.0-1.7), and a 20% increased risk for indoor falls (RR=1.2, 95% CI:0.9-1.5), adjusting for confounders. The rate ratio for the effect of knee SxOA on risk of all falls was 1.2 (95% CI:1.0-1.5). Having knee SxOA increased the risk of falls, similarly for outdoor and indoor falls.

### PHYSICAL FUNCTION LIMITATIONS AMONG OLDER ADULTS WITH PREDIABETES

P.G. Lee[1,2], C. Cigolle[1,2,3], W.H. Herman[1], Y. Lee[1], C. Blaum[1,2], *1. Internal medicine, University of Michigan, Ann Arbor, Michigan, 2. VA Healthcare System GRECC, Ann Arbor, Michigan, 3. University of Michigan Department of Family Medicine, Ann Arbor, Michigan*

Older adults with diabetes are at increased risk for functional limitations compared to those without diabetes. Prediabetes is prevalent among older adults; its association with functional limitations is unknown. We hypothesized that older adults with prediabetes are at increased risk for functional limitations. We analyzed the 2006 wave of the Health and Retirement Study, a longitudinal, nationally-representative survey of adults aged ≥53 years. Hemoglobin A1C was measured from blood samples. We considered respondents with A1C 5.7-6.4% and without self-reported diabetes to have prediabetes. Physical function measures included activities of daily living (ADLs), instrumental activities of living (IADLs), upper body function (lift 10lb, pick up dime, reach/extend arms), and lower body function (walk several blocks, climb stairs, stoop /crouch/ kneel). Logistic regression analyses were performed to compare functional limitations of respondents with prediabetes and without diabetes. Twenty-eight percent of the respondents had prediabetes, representing 21 million older adults. The proportions of respondents with prediabetes with limitations in ADLs, IADLs, upper body function, lower body function, and either upper/ lower body function were 14%, 12%, 30%, 53%, and 57%, respectively. Compared to respondents without diabetes, the unadjusted odds ratio of respondents with prediabetes having upper/lower body function limitations was 1.38 (p<0.001), and 1.15 (p=0.08) after adjusting for demographic variables. Our study found that functional limitations are prevalent among older adults with prediabetes. Functional limitations among older adults with prediabetes have implications for physical activity programs whose aim is to delay the onset of diabetes.

### THE ASSOCIATION BETWEEN MIDLIFE BODY MASS INDEX AND BRAIN VOLUME IN LATE LIFE: AGE GENE/ENVIRONMENT SUSCEPTIBILITY - REYKJAVIK STUDY

M. Chang[1], J. Saczynski[2], S. Sigurdsson[3], V. Gudnason[3,4], T.B. Harris[5], L.J. Launer[5], P.V. Jonsson[1,4], *1. Landspitali University Hospital, Reykjavik, Iceland, 2. University of Massachusetts Medical School, Worcester, Massachusetts, 3. Icelandic Heart Association, Kopavogur, Iceland, 4. University of Iceland, Reykjavik, Iceland, 5. National Institute on Aging, Bethesda, Maryland*

Background: High body mass index (BMI) in midlife is a risk factor for dementia, and total brain volume is associated with dementia risk. However, little is known about the association between midlife BMI and late-life brain volume. We examined an association between midlife BMI and late-life brain volume. Methods: A population based cohort of men and women (born 1907–1935) participated in the Age Gene/Environment Susceptibility - Reykjavik Study. The interval between midlife BMI and late-life cognitive function was 26 years. Midlife BMI was categorized as 1) normal (BMI 18.5 to 24.9; 56.9%), 2) overweight (BMI 25 to 29.9; 34.0%), and 3) obese (BMI 30 or more; 9.1%). Main outcome measure was a total brain volume (TBV, sum of gray matter, white matter, and white matter lesion) assessed using magnetic resonance imaging (MRI). Results: Total population is 4552 participants (women = 58%, dementia = 4.4%), and analyses are based on 4354 subjects after excluding individuals with dementia. Compared to the normal BMI group, overweight and obese group had higher TBV (overweight: $\beta$ = 3.15, not significant, obese: $\beta$ = 10.78, $p < 0.05$) after controlling for demographic, behavioral and cardiovascular factors, head size, physical activity, and apolipoprotein E genotype. Conclusion: Being overweight or obese in midlife is associated with higher total brain volume 26 years later. Further research needs to examine this association by different area and type of brain tissue.

### CHRONIC MUSCULOSKELETAL PAIN AND SLEEP PROBLEMS IN THE OLDER POPULATION

Q. Chen[1], L. Hayman[1], R.H. Shmerling[2], J.F. Bean[3], S.G. Leveille[1,2], *1. University of Massachusetts Boston, Boston, Massachusetts, 2. Beth Israel Deaconess Medical Center, Boston, Massachusetts, 3. Spaulding Cambridge Rehabilitation Outpatient Center, Boston, Massachusetts*

Although chronic pain and sleep difficulty are common problems affecting older adults, the relationship between pain and sleep is poorly understood. We evaluated pain severity and location in relation to sleep problems in 765 participants aged >64y from the population-based MOBILIZE Boston Study. Pain severity was measured using the Brief Pain Inventory(BPI) severity subscale. Pain location was grouped according to no pain, single site, >2 sites, and widespread pain (upper and lower extremities and back pain). We measured 3 aspects of sleep difficulty using items from the CESD (trouble getting to sleep, sleep more than usual, and restless sleep). At the baseline interview, prevalence of trouble getting to sleep according to BPI severity was 17.8%, 19.7%, 32.0%, and 37.0% for the lowest to highest pain severity quartiles, respectively. Similar relationships between pain and sleep were observed across sleep measures according to pain severity and location. In multivariable logistic regression models, chronic pain was associated with trouble sleeping (≥1d/week) (widespread pain, OR=2.55, 95% CI, 1.43-4.54; multisite pain OR=2.38, 95% CI, 1.48-3.83; and single site pain, OR=1.77, 95%CI, 1.10-2.87, each compared with no pain). Similar associations were observed across each sleep measures. With specific musculoskeletal sites alone or in combination with other pain sites, only modest associations were observed with sleep problems. In conclusion, widespread or other multisite pain and moderate to severe pain are strongly associated with sleep difficulty in older adults. Further research is needed to better understand the burden and consequences of pain-related sleep problems in the older population.

# SESSION 370 (PAPER)

## HOSPITALIZATION AND REHOSPITALIZATION

### DO DEMENTIA PATIENTS ADMITTED TO HOSPITALS WITH HIGHER RATES OF FEEDING TUBE INSERTION HAVE IMPROVED SURVIVAL?

S. Cai[1], P. Gozalo[1], S. Mitchell[2], S. Kuo[1], J. Bynum[3], V. Mor[1], J.M. Teno[1], *1. Brown University, Providence, Rhode Island, 2. Harvard Medical School, Boston, Massachusetts, 3. Dartmouth Medical School, Lebanon, New Hampshire*

Objective: Hospitals vary feeding tubes (FT) insertion rates for nursing home residents (NHR) with dementia. Our goal is to examine whether there is improved survival when a NHR with advance cognitive impairment is admitted to hospitals with sustained higher rate of FT insertions. Methods: Using the 2000-2007 Minimum Data Set and Medicare Claims Files, we characterized the ranking of hospitals' feeding insertion rate and whether the rate was increasing, staying the same, or reducing. A Total of 9 categories were formed by comparing the rates of FT insertion among 1,772 acute care hospitals between 2000-2003 and 2004-2007 time periods. A multivariate random effects model examined the 1- and 6-month mortality, adjusting for NHR characteristics. Results: A total of 56,571 NHR during 2004-2007 (average age 84, 68 % female) were admitted to 1,772 acute care hospitals (16.5% for-profit, 37.5% medical school affiliation). Comparing the two time periods, 20.6 % of the hospitals remained at sustained high level of FT insertion (top tercile) while 18.5% remained at sustained low levels of feeding tube insertion (bottom tercile). After adjusting NHR characteristics, we found no significant association between residents' survival and the level of hospital FT use. For example, the adjusted odds-ratio of 1 month survival was 0.97 (95% CI: 0.906-1.047) for NHR in 365 hospitals with sustained high level of FT insertions compared to NHR in the 328 institutions with a sustained low rate of FT insertions. Conclusion: Demented NHR admitted to hospitals with sustained high FT insertions have no survival advantage.

### PAYMENTS AND MORTALITY IN 30-DAY MEDICARE REHOSPITALIZATIONS TO THE SAME AND TO DIFFERENT HOSPITALS

A. Kind, C. Bartels, M. Mell, M.A. Smith, *University of Wisconsin, Madison, Wisconsin*

Background: About one-quarter of rehospitalized Medicare patients are admitted to hospitals different from their original, and proposed Medicare payment reforms may incentivize this practice further by penalizing facilities with high readmission rates. The impact that rehospitalization to different hospitals has on Medicare payments and patient mortality is unknown. Objective: To determine how rehospitalization to a different hospital impacts 30-day Medicare payments and 30-day patient mortality Sample: 5% random national sample of Medicare beneficiaries with acute-care rehospitalization within 30 days of discharge from the index hospitalization, 2005-2006 (N=74,564). Methods: Quantile (payments) and logistic (mortality) regression multivariate models included index-hospital for-profit status, discharge counts, geographic region, rural-urban commuting area and teaching status; and patient sociodemographics, disabled status and a measure of risk adjustment. Results: 22% (16,622) of the sample was rehospitalized to a different hospital. When compared to those rehospitalized to the same hospital, patients rehospitalized to different hospitals had significantly higher adjusted 30-day total payments (median additional $1398/patient [95% confidence interval = $1,162 – $1,634, p-value <0.001]) but no significant differences in 30-day mortality (adjusted risk ratio = 1.01 [0.96—1.06, p-value = 0.650]). Conclusions: Rehospitalizations to different hospital facilities are common, and are associated with significantly increased total 30-day payments without improved mortality. These factors should be carefully weighed in the creation and monitoring of Medicare rehospitalization payment reforms. We estimate that rehospitalization to different hospitals accounted for $458.7 million in excess Medicare payments over 2005-2006.

### INSTITUTIONAL CHARACTERISTICS OF AMERICAN NICHE HOSPITALS

M. Rosenberg, M. Boltz, N. Shabbat, E. Capezuti, *Hartford Institute for Geriatric Nursing, New York University College of Nursing, New York, New York*

NICHE (Nurses Improving Care for Healthsystem Elders) is a national program that provides the structure to develop, implement, and sustain system wide improvement in hospital care of older patients. This descriptive study compared the institutional characteristics of US NICHE hospitals (n=197) to all other US medical-surgical hospitals (n=5,520) using the 2008 American Hospital Association's (AHA) Annual Survey. NICHE hospitals are more likely to be a member of a non-profit ($p \leq 0.001$), larger (mean bed size 418.2 vs. 144.5; $p \leq 0.001$), teaching facility ($p \leq 0.01$) that is part of a network ($p \leq 0.001$), provides hospice/palliative care ($p \leq 0.001$), and have a higher RN to bed ratio ($p = 0.04$). The proportion of Medicare patients to all adult patients did not differ between the groups. Secondly, we examined institutional characteristics (AHA data) and programmatic initiatives (from the NICHE Recommitment Survey) by level of NICHE implementation: low (39.1%), some (28.6%), significant (15.8%), and high (16.5%). The highest level of NICHE was significantly ($p \leq 0.05$) associated with a higher RN to bed ratio, higher mean number of nursing assistants as well as more likely to have a geriatric service line, to provide a comprehensive geriatric assessment service, and to have attained Magnet recognition. Given that NICHE hospitals, especially those with the highest dose of NICHE implementation, are larger institutions, innovative approaches are needed to implement geriatric programs in small hospitals with fewer resources.

### REDUCING GERIATRIC REHOSPITALIZATIONS: A SUCCESSFUL CLINICAL MODEL

D. Oates, D. Kornetsky, L.B. Caruso, E. Hardt, V. Parker, *Boston University, Boston, Massachusetts*

Background: The rehospitalization of an older adult is often costly and may be an indicator of less than adequate hospital and post-discharge care. According to a Medicare Payment Advisory Commission (MedPAC) study, 75% of all 30 day rehospitalizations in 2005 were deemed potentially preventable. Boston University Geriatric Services (BUGS), an urban, academic geriatric primary care practice, which cares for medically complex, home bound, predominantly nursing home certifiable elders, employs many best practices suggested by MedPAC for reducing rehospitalizations. Methods: We conducted a retrospective cohort analysis from 2/1/06 through 12/31/08, comparing rehospitalization rates for patients of the BUGS practice 65 years old and older discharged from our dedicated inpatient geriatric service with those discharged from general medicine ward teams at our institution. We also compared the rehospitalization rates for our dedicated inpatient service with those for patients 65 years old and older discharged from other medical teams on the inpatient medical service at BMC. Results: The 30 day readmission rate for our geriatric practice's patients discharged from our dedicated, integrated inpatient service was 20.5%, compared with 22.4% for our geriatric patients discharged from non-geriatric general medical services ($p<0.0001$) and 15.35% for healthier older adults not under geriatrics care discharged from general medical services at BMC. Conclusion: A multidisciplinary, integrated geriatric practice that incorporates many of the best practices outlined by MedPAC, such as medication reconciliation, provider communication at discharge and sharing of best practices, significantly reduces 30 day rehospitalizations amongst a frail, vulnerable, geriatric population.

# SESSION 375 (POSTER)

## ISSUES IN NEUROSCIENCE AND MENTAL HEALTH

### EFFECTS OF DONEPEZIL 23 MG EXTENDED RELEASE ON SIB DOMAINS IN PATIENTS WITH MODERATE-TO-SEVERE AD

M.L. Moline[1], J. Yardley[2], Q. Wang[1], H. Zou[1], E. Brand-Schieber[1], T. Hsu[1], A. Satlin[1], *1. Eisai Inc, Woodcliff Lake, New Jersey, 2. Eisai Ltd, Hatfield, United Kingdom*

To investigate whether a higher dose of donepezil might confer cognitive benefit in patients with moderate-to-severe Alzheimer's disease (AD), patients with Mini–Mental State Exam (MMSE) score 0-20 treated ≥3 months with donepezil 10 mg were enrolled in a 24-week, randomized, double-blind, parallel-group trial. Randomized patients (n=1467) were assigned 2:1 to receive once daily donepezil 23mg extended-release tablets (23mg) or to continue on 10mg/d immediate-release tablets (10mg). The Severe Impairment Battery (SIB; cognition) and Clinician's Interview-Based Impression of Change plus caregiver input (CIBIC+; global function) were co-primary efficacy variables. At endpoint (week 24), the total SIB score showed statistically significant benefit favoring 23mg over continuing 10mg treatment (last observation carried forward [LOCF] treatment difference=2.2 points; P=.0001). For the CIBIC+, the overall change treatment difference at week 24 was not significant (0.06; P=.1789). To further characterize the significant incremental improvement of 23mg on cognition, post hoc analysis was performed on the 9 SIB domains: Language, Construction, Visuospatial Ability, Memory, Praxis, Attention, Orientation, Social Interaction, and Orientation to Name. The largest effect size was for Language (46 of 100 total points). No treatment difference was seen for Orientation, Orientation to Name, or Social Interaction, which comprise only a small number of items. Overall, treatment effect sizes for 23mg superiority (LOCF) were comparable among the domains that comprised the majority of items on the scale. These results suggest that improvement with donepezil 23mg treatment on the SIB reflects effects on a broad range of cognitive functions.

### COGNITION, EVEN IN THE NORMAL RANGE, PREDICTS FUNCTIONAL DECLINE

P. St. John[1], S. Tyas[2], P. Montgomery[1], *1. University of Manitoba, Winnipeg, Manitoba, Canada, 2. Dept. of Health Studies and Gerontology, Univeristy of Waterloo, Waterloo, Ontario, Canada*

Background: Cognitive impairment predicts functional decline. It is less clear if cognitive variation in the normal range predicts functional decline. Objective: To determine if there is a gradient effect of the Mini-mental State Examination (MMSE) score in predicting a decline in functional status over a five-year period. Population: Population-based sample of 1751 community-dwelling adults 65+ years. The sample was followed five years later; 1028 participants were still in the community and had no missing data. Measurements: Age, gender, education, living arrangements, the number of comorbid conditions, and marital status were all self-reported. Functional status was measured using the Older Americans Resource Survey (OARS), which was scored from 0 to 28. The decline was calculated in those who survived and were living in the community at time 2, and who had available data. Results: The MMSE score at time 1 was a strong predictor of functional decline five years later. This effect was a gradient seen across the entire score, extending into the normal range. There was no apparent threshold. In a linear regression model, the beta coefficient was -0.21 (p<0.001). This effect persisted in multivariate models adjusted for age, gender, education, living arrangement and the number of comorbid conditions. Conclusions: The normal range of the MMSE strongly predicts functional decline, and this effect is a gradient effect. These results support the hypothesis that cognition is a continuum.

### PREDICTORS OF MEMORY CHANGE AND STABILITY AMONG SEXAGENARIANS, OCTOGENARIANS, AND CENTENARIANS

G.D. Da Rosa[1], J. Margrett[1], P. Martin[1], L. Poon[2], *1. Human Development and Family Studies, Iowa State University, Ames, Iowa, 2. University of Georgia, Athens, Georgia*

This study investigates predictors of change in memory performance among older adults from the Georgia Centenarian Study. Participants included community-dwelling sexagenarians (N = 70), octogenarians (N = 63), and centenarians (N = 68) who were assessed during Phases 1 and 2. The test-retest period was approximately 20 months for centenarians and 60 months for sexagenarians and octogenarians. Participants completed the Expanded Paired Associate Test (EPAT; Trahan et al., 1989) and two summary scores reflecting difficulty were created (i.e., easy, hard). Individuals' standard error of measurement was used as an index to assess the degree of reliable change in memory performance over time (i.e., decline vs. stable/improve). Next, we investigated the influence of several baseline predictors including demographics (age, sex, ethnicity, education, and occupation), overall physical health rating, activities of daily living (ADL), personality (Extraversion and Neuroticism), fatigue, and depression on memory change status for each age group separately. Logistic regression analyses indicated that sex (B=-4.53, *p*=.049) and ADL ratings (B=1.73, *p*=.033) were predictive of easy EPAT change status for centenarians; men were more likely to remain stable/improve as were centenarians with higher ADL ratings at baseline. Women and highly educated centenarians were more likely to decline on the EPAT hard scores (B=-6.99, *p*=.037; B=-1.01, *p*=.05), respectively. We also found a statistical trend related to depressive symptoms and anxiety scores (B=-.347, *p*=.054; B=-1.72, *p*=.058), respectively, suggesting that centenarians with greater depressive symptoms and anxiety scores were more likely to decline on the hard EPAT task.

### EXPERIENCES DURING TRANSITIONS CAUSED BY DEMENTIA

T. Xu[1], K. Lechelt[3], L.J. Garcia[4], F. Molnar[5], W. Dalziel[5], J. Silvius[2], J.A. Triscott[3], N. Drummond[1], *1. University of Calgary, Calgary, Alberta, Canada, 2. Alberta Health Services, Calgary, Alberta, Canada, 3. Alberta Health Services, Edmonton, Alberta, Canada, 4. University of Ottawa, Ottawa, Ontario, Canada, 5. Ottawa Hospital, Ottawa, Ontario, Canada*

Decision-makers from health authorities in Canada have teamed up with researchers and clinicians to conduct a multi-centered, three-year cohort study into care for dementia, and patient and caregiver's experiences during periods of significant transition. Based on a literature review and discussion, the essential, interrelated properties of transition experiences have been identified. These include awareness, engagement, change and difference, time span, critical events, service demand, availability and utilization, expectations, sense of hazard, experience and knowledge, and environments. In addition, nine common, significant, transitional events have been identified for specific investigation: initial problem identification, first external support requirement for IADL or ADL, driving cessation, loss of financial autonomy, acute hospital admission, relocation to new community-based accommodation, entry to long term care, and end of life care. This is the first study to examine the experience, management and outcomes of transitions relating to dementia 'as they happen', emphasizing the perspectives of individuals living with dementia, whether as patients or caregivers. Patient and caregiver dyads are contacted by telephone every month to identify the presence of one of the nominated transitions, upon which an interview is immediately carried out to investigate participants' experiences and attitudes towards it. In addition, every six months a cycle of routine data collection investigates cognitive, physical, emotional and social functioning. This presentation will describe early data from the cohort - current accrual at 38 dyads with patient's mean age at 78 yrs and 37.5% male. Methodological aspects of the work will be discussed as well.

## TRANSIENT DELIRIUM AND FUNCTIONAL DECLINE IN ACUTELY ILL HOSPITALIZED ELDERS

J. Gotelli, V.J. Neelon, J. Carlson, *University of North Carolina, Chapel Hill, North Carolina*

Purpose: To compare functional status at discharge between elderly patients who developed transient (resolved by discharge) delirium during hospitalization to those who were never delirious, and to investigate the impact of components of delirium on discharge function. Methods: Seventy-nine hospitalized elders were grouped by delirium status measured by the NEECHAM confusion scale (range 0-30). Functional status at discharge (Katz ADL scale) adjusted for baseline functional status (OARS IADL and PADL) and illness severity (APACHE II) was compared between 26 patients who were delirious (NEECHAM <25) and 53 who were not delirious. We looked at multivariate associations between patient characteristics and Katz scores at discharge. Findings: Those who experienced transient delirium showed: 1) more functional impairment at discharge (Katz score 8.18 vs. 10.67 p=0.01); 2) longer hospital stays (10.23 vs. 4.63 days p<0.01); 3) higher rates of chronic cognitive impairment (9/26 patients vs. 6/53 patients p=0.02); 4) higher disease burden scores (14.5 vs. 12.15 p=0.04); 5) lower pre-admission IADL scores (8.96 vs. 11.71 p=0.02). Fully adjusted multivariate associations with Katz scores (dependent variable) were significant for the information processing components of the NEECHAM (subscale 1) (coefficient 0.63087 t score 2.64 p=0.01). Discussion: Even transient delirium had a negative impact on functional status in this sample. It is not clear how impaired IADL function before admission and transient delirium interact to worsen ADL function at discharge. It is possible that delirium, through an abrupt insult on the neural networks of executive control, imparts a lasting effect on function.

## THE LIVING WITH MEMORY LOSS PROGRAM: A STUDY OF THE EFFECTIVENESS OF A SUPPORT SERVICES REFERRAL PROGRAM FOR INFORMAL DEMENTIA CAREGIVERS

S. Bass[2], F. Moise[1,2], T. Huh[2], K. McConnell[2], J. Timbs[2], H. Doneux[3], E. Edgerly[2], K. Skultety[2], *1. Psychology, Pacific Graduate School of Psychology at Palo Alto University, Palo Alto, California, 2. Palo Alto Health Care VA System, Palo Alto, California, 3. Alzheimer's Association, Palo Alto, California*

Introduction: This study examined the effectiveness of, a community referral program, in partnership with a VA Healthcare System to impact caregivers' perceived knowledge about dementia and community resources, use of resources and distress. Methods: Out of 33 caregivers who enrolled in the program, 24 participants (15 spouses, 9 children) completed pre and post evaluations. Mean age of caregivers was 65 (SD=14). Caregivers were assessed by phone before and after program enrollment. Level of knowledge, willingness to participate in the program and level of burden and satisfaction were evaluated using questionnaires developed for the study and The Zarit-Burden Scale (Zarit, 1995). Results: Caregivers demonstrated significant increase in knowledge about community program services, (Pre Mean= 1.97; Post Mean=4.97, t (28), p<. 001) and willingness to recommend others to the program (Pre Mean=3.10; Post Mean= 3.72, t (28), p= <.01). However, although there was no significant decrease in the level of burden (Pre Mean=12.62; Post Mean= 12.34, t (28) p <.77), majority of caregivers reported feeling less stressed (80%) and isolated (70%), and were more likely to use community services (88%). Conclusion: Partnerships between community programs and health care systems increase access to needed support services. Results suggest that such access may provide several benefits to informal caregivers including awareness and willingness to use community based services, which may lead to decrease in subjective stress and sense of isolation.

## NEUROPSYCHOLOGICAL TEST PERFORMANCE AND INFORMANT REPORTS IN CLINICIANS' DIAGNOSIS OF COGNITIVE FUNCTIONING ACROSS CULTURAL GROUPS

P. Sayegh[1], B.G. Knight[2], *1. Department of Psychology, University of Southern California, Los Angeles, California, 2. University of Southern California, Los Angeles, California*

We used a sample of 145 Hispanic and 527 non-Hispanic White patients evaluated at the University of Southern California Alzheimer's Disease Research Center to test whether neuropsychological test performance or informant reports more strongly predicted clinicians' diagnosis of normal cognition or dementia across patients from two ethnic groups evaluated at a memory disorders clinic. Informant reports were measured using scales that assessed the patients' neuropsychiatric symptoms and functional abilities (i.e. instrumental activities of daily living). When controlling for age, gender, and education, results revealed that better neuropsychological test performance was associated with a diagnosis of normal cognitive functioning by clinicians among all patients. However, this association was stronger among non-Hispanic White patients as compared to Hispanic patients. The weight of informant reports in clinicians' diagnoses did not differ significantly across these two ethnic groups. These findings suggest that clinicians may weigh neuropsychological test performance to a lesser degree among Hispanic patients when diagnosing cognitive functioning due to language and education level issues associated with these tests and that they may weigh informant reports to a similar degree across groups.

## TRANSLATING RESEARCH INTO PRACTICE: A THEORY SYNTHESIS APPROACH USING *REACH* (RESOURCES FOR ENHANCING ALZHEIMER'S CAREGIVERS HEALTH) AND *WARP* (WHALL AGGRESSIVE RISK PROFILE)

V.H. Tyrrell, *Oakland University, Rochester, Michigan*

With an aging US population, more people will develop dementia and these increased health care consumer-numbers will present a significant challenge to health care systems and to provider-capacity. People with dementia (PWD) often demonstrate anxiety and aggressive behaviors when demands exceed their understanding (e.g., during daily care); such behaviors negatively impact the caregiver and the PWD. The author reviewed the existing literature for interventions designed to ameliorate anxiety and aggression in PWD. The first documented usage of the term dementia is discussed (Pinel, 1806) along with grand, middle-range and practice-level nursing theories, including Nightingale's (adding her own family care-giving experiences), the Progressively Lowered Stress Threshold (PLST) (Hall and Buckwalter, 1987), and the Need-driven Dementia-compromised Behavior (NDB) (Algase et al., 1996) models. Using the theory synthesis method of Walker and Avant (2005), two models, REACH (Resources for Enhancing Alzheimer's Caregiver Health; Burgio et al., 2009) and WARP (Whall Aggressive Risk Profile; Whall, 2009) were synthesized while integrating two nursing models, the Preferred Implicit Memory (PIM) (Harrison, Son, Kim and Whall, 2007) and Multi-Sensory Environments (MSE) (Riley-Doucet, 2009), with a goal to better delineate which PWD and what nursing intervention(s) are more likely to relieve caregiver burden and lessen aggression in people with dementia. Future adaptation of REACH and WARP (using PIM and MSE) into the language of NIC (Nursing Interventions Classification; Bulechek, Butcher and Dochterman, 2008) and NOC (Nursing Outcomes Classification; Moorhead, Johnson, Maas, and Swanson, 2008) is suggested to further facilitate research translation into practice to promote positive care-recipient/caregiver outcomes.

### SCORING INCONSISTENCIES IN IMPLEMENTING THE STRUCTURED DELIRIUM ASSESSMENT IN A MULTICENTER RANDOMIZED CLINICAL TRIAL

M.C. Okafor[1], A.L. Gruber-Baldini[1], J.P. Brown[1], E. Barr[1], E. Marcantonio[2], *1. University of Maryland Baltimore, Baltimore, MD, 2. Division of General Medicine and Primary Care, Beth Israel Deaconess Medical Center, Brookline, Massachusetts*

Delirium, a clinically important condition, is often missed in routine care and requires standard assessment tools. The Structured Delirium Assessment (SDA), a 5-part tool for delirium assessment, uses responses from the Mini-Mental State Examination (MMSE), Digit Span, and Albert Delirium Symptom Interview (DSI), to score the Memorial Delirium Assessment Scale (MDAS) and Confusion Assessment Method Diagnostic Algorithm (CAMDA). The SDA has been used in single-site studies; here we present its first use in a multi-site study. We identified SDA scoring inconsistencies in a multicenter randomized clinical trial, the Transfusion Trigger Trial for Functional Outcomes in Cardiovascular Patients Undergoing Surgical Hip Fracture Repair, Cognitive Ancillary Study (FOCUS-CAS). FOCUS-CAS examined blood transfusion strategy effects on delirium(n=174 patients). Staff from 13 FOCUS-CAS clinical sites underwent initial training; their performance was periodically assessed during data collection. The SDA was administered to patients multiple times: pre-randomization, post-randomization/in-hospital and 31-45 days post-discharge; 543 SDAs were collected. Scoring inconsistencies pertaining to incorrect summing/not following instructions were observed across all 5 parts of the SDA. Such inconsistencies were most common for DSI item 22a-attentional deficits (30.8%) and MDAS item 5-maintain/shift attention (26.7%). The Digit Span and DSI-consciousness sub-sections had minimal inconsistencies (<1%). Findings suggest that scoring inconsistencies may be reduced by providing scoring sheets for items requiring cross-scale summing and through enhanced instructions on using DSI items to score MDAS. Integrating questions verifiable through cross-checks may assist in assuring data quality, particularly in multi-site studies where onsite performance evaluations may be infrequent.

### INFLUENTIAL VARIABLES ON EGO-INTEGRITY/ DEPRESSION OF THE ELDERLY

K. Choi[1], S. Chang[2], E. Kong[3], C. Kim[4], H. Kim[5], M. Cho[6], *1. Nursing, Chung-Ang University, Seoul, Republic of Korea, 2. Korea University, Seoul, Republic of Korea, 3. Jesus University, Jeonju, Republic of Korea, 4. Hallym University, Chuncheon, Republic of Korea, 5. Kongju National University, Kongju, Republic of Korea, 6. Dongeui University, Pusan, Republic of Korea*

Purpose : Erikson described the task of old age as balancing the search for integrity and wholeness with a sense of despair. In this study we explored the influencing variables on the ego-integrity and depression in late adulthood in Korean society. This study aimed to predict achieving integrity and falling into depression of the elderly in late adulthood. Methods : Data were collected from June to December, 2005. The subjects were 417 elderly living in community settings in Republic of Korea. Through upper 25% groups and lower 25% groups by score of ego-integrity/ depression scale, high and low rank ego-integrity groups and high and low rank depression group were identified. Eleven predictors (self esteem, spirituality, life satisfaction, social support, and activity as grandparent, parent, spouse, a friend, a relative, a member of groups, a person with a religion) were analyzed by logistic regression. Results : Major predicting factors of ego-integrity are self-esteem (P=.003), and activity as a member of groups (P=.01). On the other hand, major predicting factors of depression are self-esteem (P=0.007), and activity as a friend (P=0.04). Conclusion : Self esteem which might be influenced by reinterpretation of events and situations throughout the life span is the major factor in both achieving ego-integrity/ falling into depression. This study could contribute to identifying the major areas of nursing interventions in achieving ego-integrity/ falling into depression in Korean society. Key words: Ego-integrity, Depression, The elderly

### IMPACT OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE ON ANTIDEPRESSANT UTILIZATION IN DEPRESSED ELDERLY

J. Qian[1], L. Simoni-Wastila[1], I.H. Zuckerman[1], H. Yang[1], G.B. Rattinger[1], S.K. Dutcher[1], S.W. Lehmann[2], B. Stuart[1], *1. Peter Lamy Center on Drug Therapy and Aging, University of Maryland, Baltimore, Baltimore, Maryland, 2. Johns Hopkins University, Baltimore, Maryland*

Background: Chronic obstructive pulmonary disease (COPD) and depression are highly comorbid in older adults. Although antidepressant medications can improve clinical outcomes in COPD patients, little research has evaluated the influence of comorbid COPD on antidepressant utilization. Objectives: To assess the impact of comorbid COPD on antidepressant use and duration of treatment (DOT) in depressed Medicare eligibles. Methods: Using MarketScan Medicare Coordination of Benefits data from 2006-2007, we identified Medicare beneficiaries age ≥ 65 years diagnosed with major depression (n=27,066). Use of any antidepressant was defined by filling ≥ 1 antidepressant prescriptions during the study period. DOT was defined by days between receipt of first and last antidepressant over the two-year period. We used multivariate logistic regression to estimate antidepressant use and generalized linear model to estimate antidepressant DOT. Results: Of our depressed cohort, 16.8% had COPD. Relative to depressed-only beneficiaries, those with comorbid COPD had more comorbidities (7.6 vs. 5.5), longer hospitalization days (12.2 vs. 5.4), and more medications (11.0 vs. 8.0), including antidepressants (82.9% vs. 78.9%) (all p<0.0001). Average antidepressant DOT was shorter for depressed patients with COPD than those without (529 vs. 556 days, p<0.0001). Multivariate analyses revealed that individuals with comorbid COPD had 4% lower antidepressant use (p<0.0001) and 4% shorter DOT (p<0.0001). Conclusions: Findings suggest that comorbid COPD status affects depression treatment in the elderly by reducing antidepressant use and duration. Future research is needed to address the impact of depression management in clinical outcomes of older adults with COPD.

### THE BURDEN OF DEPRESSION ON THE QUALITY OF LIFE AMONG OLDER ADULTS WITH MEDICARE SUPPLEMENT INSURANCE

R.J. Ozminkowski[4], K. Hawkins[1], M. Bai[1], S. Musich[1], J. Unutzer[2], R.J. Migliori[4], C. Yeh[3], C. Hommer[4], *1. Ingenix, Ann Arbor, Michigan, 2. University of Washington Medical Center, Seattle, Washington, 3. AARP Services Inc., Washington, District of Columbia, 4. UnitedHealth Group Alliances, Ann Arbor, Michigan*

Objective: Estimate the burden of depression and comorbidities on quality of life (QoL) among members age 65 and older with AARP® Medicare Supplement (i.e., Medigap) Insurance underwritten by UnitedHealthcare (or UnitedHealthcare of New York, for residents there.) Study Design: Data were obtained from the Health Update Survey (HUS). The HUS contains questions on demographics, comorbid conditions, and the Veterans RAND 12-item health status instrument, which was derived from the Short Form 12-item instrument (the SF-12). The HUS was mailed to a random sample of 30,000 insureds from 10 states in 2008 and 2009. Survey respondents were divided into those with and without depression. Depression was measured based upon answers to survey questions which indicated problems with depression that occurred either just in the previous 12 months (i.e., “current depression,”) or for at least two years during one’s lifetime (“chronic depression”). Population Studied: Of the 11,867 respondents, 2,283 (19.2%) provided evidence of current depression and 590 (5.0 %) indicated problems with chronic depression. Principle Findings: After adjusting for demographic and health status differences via multiple regression analyses, those with current or chronic depression averaged significantly lower scores on every quality of life dimension. Depression’s largest impacts were on vitality, social functioning, and the ability to fulfill emotional roles. Every comorbidity significantly enhanced depression's negative impact on quality of life in at least one of the quality of life dimensions. Conclusions: Depression significantly reduces quality of life and its impact intensifies when chronic physical comorbidities exist.

### RISK FACTORS ASSOCIATED WITH DEPRESSIVE SYMPTOMS IN OLDER VETERANS IN THE VA HEALTH CARE SYSTEM

J. Park, *School of Social Work, Florida Atlantic University, Boca Raton, Florida*

The cross-sectional study described depressive symptoms in older veterans (≥65 years) with chronic pain and examined potential risk factors associated with depression in this population. A sample of 107 older veteran currently receiving health care services from the Baltimore Veterans Affairs Medical Center was recruited. Self-reported health status, physical disability, race, marital status, and social support were assessed. Descriptive statistics and ordinary least square [OLS] regression with simultaneous data entry were conducted to examine whether risk factors based on the literature review were associated with depression. The overall regression model was significant ($p < .0005$), $N = 107$, $F$ (5, 101), accounting for 28.1% of the variance in the dependent variable by the set of independent variables, R square = .281, Adjusted R square = .245. The study findings indicated that poor health status, being married, lower level of social support, and higher level of physical disability were significantly associated with higher level of depressive symptoms. Although the participants were enrolled in Veteran Health Care programs, there is limited coverage of treatment for their chronic diseases. Limiting such cover¬age could have a detrimental effect on older veterans who need intensive and comprehens¬ive medical services. In order to decrease health care utilization costs through reduction in admissions to hospitals, nursing homes, and other assisted living facilities due to the multiple chronic diseases, more research is needed to investigate the role of formal social support, change Medicare policy, and systematically help older adults to manage chronic disease and improve mental health.

### TRENDS IN DEPRESSIVE SYMPTOMS AND THE DETERMINANTS OF CHANGES AMONG TAIWANESE ELDERLY: A COHORT STUDY BETWEEN 1994-2004

H. Chiu[1], C. Chen[2], J. Mullan[3], D. Griffiths[3], I. Kreis[3], T. Lan[2], *1. Graduate Institute of Healthcare Administration, Kaohsiung Medical University, Kaohsiung, Taiwan, 2. National Health Research Institutes, Miaoli, Taiwan, 3. University of Wollongong, Wollongong, New South Wales, Australia*

This longitudinal study was conducted between 1994 and 2004 based on a community-dwelling elderly cohort in southern Taiwan. This study aims to examine trends in depressive symptoms of elderly people and the determinants associated with the changes, using a ten-year longitudinal data with six waves of cross-sectional data. The Short Psychiatric Evaluation Schedule (SPES) was used for collecting information on depressive symptoms. Socio-demographic factors, socioeconomic factors, living arrangements, health-related behaviors, chronic diseases, and disability were included as the predictors of depression symptoms. The significance of the differences between the trends of depressive symptoms was examined by using the generalized estimating equation (GEE) approach. The study showed great complexity in the development of depressive symptoms. It is worth noting that psychological components of depressive symptoms were more likely to increase over time. Being female, not married, living alone, with low socioeconomic status, negative life style, having chronic diseases, and ADL/IADL disabilities were significant predictors of depressive symptoms. This is the first study that has ever examined depressive symptoms in elderly population over a ten-year time span and found a persistently increasing trend of depressive symptoms. The present findings confirm that depressive symptoms in ageing population are complex and characterized by individual variations in socioeconomic resources, physical health and functioning. It seems that disability is of central significance of late life depression. Effort to slow down the increasing trends of depression in the elderly should target the risk factors associated with chronic diseases, disability, and persistent depressive symptoms.

### MULTIPLE PROGRAMS OF INTERGENERATIONAL REMINISCENCE FOR OLDER ADULTS AND THE YOUNG GENERATION

H. Matsuzawa[1], N. Miyamoto[1], Y. Tsuboyama[1], Y. Kurokawa[2], *1. KEISEIKAI Institute of Gerontology, Tokyo, Japan, 2. Sophia University, Tokyo, Japan*

As Japan faces aging of the population and low birthrates, the traditional extended family is rapidly decreasing with less interaction between older adults and the younger generation. From 2005 to 2009, intergenerational reminiscence programs were executed for the purpose of promoting mental health of elderly people and reducing prejudice against the elderly. Three programs were conducted: (1)Intergenerational reminiscence groups for older adults and the younger generation, (2)Workshops for training facilitators of intergenerational reminiscence programs, (3)Education about aging to university students to counter negative images of elderly people. The effect of each program was examined by questionnaires and interviews. Intergenerational reminiscence groups were held fifteen times in local communities. Through participating in groups and relating their individual experiences, older adults realized the value of their own lives and expressed positive feeling to the young generation. Workshops for training facilitators were held five times. In each session, a lecture by a professional psychologist was given, and participants mutually presented their practices of groups. Specific sessions of the intergenerational groups were recorded on DVD. The edited DVD was used as a tool for the educational programs. More than 320 university students watched the DVD. After watching DVD, they replied to questionnaires and reported their views about aging. Changes in views of aging, increased understanding of the diversity of older adults and recognition of the wisdom of old people were reported by the students.

### SHORT-TERM ANXIETY OUTCOMES AND CORRELATES IN OLDER ADULT CARE MANAGEMENT CLIENTS

A. Simning[1], Y. Conwell[2], *1. University of Rochester School of Medicine and Dentistry, Department of Community and Preventive Medicine, Rochester, New York, 2. University of Rochester School of Medicine and Dentistry, Department of Psychiatry, Rochester, New York*

Background: Although anxiety symptoms are common among older adults receiving in-home care management services, we know little about how anxiety changes following care management intervention. This study aims to characterize the change in anxiety as well as the correlates associated with improving anxiety in care management clients. Methods: The study consists of a stratified sample of clients aged 60 and older receiving in-home care management services from a social services agency; stratification was based on depression scores. The GAD-7 assessed anxiety severity in research interviews performed at baseline and one-month follow-up. Results: The 86 participants had a mean age of 72 years; 77% were female, 69% white, and 69% unmarried. One month following the care management assessment, many clients were less anxious. Of those suffering from at least mild anxiety, 46% improved to a less severe symptom class and 44% remained unchanged. Among all clients, 14% worsened to a more severe anxiety severity class. Clients with any improvement in anxiety symptoms constituted a more functionally impaired and socioeconomically vulnerable group at baseline than those who did not improve. Conclusions: There is modest improvement in anxiety among care management clients one month following an in-home assessment, especially in those who are functionally impaired and socioeconomically disadvantaged. The care management intervention is multifaceted and we do not know which components are most effective in reducing distress. Anxiety did not improve for many clients, however, and further research is necessary to better understand how to improve mental health outcomes in care management clients.

### PHYSICAL PERFORMANCE, EXERCISE, AND MAGNETIC RESONANCE SPECTROSCOPY OF THE MEDIAL TEMPORAL LOBE IN OLDER ADULTS WITH MILD COGNITIVE IMPAIRMENT

E.L. McGough[1], R.G. Logsdon[1], K.E. Weaver[2,3], T.R. Richards[2,3], S.M. McCurry[1], L. Teri[1], *1. School of Nursing, University of Washington, Seattle, Washington, 2. Integrated Brain Imaging Center, University of Washington, Seattle, Washington, 3. Department of Radiology, University of Washington, Seattle, Washington*

BACKGROUND: Older adults with mild cognitive impairment (MCI) have a higher risk for Alzheimer's disease (AD), especially those with lower physical performance and exercise levels. At present, little is known about the neurochemical correlates of MCI and physical performance or MCI and exercise. This study examined associations between physical performance, exercise levels, and MTL metabolites in older adults with MCI. METHODS: The Short Physical Performance Battery (SPPB), minutes of exercise in the past 7 days (self-report), and 1H magnetic resonance spectroscopy (MRS; at 3T) data were collected from 15 individuals with MCI (mean age= 85.4, SD 4.5), during baseline assessments of a larger randomized trial of an exercise intervention. For MRS, short echo acquisitions were collected from a hippocampus voxel and an occipital lobe voxel (control). Absolute concentrations of MTL metabolites (N-acetyl aspartate, creatine, choline, and myoinositol) were quantified. Analyses included Pearson's coefficients for SPPB in relation to MTL metabolites, and an independent t-test (95% CI) to examine differences in MTL metabolites by high vs. low exercise. RESULTS: Correlations between SPPB and MTL metabolites, choline ($r = -0.766$, $p = .001$) and creatine ($r = -0.627$, $p = .016$) were significant after adjusting for age. The mean concentrations of choline ($p=.022$) and myoinositol ($p=.019$) were significantly greater with low exercise. CONCLUSIONS: Poorer physical performance and low exercise were associated with elevated MTL metabolites typically involved in neurodegenerative processes. Further studies are needed to examine the role of MTL metabolites and their response to exercise interventions in individuals with MCI.

## SESSION 380 (SYMPOSIUM)

### MEASURING AND UNDERSTANDING RESERVE AND RESILIANCE

Chair: *T.T. Perls, Medicine & Geriatrics, Boston University School of Medicine, Boston, Massachusetts*
Discussant: *T. Harris, National Institute on Aging, Bethesda, Maryland*

The compression of morbidity and disablity towards the end of life has tremendous implications in terms of effecting healthy aging. Study of these phenomena have been hampered by inconsistent measures. To address measuring issues, the application of Item Response Theory and accurate estimates of latent traits will be discussed. Results from the 20 year longituninal study of ~2,300 60 year old college alumni reveal important associations between obesity, inactivity and smoking and disability. In the 18 year study of 8,600 septuagenarians in the Health and Retirement Study, living longer is associated with surviving to late ages without diseases and disabilities. Persons with higher socioeconomic status are more likely to survive without disease and disability and thus lead both longer lives and longer healthy lives. Similar findings are discussed using data from the Age, Gene/Environment-Reykjavik Study and the Health, Aging, and Body Composition Study. In the New England Centenarian Study, supercentenarians (age 110+) had lower prevalence rates and a higher age of onset for almost all age-associated illnesses reported compared to younger centenarians (age 100-104). Both centenarian groups had a marked delay in disability. With regard specifically to cognitive impairment, epidemiologic evidence suggests that cognitive reserve can be enhanced through life experiences at any age, therefore supporting the idea that non-pharmaceutical interventions might slow or prevent the cognitive effects of aging and dementia. Surviving to very old age is a matter of resilience and reserve earlier in old age.

### MEASURING AND MONITORING TRENDS IN MORBIDITY USING ITEM RESPONSE THEORY (IRT)

J.F. Fries, *Standford University, Palo Alto, California*

Background: Trends in the compression or extension of morbidity are central to the longitudinal study of human aging, yet validity is threatened when outcomes are inconsistently defined and inaccurately measured. Methods: Item Response Theory (IRT) approaches can estimate a latent trait much more accurately than before. We studied 2,327 college alumni annually from age 68 years for 20 years. Results: Disability increased over time for all groups, 200 % as rapidly in the high risk group (HR) as in the low (LR) (0.3 vs 0.6 units) ($p<0.001$). Mortality rates were increased 150 % from 247 to 384 in HR ($p<0.001$). Conclusions: Obesity, inactivity, and smoking are associated with increased disability and mortality in later life. Disability is postponed more than mortality, supporting compression of disability, and by inference, morbidity. Precise definition and measurement of endpoints is essential to strengthen results.

### COGNITIVE RESERVE AND AGING

Y. Stern, *Columbia University, New York, New York*

The concept of reserve emerged from observations of a disjunction between the degree of brain changes or pathology and the clinical manifestation of those changes. Epidemiologic studies indicate that life experiences including educational and occupational exposure and leisure activities are associated with a slower rate of cognitive decline in normal aging and reduced risk of developing dementia. Two types of reserve are possible. Brain reserve applies to anatomic differences in the brain that may allow some individuals to cope better with brain changes. Cognitive reserve postulates that individual differences in the cognitive processes underlying task performance allow some people to cope better than others. Because epidemiologic evidence suggests that cognitive reserve can be enhanced through life experiences at any age, this concept supports the idea that nonpharmaceutical interventions might slow or prevent the cognitive effects of aging and dementia.

### COMPRESSION OF MORBIDITY AND DISABILITY AMONGST CENTENARIANS AND SUPERCENTENARIANS

S.L. Andersen[1], T.T. Perls[1], P. Sebastiani[2], A. Reid[1], M. Frederick[1], L. Feldman[1], *1. Medicine & Geriatrics, Boston University School of Medicine, Boston, Massachusetts, 2. Boston University School of Public Health, Boston, Massachusetts*

Background: Given that they live at the limits of human life span, centenarians and supercentenarians are an important group to study for the phenomenon of compression of disability and morbidity. Methods: We studied 105 supercentenarians (age 110+ years) to determine if our observations of younger centenarians hold true for this group. Results: Supercentenarians had lower prevalence rates and a higher age of onset for almost all age-associated illnesses reported compared to centenarians (age 100-104). Most notably, 28% of supercentenarian had cardiovascular disease with a mean age of onset of 98 compared to 47% of centenarians with a mean age of onset of 88. Comparing ADLs, mean Barthel Index score for supercentenarians dropped below functional independence at age 106 compared to 100 for centenarians indicating a delay of 6 years in the onset of disability in supercentenarians. Conclusion: Among supercentenarians, exceptional longevity is associated with increased health span.

### SURVIVAL, RESILIENCE AND RESERVE IN A NATIONAL POPULATION

E. Crimmins, H. Beltran-Sanchez, J.A. Ailshire*, University Southern California, Los Angeles, California*

Background: We examined subjects in the original AHEAD cohort of the Health and Retirement Study, a representative sample of Americans 70 and over who have now been interviewed 10 times over 18 years. We compare survival, cognitive and physical functioning and indicators of risk by age at death to see how cohorts who die after 100 compare to cohorts who die in their 80s and 90s. Methods: 8,600 people according to the age at death or the potential age at death Results. The age at onset of major disease, risk factors, and functioning loss is related to the age at which people die. Living longer does not mean living sicker longer. Conclusion: Living longer is associated with surviving to late ages without diseases and disabilities. Persons with higher socioeconomic status are more likely to survive without disease and disability and thus lead both longer lives and longer healthy lives.

### RESILIENCE AND RESERVE IN OLD AGE: FIXED OR FLUID?

T. Harris*, National Institute on Aging, Bethesda, Maryland*

Resilience and reserve (RNR) are thought to be critical to maintenance of disability free survival in old age. RNR may be determined by factors including genetics, in utero exposures, social class, optimal health behaviors, health, and personality. In general, RNR reflects what is brought into old age from earlier life. Clinical trials in older persons, even with molecular outcomes, suggest that some of these factors are malleable and that reserve may be added even in the very old. Using data from the Age, Gene/Environment-Reykjavik Study and the Health, Aging, and Body Composition Study, these factors will be highlighted and the discussion augmented with data from clinical trials in older persons.

## SESSION 385 (PAPER)

## RESEARCH METHODS: LONGITUDINAL DATABASES AND TOOL DEVELOPMENT

### DEVELOPMENT AND VALIDATION OF A SHORT FORM OF THE GERIATRIC ANXIETY INVENTORY

G. Byrne[1,3], N.A. Pachana[2]*, 1. School of Medicine, University of Queensland, Brisbane, Queensland, Australia, 2. School of Psychology, University of Queensland, Brisbane, Queensland, Australia, 3. Royal Brisbane & Women's Hospital, Brisbane, Queensland, Australia*

While several instruments now exist to measure anxiety in older people, there is a need for a very brief self-report scale to measure anxiety symptoms in epidemiological surveys and in busy general medical settings. Accordingly, we undertook the development of such a scale, based on our Geriatric Anxiety Inventory (GAI). We developed a 5-item measure, which we have called the Geriatric Anxiety Inventory – Short Form (GAI-SF), using a combination of psychometric and pragmatic considerations. We eschewed the use of somatic items to avoid confounding with the general medical conditions that occur commonly in older people. We retained a dichotomous response scale (Agree/Disagree) to maximize accessibility. We tested the GAI-SF against MINI-V/DSM-IV diagnoses of Generalized Anxiety Disorder using receiver operating characteristic (ROC) analyses in a cross-sectional study among randomly selected, community-residing, older women (N = 284; Mean age 72.2 years). Internal consistency was high (Kuder-Richardson coefficient = 0.81) and concurrent validity against the Spielberger State-Trait Anxiety Inventory was good ($r = 0.48$, $p < 0.001$). We found that the optimal threshold for the detection of GAD in this community sample was a score of three or more out of a possible score of five. At this cut-point, sensitivity was 75%, specificity was 87%, and 86% of participants were correctly classified. The area under the ROC curve was 0.80. GAI-SF score was not related to age, MMSE score, level of education or perceived income adequacy. We recommend the GAI-SF for use as a brief screening instrument for anxiety in older people.

### RACIAL DIFFERENCE IN AGING: THE CASE OF CARDIOVASCULAR DISEASE

A. Chattopadhyay*, University of California at San Francisco, San Francisco, California*

The age pattern of cardiovascular disease (CVD) between the races has implications for studies of racial difference in aging that is not discernable with traditional age adjusted analysis. Using data from NHANES and the CDC WONDER files, this paper shows that racial differences in CVD prevalence and mortality varies markedly by age, with little or no differences among the elderly but the large disparities in younger ages. Black-White differences in age-sex specific prevalence rates were tested using a logistic model which controlled for clinical conditions, socioeconomic status and health care access. Mortality differences were examined using standard demographic methods. CVD prevalence was 2.4 ($p<.01$) times higher in blacks than whites in the 35-44 age group, but the differentials declined in higher age groups until it vanished for those over age 65. Clinical and socioeconomic factors account for some, but not all, of the differences between blacks and whites at each age. A similar age pattern was also seen for CVD mortality. Thirty-five to forty four year old black persons had 2.5 higher mortality compared to whites of the same age-group, where as elderly blacks had only. 9% excess mortality. Over a quarter (26%) of all CVD deaths occur before age 65 among blacks, while only 15% of all such deaths occur among whites. The similarity in the age pattern of disease rates with mortality rates suggests differences in disease severity and provides evidence for the heterogeneity of the aging processes between the races

### MULTIMORBIDITY AND HEALTH OUTCOMES: A REPORT FROM THE HEALTH AND RETIREMENT STUDY

S. Koroukian[1], D.F. Warner[1], C. Owusu[1], C.W. Given[2]*, 1. Epidemiology and Biostatistics, Case Western Reserve University, Cleveland, Ohio, 2. Michigan State University, East Lansing, Michigan*

Introduction: The effects of multimorbidity on health status /decline have not been fully explored. We report our findings on these effects from our analysis of self-reported data from the 2004-2006 Health and Retirement Study. Methods: Multimorbidity was characterized by the occurrence and co-occurrence of comorbidities (COM), functional limitations (FL), and geriatric syndromes (GS). Accordingly, we grouped respondents in the following clinical categories: CC0: none of COM, FL, or GS; CC1: occurrence – but no co-occurrence – of COM, FL, or GS; CC2: co-occurrence of any two of COM, FL, and GS; and CC3: co-occurrence of all three of COM, FL, and GS. Our outcome measures included fair/poor health status and 2-year health decline from excellent, very good, or good to fair/poor health, or decline from fair to poor health. We used multivariable logistic regression analysis to evaluate the association between multimorbidity and each of the outcomes, adjusting for clinical and individual attributes. Results: Our study population included a U.S. representative sample of 13,589 individuals age >= 50 years. Fair/poor health and decline were significantly associated with multimorbidity. Compared to CC0, and respectively for each of fair/poor health and decline, the adjusted odds ratios and 95% confidence Interval were 2.78 (2.14, 3.61) and 2.10(1.54, 2.87) for CC1; 6.25 (4.84, 8.07) and 3.28 (2.42, 4.45) for CC2; and 26.3 (20.3, 34.1) and 5.17 (3.80, 7.03) for CC3. Conclusions: Multimorbidity is strongly and significantly associated with fair/poor health status and decline. These findings carry important implications in clinical practice and outcomes research.

### EFFECTS OF LONGITUDINAL STUDY PARTICIPATION ON PHYSICAL AND COGNITIVE FUNCTION IN OLDER ADULTS

M. Hackney[1], K. Hawley[1], S. Whitbourne[3], L.P. Nadel[1], A. Spiro[3], K. Echt[1,2], *1. Atlanta VA Rehabilitation Research & Development Center of Excellence in Aging Veterans with Vision Loss, Decatur, Georgia, 2. Emory University School of Medicine Division of Geriatric Medicine and Gerontology, Atlanta, Georgia, 3. VAMC Boston, Boston, Massachusetts*

Longitudinal study participants are often rigorously screened at enrollment and may become increasingly select over time, limiting generalizability. The longitudinal VA Normative Aging Study (NAS) began in 1963 with initially healthy men. The study evaluated cross-sectional physical and cognitive performance data collected from a sample of NAS men (n=55; 77±5 years) compared to a sample of older adults (OA; n=40; 74±6 years). Participants completed demographic, quality of life (SF-36), physical function (grip strength, 30-Second Chair Stand, 8 foot Up&Go, gait speed) and cognition measures (Verbal Ability, Memory, Reasoning). NAS participants did not differ in educational level from OAs, but were older, had worse vision, took fewer medications, and more reported good or better health (85.4% vs. 80.0%; p's<0.01). NAS participants did not differ from OA in gait speed, but had greater grip strength (NAS: 46.9±22kg, vs. OA: 35.8±9.1kg), better scores on the Chair Stand (NAS: 12.1±3.3 rises vs. OA: 9.4±3.5 rises) (p's< 0.001), and needed less time to complete the Up&Go (NAS: 7.6±1.7 sec vs. OA: 8.6±2.5 sec; p = 0.015) than OA. NAS also had significantly higher MMSE (NAS: 27.7±1.4 vs. OA: 26.5±2.6) and verbal ability scores (NAS: 34.5±3.5 vs. OA: 30.4±7.9; p< 0.01). NAS participants were significantly older than OA, but demonstrated better physical and cognitive function. Also, better physical performances were associated with higher cognitive performances (r's= 0.24-0.38). Further investigation must determine whether superior NAS performances stem from effects of longitudinal health observation or from protective effects engendered by superior physical health and fitness at enrollment.

## SESSION 390 (SYMPOSIUM)

### THE BERLIN AGING STUDY II (BASE II)

Chair: *E. Steinhagen-Thiessen, Dep. on geriatric research, Charite University Medicine, Berlin, Germany*
Co-Chair: *J. Smith, Macquarie University, Ann Arbor, Michigan*
Discussant: *J.D. Walston, Johns Hopkins Geriatric department, Baltimore, Maryland*

This symposium presents the structure, goals and first results of the Berlin Aging Study II (BASE-II). BASE-II is a collaborative project between the Max-Planck-Institute for Human Development, the Charité Geriatric Department, the Max-Planck-Institute for Molecular Genetics, and the German Socio-Economic Panel Study (SOEP). Our multidisciplinary study is examining 2200 subjects from two age groups (20-30 and 60-70 years) recruited from all over Berlin. BASE-II aims to characterize, compare and follow-up medical, cognitive, neuropsychologic, genetic, social and economic aspects across both age groups, with special emphasis on the elderly. A major goal is the identification of biomarkers that will help to predict diseases at an early stage and to facilitate preventive and/or early therapeutic interventions. To date, 2200 probands were tested for cognitive function, 1300 were interviewed by means of the SOEP protocol, 1330 were assessed by genome-wide screening, and 500 underwent extensive medical and neuropsychologic testing (e.g. detailed medical history and examination, extensive laboratory tests, neuropsychologic assessment, motoric function, gait analysis, electronic tapping, grooved pegboard test, HU-Motion belt, bone density, bioimpedance analyses, vision, hearing, cardiac function). In addition to introducing the structure and selectivity of the BASE-II sample, we present data on factors associated with life satisfaction, the relation between vitamin D levels and frailty syndrome, as well as on the comparison of methods detecting arrhythmic cardiac events and mild cognitive impairment. Furthermore, we present first results from our genome-wide association analyses for which we correlated medical and cognitive phenotypes with known genetic modifiers of dementia and lipid metabolism.

### BASE-II AS A STUDY RELATED TO SOEP (GERMAN SOCIO-ECONOMIC PANEL STUDY)

G.G. Wagner[2], L. Bertram[3], G. Papenberg[2], E. Steinhagen-Thiessen[1], J.K. Wolff[2], U. Lindenberger[2], *1. Dep. on geriatric research, Charite University Medicine, Berlin, Germany, 2. MPI for Human Development, Berlin, Germany, 3. MPI for Molecular Genetics, Berlin, Germany*

It is an almost unique feature of BASE-II that this city-based study is embedded into a nationwide longitudinal study, the German Socio-Economic Panel Study (SOEP). This feature enables to analyze the representativeness of BASE-II in comparison to the random sample of SOEP which is representative for the population in Germany. As SOEP covers more than 10,000 private households with roughly 20,000 adult respondents it includes a sub-sample of about 350 households in Berlin which is large enough to allow comparisons with the participants of BASE-II. We first present analyses of the prepresentativeness of BASE-II compared to Berlin followed by a comparison to the entire population in Germany.

### INSUFFICIENCY AND DEFICIENCY OF VITAMIN D: IMPACT ON THE DEVELOPMENT OF THE FRAILTY SYNDROME IN OLDER ADULTS OF BASE-II

D. Spira, K. Külbel, V. Moskiou, E. Steinhagen, N. El-Zidy-Ibrahim, H.K. Berthold, E. Steinhagen-Thiessen, *Dep. on geriatric research, Charite University Medicine, Berlin, Germany*

The Frailty Syndrome is a multidimensional syndrome characterized by loss of diverse functional abilities and subsequent heightened morbidity and mortality. Vitamin D insufficiency - highly prevalent in older adults - is also associated with several of the conditions that may contribute to the Frailty Syndrome. In a sample of 300 persons aged 60 years or older participating in the Berlin Aging Study Part II we measured levels of 25(OH) Vitamin D3 in conjunction with an extensive assessment of clinical data including laboratory tests, geriatric assessment of physical performance and mental function, bone density and body composition via DEXA scan, as well as estimation of nutritional status and physical activity levels gathered by questionnaire. Of our participants 64% have demonstrated evidence of inadequate vitamin D serum levels (< 50 nmol/l). We will present data suggesting possible pathological mechanisms linking low Vitamin D levels with frail health status.

### BASE-II: STANDARD VERSUS 2-HOUR ELECTROCARDIOGRAPHY FOR PREDICTING ARRHYTHMIAS IN THE ELDERLY

N. El-Zidy-Ibrahim, A. Töpper, K. Scileppi, D. Spira, V. Moskiou, S. Kubenz, W. Haverkamp, E. Steinhagen-Thiessen, *Dep. on geriatric research, Charite University Medicine, Berlin, Germany*

Transient arrhythmia cannot always be detected on a resting electrocardiogram (ECG), for which the established reference examination is the 24-hour ECG. A timesaving diagnostic alternative would be of clinical significance. To determine the comparative sensitivity of the two techniques for the detection of cardiac arrhythmia in asymptomatic patients 300 participants in the Berlin Aging Study II received both a 2-hour and a standard 12-lead resting ECG. Results were evaluated for determination of heart rate variability, rhythm and arrhythmia, ectopic events and conduction disturbances. Evaluation of tracings was performed utilizing computer-assisted algorithmic analysis to search for occult episodic atrial fibrillation and predictive indications of atrial fibrillation. The latter will be evaluated over the next two years. Extending the observational time frame of ECG analysis to 2 hours may afford a sufficient database for computerized algorithms to identify patients at higher risk for arrhythmic or conduction disturbances.

### BASE-II: SENSITIVITY OF SCREENING TESTS TO DETECT MILD COGNITIVE IMPAIRMENT & EARLY DEMENTIA

N. Bucholtz, G. Lämmler, K. Hoffmann, D. Meierkord-Palme, S. Kubenz, E. Steinhagen-Thiessen, *Dep. on geriatric research, Charite University Medicine, Berlin, Germany*

Neuropsychological screening instruments are widely utilized in the identification of patients with dementia. Sensitivity is low, however, for patients with mild cognitive impairment (MCI) or early dementia. One limitation is that test results are interpreted without reference to variables such as age, sex and education. The aim of this study is to examine the potential for enhanced diagnostic accuracy of standard screening tests by the incorporation of these demographic data. Five hundred participants of the BASE-II study were assessed using the standard Mini Mental Status Examination and Clock Completion Test, as well as the German-based DemTect. A diagnosis of MCI or dementia was established according to the criteria contained in the neuropsychological test battery of the Consortium to Establish a Registry for Alzheimer's Disease. Based upon preliminary data we report the effect upon screening instrument accuracy when adjusted for covariates and the implications for clinical practice.

### GENOME-WIDE SCREENING OF THE BASE II POPULATION: FIRST RESULTS

L. Bertram[1], W. Nietfeld[1], S. Li[2], L. Bäckman[4], A. Trovato[3], E. Steinhagen-Thiessen[3], U. Lindenberger[2], *1. Max-Planck Institute for Molecular Genetics, Berlin, Germany, 2. Max-Planck Institute for Human Development, Berlin, Germany, 3. Charite University Medicine, Berlin, Germany, 4. Karolinska Institute, Stockholm, Sweden*

One major aim of the BASE II study is to investigate the impact of genetic factors on cognitive, socio-economic, and medical phenotypes assessed during the examination of study participants. To this end, we have recently completed the genotyping phase of a genome-wide association study (GWAS) using the Affymetrix Human SNP Array 6.0 for a subset of the BASE II participants (n=1,330). This array covers over 1.8 million genetic markers to investigate both single-nucleotide polymorphisms (SNPs) and copy number variants (CNVs). Here, we will present the results of first analyses using the GWAS dataset focusing on genes known to be involved in dementia, memory, and lipid metabolism. These findings will be compared to analyses correlating the same traits with the ε2/3/4 haplotype in the APOE gene, a well-established genetic modifier of cognitive performance and cholesterol homeostasis, and the strongest known risk factor for Alzheimer's disease.

## SESSION 395 (SYMPOSIUM)

### ESPO PRESIDENTIAL SYMPOSIUM: THE STRUGGLE BETWEEN PERSONAL & PROFESSIONAL IDENTITY: TRANSITIONING FROM STUDENT TO EMERGING SCHOLAR AND PROFESSIONAL

Chair: *N. Leland, Community Health Center for Gerontology and Health Care Research, Brown University, Providence, Rhode Island*

The interplay between personal and professional identity is a common concern among Emerging Scholar and Professional Organization (ESPO) members. Last year, ESPO and GSA jointly conducted a survey to identify issues and concerns related to career and family planning among ESPO members. One of the top three concerns identified by survey respondents was their ability to maintain a balance between personal life and career. This struggle for balance between the personal and professional identity incorporates the push and pull of an individual's self-definition, values, roles, routines, and personal and professional expectations. The objective of this ESPO Presidential Symposium is to facilitate a discussion about the struggle for this personal-professional balance, highlighting issues such as: starting a family, parenting, chronic illness/ disability and career development, mentorship, and seeking international job opportunities. This symposium aims to achieve these objectives through facilitated roundtable discussions on these identified topics.

### BALANCING PROFESSIONAL AND PERSONAL IDENTITIES: LGBT PERSPECTIVES

G. Harris, *Fielding Graduate University, Santa Barbara, California*

The proposed discussion will center on issues faced by emerging LGBT scholars and professionals. Specifically, the discussion will focus on the interplay between the personal and professional self, mentors and allies, and bias and discrimination in education, training, and work environments. We will discuss integration of the personal and professional selves, as well as the significance of internally consistent self-concepts in the above-mentioned environments. Particular interest will be on the balance between caring for self and others when working with older adults. Additional topics will include the effects of discrimination in these environments, appropriate ways to deal with discrimination, and the benefits of mentors and allies.

### CAREER DEVELOPMENT AND DISABILITIES

K.J. Johnson, *Gerontology, University of Massachusetts Boston, Boston, Massachusetts*

Striking an equilibrium between work and personal life is an ongoing challenge for most emerging professionals, but for those managing a chronic illness or disability, finding a balance between personal time and professional activities—research, teaching, and professional service—can be particularly daunting. Adding to this challenge is the lack of mentors serving as successful examples of developing and managing a professional identity while living with a disability or illness or while caring for an adult with such a condition. Fortunately, strategies exist that can help, such as prioritizing tasks and adjusting expectations, new technologies, and developing and promoting a focused professional identity. Most importantly, fellow emerging scholars who face similar time constraints and work-life issues surrounding their own or a loved one's disability or illness can bring their difficulties, ideas, and coping strategies to this roundtable discussion.

### CROSSING THE BORDER: CONSIDERATIONS FOR AN INTERNATIONAL CAREER

K. Fitzgerald, *Center for Gerontology, University of Zurich, Zurich, Switzerland*

Does working in Europe sound glamorous? Or working in South America sound challenging? Working abroad can bring about visions of excitement and adventure. Unfortunately if you are considering a job abroad, you must remember reality. There are challenges to adjusting to new cultures, accessibility to family back home, and before all of this, determining whether your degree is recognized and accepted in the country you are considering employment. Searching and applying for jobs abroad can be difficult. You can simplify this process by doing things such as developing your international network. This round table will discuss the questions you must consider as you determine whether you will work abroad, how you will begin searching for a job, and how you will make the move. Although making the decision to work abroad may sound like a daunting task, the rewards gained from working in a foreign country can be extremely worthwhile.

### BALANCING A GERONTOLOGICAL CAREER AND A FAMILY SUCCESSFULLY

C. Brown, *Seasons of Life, LLC, Parker, Colorado*

Gerontologists, either as a student or an emerging professional have concerns of starting a family and balancing a career as indicated by a recent survey conducted by ESPO and GSA. For the majority of respondents without children, career development has an influence on family planning. Many individuals desire to start a family; however, it is perceived that moderate disruption to ones academic or professional development is likely to arise. Respondents, who are parents, are aware that perfect timing to start a family is not likely. However, balancing parenting and a career can be achieved well. This may result in planning a career around a family instead of planning a family around a career. In addition, maintenance between family and a career may be enhanced by employer support through maternity/paternity leave and on-site day care facilities. This discussion will convey strategies to ESPO members for successful career and family management.

### MENTORING AND THE NON-TRADITIONAL STUDENT

W.E. Palmer, *Allied Health Sciences, The University of North Carolina at Chapel Hill, Chapel Hill, North Carolina*

In seeking mentors, non-traditional students and emerging scholars are challenged to get past superficial externals and discover the individual qualities that potential mentors possess. As non-traditional students we are sensitive to our "otherness", often justifiably, but we must beware our preconceived notions of the "type of person" we should seek as a mentor. As an older student I initially sought the advice of the older professors in my program and received excellent mentoring, yet I have also sought out and received excellent mentoring from junior faculty members young enough to be my children. Although my age defined my 'otherness', race, gender, sexual orientation, disability, ethnicity, national origin, or something else, may be your 'otherness'. This roundtable discussion is an opportunity to explore the role of "otherness" in finding and building mentor-mentee relationships.

## SESSION 400 (SYMPOSIUM)

### ACTIVITY ENGAGEMENT IN LATER LIFE: CONCEPTUAL AND MEASUREMENT ADVANCES

Chair: *N. Morrow-Howell, Washington University, St. Louis, Missouri*
Discussant: *M. Pitt-Catsouphes, Sloan Center on Aging & Work, Boston College, Boston, Massachusetts*

Engagement in activity has been central to theoretical discussions and empirical analysis of well-being in later life. Despite its important theoretical role, there has not been attention to the conceptualizing and measuring activity engagement. In general, researchers collect information about what activities older adults engage in and for how much time. They fail to capture more subjective realities of activity participation, like the extent of choice or positive feelings toward the activity. Further, researchers target a single activity, like physical activity, volunteering, or caregiving, ignoring the reality that older adults engage in multiple activities at any one time. In this session, we will present conceptual advances in the study of activity engagement and provide empirical findings to guide these theoretical developments. We will first discuss how to assess the extent to which employees, volunteers, and caregivers perceive choice of activity involvement, the quality of the connection and psychological importance of the activity. Data from a new measurement tool are presented. We then compare two existing measures of employee engagement, including divergence in results that depend on the instrument used. Finally, we will present a rationale and approach to consolidating discrete activity items into two concepts: activity domains and engagement patterns, and data from the HRS are used to demonstrate the utility of these concepts. A discussant will reflect on the contribution of this work toward knowledge development about activity engagement that may be most beneficial for older adults, families, and society.

### ASSESSING INVOLVEMENT VS. ENGAGEMENT IN FOUR ACTIVITIES OF LATER LIFE

J. James, E. Besen, C. Matz-Costa, M. Pitt-Catsouphes, *Boston College, Sloan Center on Aging and Work, Chestnut Hill, Massachusetts*

Previous research assessing the benefits of older adult activities typically asks about involvement, i.e., what activities older adults are doing, and perhaps the level of activity. While valuable, such research tells us little about what the involvement means to participants or how energetic they are about their participation. Although many researchers use the terms involved and engaged interchangeably, we argue that there are important distinctions. Involvement has to do with participation in the activity, whether by choice or by perceived demand, while engagement connotes the quality of the connection or the feelings that occur when someone attaches psychological importance to the activity. A validated measure of work engagement (Schaufeli, et al., 2002) was used to construct measures of engagement with volunteer, caregiving, and educational activities for the Life & Times in an Aging Society Survey. Preliminary analyses reveal that engagement predicts well-being outcomes over and above involvement.

### THE MEASUREMENT OF EMPLOYEE ENGAGEMENT

C. Matz-Costa, J. James, E. Besen, *Boston College, Sloan Center on Aging & Work, Chestnut Hill, Massachusetts*

Employers recognize the importance of efforts to keep employees of all ages engaged in their work. There has, however, been much debate about the measurement of employee engagement. A variety of competing and inconsistent interpretations of engagement have proliferated in the academic and practitioner literatures. As a result, it has been very difficult to form an agreed-upon definition and to synthesize data across studies. As one step toward progress, data were collected using two different measures of engagement (the Utrecht Work Engagement Scale and a vendor-based measure) in the Age & Generations Study (N=1,800). Analyses revealed differences in these measures of engagement by age group, such that, among employees under age 55, engagement increased with age, however among those age 55 or older, the patterns for the two measures diverged. Findings will be discussed in terms of the strengths and weaknesses of each measurement approach.

### CONSOLIDATING ACTIVITY ITEMS INTO ACTIVITY DOMAINS AND ENGAGEMENT PATTERNS

M. Putnam[1], N. Morrow-Howell[2], M. Inoue[3], J.C. Greenfield[4], *1. School of Social Work, Simmons College, Boston, Massachusetts, 2. Washington University in St. Louis, St. Louis, Missouri, 3. Boston College, Boston, Massachusetts, 4. Washington University in St. Louis, St. Louis, Missouri*

Modeling engagement by older adults in multiple activities at one time is stymied by the lack of composite measures. This limits theoretical development and empirical evaluation of predictors (e.g. health, prior engagement) and outcomes (e.g. life satisfaction) of activity participation. We tested two approaches to empirical consolidation of activity measures using the Health and Retirement Study's 2007 Activity Supplement. A variable-centered approach (exploratory factor analysis), identified 7 distinct activity domain factors including household chores, outdoor activities/hobbies, and social/relationship development and maintenance. Using a person-centered approach (latent class analysis), we identified 4 distinct groups across the 7 EFA produced domains. Three groups segmented by activity level across most domains, supporting conceptual distinctions in involvement versus engagement. The fourth group was low on all activities except work suggesting its dominance for some adults in old age. EFA and LCA findings will be discussed regarding their validity and usability as composite measures.

## SESSION 405 (SYMPOSIUM)

### CHANGES OVER TIME IN ASSISTED LIVING SERVICES AND MODELS OF CARE

Chair: *D.L. White, Portland State University, Hillsboro, Oregon*
Discussant: *S. Zimmerman, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina*

When assisted living (AL) residences emerged as a popular form of long-term care for older persons in the late 1980s, they were usually described as operating under a "social model" of care that deliberately sought to distance themselves from the "medical model" associated with nursing homes and hospitals. Over time, however, these distinctions have blurred. The result is a growing recognition of the need for new models of AL that more fully address the complex care needs of aging consumers while continuing to emphasize the core values of AL (e.g., privacy, dignity, choice). The papers in this symposium present research on recent and emerging models of care within AL. Papers address: 1) An overview of state policies is provided, including recent trends in defining and clarifying the use of person-centered and person-directed models of care and the role of nurses, physicians, and hospice care in AL. 2) The growing emphasis on person-directed care in delivery of long-term care services, highlighting research specific to AL. 3) The integrative role of nurses in AL, including care management, staff education, systems development, and interpersonal communication. 4) Implications of a recent national survey of physician involvement in AL residences for new physician roles and models of practice in AL. 5) Resident and family experiences with hospice care within AL residences and ways that hospice fills a gap in AL services, forestalling discharge at the end of life. Individualizing a comprehensive array of support services for AL consumers is a common thread throughout all papers.

### THE STATUS OF PERSON-CENTERED CARE POLICIES AND PRACTICES IN ASSISTED LIVING

K. Love[2], P. Carder[1], *1. Institute on Aging, Portland State University, Portland, Oregon, 2. Center for Excellence in Assisted Living, Falls Church, Virginia*

This paper describes what is currently known about state policies related to person-centered care (PCC) in assisted living (AL) residences. This overview is based on interviews with 38 long-term care experts (including researchers, providers, and policy makers), literature review, and regulatory review. Only a small number of states currently use person-centered care language, though some leaders in the AL industry have begun to incorporate PCC practices. States periodically review and revise their AL regulations, but they need evidence to guide whether and how to make changes, including adopting PCC. Research is an important starting point to inform state policy and practice. This paper suggests topics that still need to be defined and researched, including the effect of PCC practices on quality care and resident satisfaction, work-force development and retention, costs and reimbursement rates, dementia care settings, and the type of AL residence (e.g., small versus large).

### CAREGIVERS USING PERSON-DIRECTED CARE AS A MODEL OF CARE IN ASSISTED LIVING

T. Sharpp, *Betty Irene Moore School of Nursing, University of California, Davis, Sacramento, California*

Assisted Living (AL) was designed to promote autonomy and dignity, ideas of person-directed care (PDC) that put residents' needs and preferences before caregivers' needs to complete tasks. However, little is known about the degree to which caregivers in AL provide PDC. This presentation describes an ethnographic study in one AL community, focusing on ways caregivers used PDC during practice and how residents with dementia responded. Data collection included participant observation, interviews, focus groups, and chart reviews. Analysis was aided by Atlas Ti software. Each caregiver interacted in ways that were sometimes person-directed and sometimes were not. In person-directed interactions, caregivers demonstrated advocacy, affection, attachment, and support for resident autonomy. The trend was for PDC to result in positive resident responses. Because caregivers have tendencies to interact in both person-directed and more staff-centered ways, new models of care must include systems that will support person-directed care as the predominant practice.

### MOVING TO AN INTEGRATIVE MODEL OF RESIDENT CARE: THE EMERGING ROLE OF NURSING

C. McDaniel, *Oregon Health & Science University, Portland, Oregon*

Many older adults living in assisted living (AL) settings have complex social, psychological, physical, and health needs that have not adequately been addressed by early models of AL. Recent research focused on Oregon AL nurses indicates that nursing in AL is an area of expert practice similar to the role of nurses in public health. Four domains of AL practice were identified: 1) Care and clinical manager with expert gerontological nursing knowledge and the ability to teach direct care staff. 2) Systems expert and member of the leadership team able to develop and implement policies and procedures that meet regulatory requirements and best practices. 3) Communicator and facilitator who can work effectively with residents, staff, family members, and other stakeholders. 4) Leader/manager who can respond to multiple and often unexpected demands, prioritize actions, and manage time. Implications for preparing nurses for this emerging role are presented.

### ASSISTED LIVING RESIDENTS AND THEIR PHYSICIANS: CHANGING CARE CONTEXTS

J. Schumacher[1], S. Zimmerman[2], J.K. Eckert[1], P. Sloane[2], *1. Sociology and Anthropology, University of Maryland, Baltimore County, Baltimore, Maryland, 2. University of North Carolina at Chapel Hill, Chapel Hill, North Carolina*

As more older adults choose to live and age-in-place in residential care/assisted living (RC/AL), their community-based primary care providers are challenged to develop new practice delivery patterns to continue to provide their medical care in this context. The resultant practice patterns range from making no changes, to making on-site room visits to RC/AL patients, to setting up regular clinic hours in an RC/AL-provided exam room. Analysis of data collected as part of an NIA funded study with 180 medical care providers and 80 RC/AL healthcare staff members reveals high percentages (>80%) of providers view their work with RC/AL healthcare staff in terms of a partnership. Data suggest a complex healthcare relationship emerging among some residents, families, physicians, and RC/AL healthcare staff members. Participants report the existence of communication challenges, divergent expectations, and generally high levels of satisfaction (>80%) as characteristic of this emerging relationship.

### MIND THE GAP: FAMILY CAREGIVERS' OF ASSISTED LIVING RESIDENTS PERCEPTIONS OF HOSPICE

M. Volpin, *Oregon Health & Science University, Portland, Oregon*

As the assisted living (AL) population has become older and frailer, the annual death rate in AL has reached approximately 30%. Studies indicate that residents want to die in their AL homes and family members support this desire. Hospice is often brought into AL to meet this goal. This paper presents findings from a qualitative study comprised of interviews of family caregivers and observations of their interactions with hospice-enrolled family members residing in AL. Family members reported positive experiences with hospice in this setting, although their understanding of the role and scope of hospice was often unclear. Hospice was often seen as "gap filler" that prevented the need for residents to transfer to a higher level of care. This presentation focuses on the expectations of family caregivers of hospice within the AL setting, how that changes over time, and the need to create congruence between family expectations and available services.

## SESSION 410 (PAPER)

## END OF LIFE AND PALLIATIVE CARE I

### A COMMUNITY APPROACH TO IMPROVE PALLIATIVE CARE ACCESS

C. Flores[1], C. Russell-McGregor[2], A. Ketchel[3], J. Newman[3,1], R. Newcomer[1], *1. Social and Behavioral Sciences, University of California, San Francisco, San Francisco, California, 2. Sutter Health Sacramento, Sacramento, California, 3. Sutter Health Institute for Research and Education, San Francisco, California*

A study was designed to improve palliative care service provision in the San Francisco Bay Area community through assessment, coordination, education, and outreach. This study addresses the problem of the growing prevalence of advanced chronic illness among aging and other end-of-life populations who are underutilizing palliative care services that can increase comfort and lower cost of care. This presentation includes the results of the assessment of the quality, adequacy and utilization of palliative care services in the San Francisco's Skilled Nursing Facilities (SNF) (n=11) and Residential Care/Assisted Living facilities (RC/AL) (n=17). All licensed SNFs and all licensed RC/ALs with more than 40 licensed beds were contacted and interviewed using a standardized date collection tool. The response rate was 80% for the SNFs and 90% for RC/ALs. Most of RC/ALs had little knowledge of palliative care approaches with the exception of hospice care services. Two (12%) RC/ALs had a specific palliative care program in place. In SNF's the primary source of palliative care coverage is the Medicare hospice benefit, which limits services to those with specific prognosis as opposed to patients' needs for quality end of life care. Both SNFs and RC/ALs faced similar challenges in regards to implementing improvements in utilizations of palliative care services, such as the problems surrounding the use of advance directives and inconsistent participation of physicians in end-of-life planning. This study has informed a team of influential partners in devising an action plan for improving the awareness and use of palliative care services.

### FRAMING EFFECTS OF QUESTIONS ON END-OF-LIFE DECISIONS AMONG LATINO OLDER ADULTS

D. Velez Ortiz, R. Martinez, *Julian Samora Research Institute and School of Social Work, Michigan State University, East Lansing, Michigan*

Background: Making end-of-life decisions is a difficult and painful experience, yet, very little is known about the views of Latino older adults toward directives at the end-of-life. This study examined how the presentation of end-of-life questions influenced Latino older adults in making decisions about their lives. The authors build on prospect theory, which deals with decision-making based on whether a situation is framed positively or negatively (Tversky and Kahneman, 2000). This decisional dynamic can have an influence on the choices relating to end-of-life directives depending on how the situation is framed. Methods: This study used quantitative methods using survey data. It analyzed responses to questions relating to resuscitation and life-support directives from the Decision Making at the End of Life in Mexican American Aged (DELMA) survey (N=110). Surveys were conducted in English and Spanish. Logistic and OLS regression were employed to build the statistical model. Results: Significant framing effects were found in the presentation of end-of-life questions and the decisions Latino older adults made in relationship to their views about resuscitation and life-support in their own lives. Participants were more likely to choose one of the options provided in either resuscitation or life-support according to the order in which choices were presented. Implications: A major implication from these findings is that service providers can affect the choices of Latino older adults facing end-of-life issues. With the rapid growth in the Latino older adult population in the United States, comes an ethical imperative to better understand and respect their perspective about end-of-life issues.

### PALLIATIVE CARE FOR MASS CASUALTY EVENTS WITH SCARCE RESOURCES

A. Wilkinson[1], M. Matzo[2], M. Gatto[3], J. Lynn[4], S. Phillips[5], *1. School of Nursing, Midwifery and Postgraduate Medicine, Edith Cowan University, Joondalup, Western Australia, Australia, 2. University of Oklahoma College of Nursing, Oklahoma, Oklahoma, 3. Bon Secours Health System, Marriotsville, Maryland, 4. Department of Health, Washington, District of Columbia, 5. Agency for Healthcare Research and Quality, Rockville, Maryland*

Catastrophic mass casualty events (MCEs), such as pandemic flu outbreaks or large-scale terrorism-related events, could yield thousands of victims whose needs overwhelm local and regional health care systems, personnel, and resources. MCE conditions will require deploying scarce resources in a manner that is different from the more common single-event disaster. This presentation explores the little discussed "not expected to survive" category, such as those with an existing life-threatening illness; examines the role of palliative care in support of individuals not expected to survive; and recommends specific actions for a coordinated disaster response plan. Semi-structured telephone discussions with key experts and a consensus development meeting identified the issues, responsibilities and resources necessary to integrate palliative care in disaster planning and response including: (1) palliative care's role in a MCE; (2) triage and ensuing treatment decisions for those "likely to die;" (3) critical palliative care services, personnel and treatments settings needed; (4) pragmatic plans for ensuring appropriate training, supplies, and organizational/jurisdictional arrangements; and (5) unusual issues affecting palliative care under MCE scenarios. Palliative care ensures comfort and minimizes the suffering the dying and may also free up resources to optimize the survival of others. Palliative care minimizes the suffering of those who die, ensures comfort, addresses the needs of those who will not survive, and may also free up resources to optimize survival of others. Provision of palliative care services during mass casualty events should be part of current state and local disaster planning and training activities.

## SESSION 415 (PAPER)

## GERONTOLOGICAL EDUCATION

### NORMALIZATION OF THE HARTFORD PARTNERSHIP PROGRAM FOR AGING EDUCATION MODEL

E. Barker, *Social Work Leadership Institute, The NY Academy of Medicine, New York, New York*

The Social Work Leadership Institute (SWLI) of the New York Academy of Medicine is working to increase the number of social workers who specialize in aging through research, policy and education. To achieve this a national initiative; the Hartford Partnership Program for Aging Education (HPPAE), funded by the John A. Hartford Foundation, is working to train leaders in social work and aging through a rotation-based field model and aging-infused curriculum. To date, 72 programs were funded in 33 states. The goal of this initiative is to normalize the educational model in all CSWE accredited MSW programs. Two regions: the south and the northeast, representing an additional 33 schools have begun their normalization process. The normalization strategy engages a grassroots, collaborative network including; Deans and Directors, Field Directors, Students, and Community Partners to expand the HPPAE program and make it a self-sustaining model for education in graduate schools of social work. SWLI utilized the Breakthrough Series Collaborative model developed by the Institute for Health Care Improvement as the theoretical framework to establish the process of normalizing the HPPAE. The National Advisory Panel (NAP), a group of experts in the field of aging, guides the HPPAE; together they comprise the Collaborative Team. Normalization meets the recommendations from the Institute of Medicine's (IOM) 2008 report Retooling for an Aging America. This presentation will focus on how the process of normalization creates a structure for learning, action, and evaluation that engages all schools in making system-level changes in aging education to adopt this model.

### SPECIALIZED GERONTOLOGY CURRICULUM: PREPARING SOCIAL WORKERS FOR ADVANCED PRACTICE

N. Hooyman[1], P.D. Allen[5], Z. Gellis[2], L. Pierce[4], S. Tebb[3], *1. School of Social Work, University of Washington, Seattle, Washington, 2. University of Pennsylvania, Philadelphia, Pennsylvania, 3. Saint Louis University, St Louis, Missouri, 4. University of Missouri, St Louis, St Louis, Missouri, 5. Louisiana State University, Baton Rouge, Louisiana*

The Council on Social Work Education (CSWE) Gero-Ed Center, funded by the John A. Hartford Foundation, prepares faculty and students to meet the geriatric workforce needs of our aging society. The Center's Specialized Gerontology Program provides faculty with the resources to design, implement, and institutionalize gerontological competencies at both the generalist and advanced levels of practice—as a minor, area of emphasis, certificate, specialization, or concentration. Such advanced curriculum is necessary to prepare social workers who can provide leadership during critical care transitions for older adults. Sixteen social work programs nationwide are participating in the two-year Specialized Gerontology Program. The Gero-Ed Center co-Principal Investigator will give a brief overview of the need for specialized gerontological social work curriculum to prepare social workers for advanced practice with older adults and their families, and highlight the role of social work during care transitions. Three social work faculty members who have completed the first year of the Specialized Gerontology Program will discuss the challenges encountered in their planning and implementation phases and describe strategies undertaken to address these. They will highlight the geriatric social work competencies that advanced practice students will attain by completing the specialized curricular structure. Each paper will conclude with lessons learned from their initiatives, which are relevant to other disciplines seeking to offer specialized gero curriculum. Ample time for questions and comments will be provided to engage the audience.

### THE FUTURE OF ACADEMIC GERONTOLOGY PROGRAMS: END OF AN ERA OR TIME OF TRANSITION?

D. Schafer[1], A. Pelham[2], P. Abbott[3], *1. National Association for Professional Gerontologists, Healdsburg, California, 2. San Francisco State University, San Francisco, California, 3. California State University, Fullerton, Fullerton, California*

Background: Gerontological education in the United States is facing a critical challenge. While public awareness of the increasing size of the older population is growing, with the recognition that aging "baby boomers" will require considerably more resources and services, it is not clear that academic Gerontology programs will be able to educate adequate numbers of Gerontologists to meet future workforce demands. A number of recent articles have alluded to the comparative fragility of Gerontology and its possible disappearance as a separate discipline. This paper asks the question: Are we prepared to educate the Gerontologists who will be necessary to meet the needs of the future aging population? Method: To address this question, the number and type of Gerontology/Geriatric programs listed in the seventh (2000) and eighth (2009) editions of AGHE's Directory of Educational Programs in Gerontology and Geriatrics were compared. Results: Results indicate that there was an overall decline in the number of Gerontology/Geriatric programs over the nine-year period nationwide and in virtually every program category (degrees, certificates, minors, etc). Conclusions: Since the previous nine years should have witnessed an increase in Gerontology/Geriatric programs to meet anticipated demand for trained professionals, it is apparent that we are not prepared to educate the next generation of Gerontologists without a transition toward professionalizing the field. A conceptual model describing the interrelationships among accreditation of Gerontology programs and credentialing of Gerontology graduates is presented as a blueprint for strengthening the discipline and insuring that future workforce needs are met.

## SESSION 420 (POSTER)

## GLOBAL AND DIVERSE AGING

### GLOBAL AGING AND HEALTH: NEEDS ASSESSMENT OF COMMUNITY-RESIDING OLDER ADULTS IN BOACO, NICARAGUA

M. Cannon[1], B. Nolan[1], M.B. Neal[1], K. Wilson[2,1], M. Lopez Norori[2], A. DeLaTorre[1], *1. Portland State University, Portland, Oregon, 2. The Jessie F. Richardson Foundation, Clackamas, Oregon*

In 2004, Portland State University's Institute on Aging (IOA) and the charitable non-profit organization the Jessie F. Richardson Foundation (JFR) began jointly designing and teaching an interdisciplinary service learning course on global aging and health with a focus on Nicaragua. Since then, the course has been offered annually, and JFR, the IOA, students, and Nicaraguan governmental and community stakeholders have worked together to create sustainable solutions to support a growing Nicaraguan elder population. Data concerning older Nicaraguans were lacking, and community leaders asked for advice on how to increase the knowledge base about the experience of older adults in their communities. This poster presentation details how, during the summers of 2006 and 2009, faculty and students worked with community partners to assess the needs of community-residing older adults in the province of Boaco, Nicaragua, in the areas of health, financial status, and family support. Both survey research and qualitative interviews were conducted. Local community leaders were trained in interviewing techniques and data collection practices by JFR's staff (a physician) in Nicaragua, and students conducted qualitative interviews with rural elders attending health clinics. The data collected and presented represent some of the first information about the status of older adults in the region and highlight the need for improved access to healthcare, strengthened community support structures, and improved access to basic amenities such as food, potable water, and sanitation services. Additionally, challenges in using survey research and qualitative interviewing in a cross-cultural, collaborative setting are discussed.

### SOCIAL CAPITAL AND HEALTH AMONG OLDER ADULTS IN CHINA: THE URBAN – RURAL DIMENSION

J. Norstrand[1], Q. Xu[2], *1. Boston College, Newton, Massachusetts, 2. Boston College, Newton, Massachusetts*

Introduction: Social capital (SC) is significantly associated with health, however role of urban/rural habitat among older adults in Chinese context remains poorly understood. Goal: Study examined whether SC (examined by bonding, bridging and linking) is associated with physical and emotional health by urban/rural context. Method: China General Social Survey, collected 2005, provided sample of 1250 Chinese elderly (65 years and over). Multiple regression analyses were carried out for physical and emotional health indicators. Three models were tested: socio-demographic indicators entered in Model 1; health indicator entered in Model 2; SC indicators entered in final model. Results: Even when accounting for important socio-demographic and health indicators, Bonding was significant predictor of emotional health ($p<.05$) in urban settings; Bridging and linking were significant predictors of physical health (both $p<.05$) in urban settings. Conclusions: Understanding interaction between type of SC and urban/rural habitat is critical in promoting health among Chinese elders.

## THE IMPACT OF CHANGING SOCIAL ENVIRONMENT ON HEALTH AMONG CHINESE OLDER ADULTS

Y. Li, *School of Social Work, San Diego State University, San Diego, California*

Purpose: Macro social environment in China has dramatically changed and affected many aspects of people's life. However, little empirical evidence is available to demonstrate the existence of those effects. This study investigates how community economic development and social development over time affect the health trajectories of older adults. Method: Employing data from the four waves (1997, 2000, 2004, and 2006) of the China Health and Nutrition Survey (CHNS), this study estimates multi-level growth curve models of functional health, self-rated health, and cognitive function. Results: The results show that: 1) the aspects of community social environment, particularly community household median income, communication development, and time cost for healthcare access exert independent effects on health outcomes over and beyond the elders' individual-level factors; 2) these social environment factors affect the initial health status, but not the consequent development of elders' health; 3) the effects of social environment on health outcomes differ by elder's education and income. Conclusion: Taken together, this study demonstrates that social environment affects health among older Chinese adults independently. Continual progress in economic and social environment could potentially improve health.

## THE HEALTH AND HEALTH CARE OF CANADA'S ETHNOCULTURAL MINORITY OLDER ADULTS: A SCOPING REVIEW

S.D. Koehn[1,2], J. Kozak[1,2], H. Khamisa[1], S. Neysmith[4], K. Kobayashi[3], *1. Centre for Healthy Aging, Providence Health Care, Vancouver, British Columbia, Canada, 2. University of British Columbia, Vancouver, British Columbia, Canada, 3. University of Victoria, Victoria, British Columbia, Canada, 4. University of Toronto, Toronto, Ontario, Canada*

Canada's population is becoming older and increasingly diverse, yet little is known about the health behaviours, attitudes, disease prevalence, and health care access and utilization of ethnocultural minority older adults (EMOA) in Canada. This review aims to (1) consolidate the various types of available knowledge to provide policy-makers, administrators, clinicians etc. with current evidence and possible solutions to address the health and healthcare concerns of this population, and (2) to identify knowledge gaps that will provide direction for future research. Our extensive systematic search of the English-language published and grey literature on this topic focused on Canada and countries with similar health care systems and ethnocultural minority populations. Abstracts of relevant sources were coded in Atlas.ti 5.2.0® to indicate methodological parameters, source, focus of study, participant demographics, location of the study, etc. (almost 400 codes/subcodes). Our search revealed that the qualitative and quantitative literature on this topic is distributed across a broad set of content areas addressed across multiple disciplines with publications in more than 250 diverse journals. Certain ethnocultural groups and health topics are studied more than others, but these similarities may be missed due to inconsistent conceptualization, labeling, and reporting of ethnocultural groups over time and space. Access to information on the health and health care of EMOA requires a search of multiple content areas, and cannot be limited to health databases alone. Situating health and health care for EMOA will require an understanding of how sociocultural categories meaningfully intersect to shape health status and health care access.

## PUERTO RICAN ELDERS' USE OF COMMUNITY-BASED LONG-TERM CARE SERVICES: COMPARISON OF SURVEY AND FOCUS GROUP DATA

N.W. Sheehan, M. Guzzardo, *Human Development & Family Studies, University of Connecticut, Storrs, Connecticut*

While there is consensus that minority elders are underserved by the formal service system, we know relatively little about minority elders' experiences with the long-term care system. The purpose of this study was to explore findings about Spanish-speaking Puerto Rican elders' perceptions of community-based long-term care services by comparing their survey responses to analysis of focus group discussions. A total of 28 Spanish-speaking Puerto Rican elders participated in this study. Elders were recruited from three community settings: conventional housing, public senior housing and specialized Latino senior housing. Participants were in one of three focus groups based on housing type. Quantitative analysis of survey data suggests that while there was some variation across the three groups, the majority of elders receive at least one formal service. One interpretation of this finding is that these elders are connected to the formal service system. However, the focus group data illustrate the problems these elders experience with the system. Overall, the themes emerging from the focus groups indicate that the receipt of services frequently adds stress in their lives. Problematic encounters with the formal service system include psychiatrists, home care workers, and drivers who are not bilingual, poor quality homemaker services, and unresponsive case managers. Also, a striking finding from the focus groups was the limited availability and reliability of family support and assistance forcing elders to rely on formal services. The implications of these findings for future research will be discussed.

## ENGLISH LANGUAGE PROFICIENCY AND DEPRESSIVE SYMPTOMS AMONG KOREAN AMERICAN ELDERS

S. Kang, R. Basham, Y. Kim, *School of Social Work, The University of Texas at Arlington, Arlington, Texas*

Introduction. The effects of English language proficiency and social support on depressive symptoms among 118 Korean American elders in South were examined using the frameworks of the stress coping theory. Despite the rapid growth in the number of Korean American residents aged 65 or older in South in the last decade, policy makers and gerontology practitioners have no empirical data on which to design programs aimed at the specific needs of this elderly population. Methods. A sample of 118 Korean American elders aged 65+ ($M = 75.6$; $SD=7.1$; 69.6% female) completed one and half hour survey. Due to the lack of ethnic enclave resources, such as established community based organizations, the quality of life experience of Korean American elders in South- which was calculated by Geriatric Depression Scale (GDS) - might differ from that of their counterparts living in or near ethnic enclaves. Results. As expected, the proportion of Korean American elders with depressive symptoms was 38% of the sample which is higher than mainstream American elderly population (The standard cutoff point for depression in the total Short form GDS score is > 5). Based on multiple regression analyses, the models (R square = .232) indicate that English language proficiency, perceived health status, and living arrangement were significant correlates in explaining depression scores. The family responsibility expectation factor, the perception of these family value differences between generations and religiosity did not make any significant impact on depression levels.

## CONTRIBUTIONS OF ECONOMIC, HEALTH, AND SOCIAL FACTORS ON LIVING ARRANGEMENT AMONG NON-MARRIED CHINESE AMERICAN ELDERS

D. Nguyen, T. Shibusawa, *New York University, New York, New York*

Living arrangements among elders in the United States are influenced by age, gender, health status, economic resources, availability of family, and culture. While higher numbers of immigrant elders live with extended family than non-immigrant elders, little research has been conducted on immigrant elders who are not married and are at-risk for social isolation. This study examined how economic, social and health factors determine living arrangements among non-married Chinese American elders. Data from the 2006 American Community Survey household and person files were combined for this study. The study sample consisted of 1,020 self-identified Chinese Americans, aged 65 and over, who were not married. Complex sampling weights were applied to sex-specific hierarchical logistic regression analyses to examine the relative contribution of economic, health, and social factors on living arrangement. The results of this study revealed the equal contribution of economic, health, and social factors on Chinese American elders' living arrangement. Specifically, increased age, the foreign born, and having physical or dressing difficulties resulted in increased odds of living alone. Income had differential effects by gender; low personal income increased the likelihood that men lived alone, while this trend was reversed for women. This study identified social and health factors that increase Chinese Americans' vulnerability to living alone. Contrasting previous research, immigrant unmarried Chinese Americans were more likely to live alone. Interventions that reduce the social isolation of Chinese American elders, especially among immigrants, can reduce further risk for health and psychosocial needs of a vulnerable social group.

## THE RELATIONSHIP OF SPIRITUALITY AND RELIGIOUS INVOLVEMENT TO DEATH ANXIETY AMONG KOREAN OLDER PERSONS

H. Yoon[1], M. Huh[2,1], *1. Hallym University, Chuncheon, Gangwon-do, Republic of Korea, 2. Hallym University, Chuncheon, Gangwon-do, Republic of Korea*

This study examines the relationships of spirituality and religious involvement to death anxiety among older persons in Korea. Despite the commonly held view that spirituality and religion buffers against death anxiety, empirical attempts to demonstrate this connection were scarce and have met with mixed results. We hypothesize that higher spirituality and more religious involvements decrease the level of death anxiety. The data for this study came from the Hallym Aging Study conducted by the Hallym University Aging Research Institute in 2003. 1,805 individuals aged 65 and over, who lived in Seoul and Chuncheon were interviewed. Spirituality was assessed by selecting intrinsic measurement part from the Intrinsic/Extrinsic Measurement constructed by Gorsuch & McPherson. Religious involvement was measured by whether or not having religion and number of religious activities. Hierarchical regression analysis showed that spirituality and religious involvement (number of religious activities) had significant effects on death anxiety, while controlling demographic characteristic, number of children, monthly income, health status (self-rated health status and number of chronic diseases), social activities, and social support (R2 change = .19, F = 6.5, p < .001). The total explained variance was 35%. Gender differences in the association between religious involvement and death anxiety were found. Men showed that religious activities decreased the level of death anxiety. The findings support the hypothesis that spirituality and religious involvement are significant factors to reduce the level of death anxiety among older persons, in particular, for men. The practice implications and the relevance of our findings for future research are discussed.

## THE CORRELATION BETWEEN RELIGIOUS SERVICE ATTENDENCE AND PSYCHOSOCIAL INDICATORS AMONG ASIAN IMMIGRANT ELDERS

A. Mui, E.S. Lee*, Columbia University School of Social Work, New York, New York*

This study examines the association between religious service attendance and psychosocial indicators among Chinese and Korean immigrant elderly populations (n = 205) in an Eastern U.S. metropolitan area. Results showed that 85% of the Asian immigrant elderly respondents had participated in different forms of organized religion. Korean elders were more religious than their Chinese counterparts when measured by church attendance. Seventy percent of the Korean elderly respondents attended church at least once a week, compared to 11% of the Chinese elders. Religious service attendance was found to be correlated with better family relationships, higher levels of life satisfaction, and lower levels of depression. Asian older adults were more likely to attend religious activities when they experienced more stressful life events and had better proficiency in English language. Findings suggest that social and spiritual connection with a faith-based community is a powerful spiritual and social support for these Asian immigrant elders. Multiple regression analyses indicated that among the two groups of immigrant elders, church service attendance was also associated with their perception of the importance of religion and their having adult children living nearby. The link between religiosity and the proximity of adult children suggests that they may be more likely to attend church when their adult children support and encourage them. The findings point to the benefits of religiosity in predicting family relationships and the importance of family involvement in the spiritual enhancement of Asian elderly immigrant populations.

## IMPROVING ORGANIZATIONAL CAPACITIES TO RECRUIT SENIOR VOLUNTEERS IN JAPAN

K. Nonaka[1], Y. Fujiwara[1], H. Ohba[1], M. Yasunaga[1], Y. Murayama[1], N. Sakuma[1], H. Uchida[2], S. Shinkai[1], *1. Tokyo Metropolitan Institute of Gerontology, Tokyo, Japan, 2. School of Human Science and Environment, University of Hyogo., Hyougo, Japan*

Objective: Because of relatively short history of volunteerism in Japan, volunteer organizations managed by seniors tend to chose semi-formal "group" with weak organizational structures. These groups are often fading because they fail to substitute aged with new younger volunteers. Therefore, our intervention aimed at networking three volunteer groups, to seek a strategy that improves the organizational capacities to attract new volunteers. Intervention: Intervention was conducted from September 2007 to December 2009. We promoted strategic alliance among three volunteer groups, in which senior volunteers engage in reading picture books to children in different areas of Tokyo. Each group consists of about 60 volunteers. Successful alliances are seen to evolve through a sequence of learning-reevaluation-readjustment cycles (Doz, Yves L. 1996. Strategic Management Journal, 17:55-83). Thus, we promoted several joint projects to facilitate a successful alliance processes. Evaluation of intervention: we conducted a focus group interview for the volunteers (n=10), and data were analyzed using the grounded theory approach. We also examined the changes in the numbers of dropout and new memberships. Results: Each partner considered that alliance contributes to the expansion of their groups, and they decided to widen cooperation further. The result indicated factors necessary for successful alliance. For instance, a definition of joint task should be perceived as feasible and beneficial for all partners. Also, successful learning processes is largely influenced by initial conditions and the form of interactions. Conclusion: Initial conditions and formations of alliance are important to develop successful alliance, which contribute the sustenance of organization.

## DIVERSIFICATION OF PUBLIC SERVICES FOR OLDER PEOPLE IN SPAIN AND SWEDEN

G. Sundström[1], D. Puga Gonzalez[2], M. Sancho Castiello[3], M. ToRtosa Chulia[4], *1. Institute of Gerontology, School of Health Sciences, Jönköping, Sweden, 2. Consejo Superior de Investigaciones Scientificas, Madrid, Spain, 3. INGEMA, Madrid, Spain, 4. Universidad de Valencia, Valencia, Spain*

Considerations about (public) services for older people are often limited to institutional care and Home Help. These major services are in many countries supplemented – or substituted – by "minor" services such as transportation, meals-on-wheels, alarm systems and day care. We analyze use of all these services, which are rapidly expanding in Spain - unlike other Mediterranean countries - but declining in Sweden. After initial, dramatic cost increases, Sweden contained costs for services after the 1980s by substituting less intensive, "minor" services for more "heavy" ones, and Home Help is rationed to support only the neediest, before nursing homes provide ever shorter stays at the end of life. Data suggest rather adequate targeting of needs in Sweden, but less so in Spain. Total coverage, all services considered, is about 15 % of the

65+ in Spain and about 25 % in Sweden. In both countries, there is a good deal of overlap between family care and public services, but more so in Sweden. A wide range of services, major and minor, may suit the varying needs of older people and their families more effectively than the choice between nothing, Home Help or institutional care.

### FACTORS OF UTILIZATION AND COORDINATION COMPETENCE OF PROFESSIONAL NETWORKS AMONG CARE MANAGERS IN JAPAN

H. Ishikawa, K. Matsuoka, *Human Welfere Studies, Kwansei Gakuin University, Nishinomiya, Hyogo, Japan*

Purpose: Care mangers under the LTCI in Japan are required to utilize and coordinate their professional networks to provide the appropriate services. However, evaluation studies regarding network utilization and coordination remain quite limited. The purpose of this study is to examine the factors of utilization and coordination competence of professional networks by principal factor analysis. Methods: A total of 998 care managers, who were working at home care support centers in Japan, were randomly selected from the WAMNET list. The survey was conducted by mail from January through February, 2006. There were thirty items regarding utilization and coordination competence of professional networks. Each item was measured by four items ascertained by a four-point scale. Results: As a result of first principal factor analysis with varimax solution, four items were deleted because of low factor loadings. Three factors such as, “basic attitude as professionals”, ”basic knowledge and skills, and ‘approach skills to others’ professional were extracted with 26 items. The reliability (coefficient alpha) was 0.959. As a result of One Way ANOVA, the bigger networks care managers have, the more they utilize and coordinate their networks. Conclusion: The result of this study suggests that care managers are required to enrich basic ethics, knowledge, and skills to coordinate professional networks efficiently. It is necessary for care managers in Japan to undergo basic trainings repeatedly and strengthen their network competence.

## SESSION 425 (SYMPOSIUM)

### HURRICANE KATRINA, ATTACHMENT TO PLACE, AND WIDOWERS ON FILM: A CRITICAL ANALYSIS OF THE IMPORTANCE OF HOME

Chair: *C. Cicero, Gerontology, Univ. of Southern California, Los Angeles, California*

Co-Chair: *C. Detweiler, Pepperdine University, Center for Entertainment, Media and Culture, Malibu, California*

As shown in New Orleans in 2005, policy makers’ attempts to force housing transitions upon residents during civic emergencies often collide with older adults’ resilient attachment to place. Everyday, social service practitioners and family members weigh elders’ rights to self-determination against realistic assessments of their abilities to safely age in place. Theories of place attachment explain why older people choose to stay living in their own homes both in the most acute, life-threatening circumstances such as Hurricane Katrina and also in more chronic situations when elders’ health, emotional, and psychological needs require a step up in the continuum of care. Connections to the home are often based in memories of relationships cultivated there, and in an elder’s transition period following a spouse’s death, the home is a crucial component. This symposium will use the lens of place attachment theory to analyze popular culture’s portrayals of widowers’ transitions in contemporary feature films. After the first presenter outlines the tenets of attachment theory, the second presentation will discuss critical film analysis as a study of society’s attitudes towards aging and older people. Finally, a content analysis on the role of the widower in the films Gran Torino, Up, and That Evening Sun will be presented.

### ATTACHMENT TO PLACE: FROM CIVIC EMERGENCIES TO TRANSITIONAL LIVING

C. Cicero, *Gerontology, Univ. of Southern California, Los Angeles, California*

This presentation will examine place attachment’s theoretical roots and its relevance to older people’s transitions across the continuum of care. Beginning with Powell Lawton, the psychological importance of the built environment will be discussed with justification for revisiting the importance of environmental gerontology in aging research. More specific theories including Rowles’ concept of autobiographical insidedness, Chadhury’s symbolism of the house and place attachment, and Golant’s place therapy and environmental history will be discussed with implications for local policy and practice.

### CONTENT ANALYSIS: AMERICAN FEATURE FILMS’ PORTRAYAL OF AGING AND OLDER PEOPLE

C. Detweiler, *Pepperdine University, Malibu, California*

How has Hollywood portrayed aging populations onscreen? Representations have ranged from crazy old codgers defending their land with a shotgun to over-sexualized grandmothers on the prowl. Such stereotypes may be played for laughs, but eventually harden into ageist attitudes and perceptions. This presentation will utilize critical film theory to analyze the evolving portrayals of elders onscreen. It will address the question: How has Hollywood influenced the American public’s mood and attitudes towards aging and older people?

### AMERICAN PERSPECTIVES ON THE WIDOWER: A VIEW FROM FILM

C. Cicero[1], C. Detweiler[2], *1. Gerontology, Univ. of Southern California, Los Angeles, California, 2. Pepperdine University, Malibu, California*

This presentation will address American perspectives on the widower through analysis of the films Gran Torino (2008), Up (2009), and That Evening Sun (2009). Three veteran actors, Clint Eastwood, Ed Asner, and Hal Holbrook, portray recent widowers facing lifestyle transitions and profound conflicts surrounding their homes. The death of their beloved spouses place them at crossroads. Will they adopt a reclusive posture toward their communities or will they engage their neighbors? Up offers a fantasy version of adventure, with home serving as the means for Carl Fredricksen to reach shared dreams with Ellie. In Gran Torino, a changing neighborhood demographic challenges a hardened Korean war veteran, Walt Kowalski. In That Evening Sun, farmer Abner Meecham is willing to wage war to hold onto his treasured land. The balance between the characters’ self determination and their abilities to age in place presents a significant gerontology dilemma to the public square.

## SESSION 430 (SYMPOSIUM)

### INTERNATIONAL VIEWS ON GOVERNMENT, MARKET AND CIVIL SOCIETY ROLES IN 21ST CENTURY AGING POLICIES

Chair: *M.E. McCall, Psychology, Saint Mary’s College of California, Moraga, California*

Co-Chair: *A.E. Scharlach, University of California, Berkeley, Berkeley, California*

Discussant: *M. Jegermalm, Ersta Sköndal University College, Stockholm, Sweden*

As nations face the common prospect of aging, they also encounter unique circumstances in their specific societies that provide the parameters within which they must strive to meet the needs of older citizens. In this paper we analyze how the intersecting factors of government programs, the economic markets, and civil society factors (fndividuals, families, volunteer organizations, etc.) operate in Japan, Sweden, and the United States. These countries represent different mixes of governmental welfare systems, market forces, and constellations of civil society in relation to social policies for elders. We discuss and analyze how these three factors have changed over time during the last several decades and how these nations are working to adapt to aging populations and design social policies and programs that effectively and efficiently meet the needs of their citizenry and what this portends for the 21st century of policy development and implementation. Will the onus fall on civil society in nations around the world to meet the needs of older persons, or will the role of government remain strong or even grow amidst global economic pressures? What we can learn from different societies about the interaction between the government, market, and civil society and the possibilities to create nations in which all can live and age well? We analyze whether we are likely to observe a development where different countries are adopting similar solutions heading towards a 'welfare mix' versus a 'path dependency' indicating that the cultural contexts have a strong impact on how policies are designed.

### LTC AFTER HEALTH CARE REFORM: CHANGING ROLES OF GOVERNMENT, INFORMAL CARE, AND PRIVATE SECTOR IN US

A.E. Scharlach, *Social Welfare, University of California, Berkeley, California*

This presentation examines the evolving roles of government, informal care, and the private sector in paying for, providing, and overseeing elder care in the United States. Particular attention is given to the impact of recent legislation associated with health care reform. While the US government typically has been considered the payor and provider of last resort, becoming involved only when it would be socially unconscionable not to do so, federal and state governments already are responsible for about 70% of LTC expenditures. Recent policy changes can be understood as efforts to limit government's role, while requiring increased individual responsibility for financing and providing care. Despite concern about increased family responsibility, emerging private sector innovations and peer support models are likely to supplement families as the primary source of elder care in the US, potentially exacerbating disparities in LTC access and quality.

### JAPAN'S SOCIAL POLICIES ON AGING IN THE 21ST CENTURY: FROM FAMILY CARE TO GOVERNMENT CARE

M.E. McCall, *Psychology, Saint Mary's College of California, Moraga, California*

Japan's elderly have traditionally been taken care of by the family, with limited roles of government and market forces. However, in the last part of the 20th century, as the government foresaw the coming changes in age and family structures, the role of the government drastically increased through programs such as the Golden Plan. More recently, with establishment of Public Long-Term Insurances in 2000 and 2005, the roles of the market place and civil society, through neighborhood and other NGO organizations, have increased. Can we expect to see further reallocating of care roles in the 21st century so that a fully-balanced approach is used, or will we see a resurgence of family roles as we move forward?

### SWEDEN'S SOCIAL POLICIES ON AGING IN THE 21ST CENTURY: FROM GOVERNMENT TO MARKET AND CIVIL SOCIETY

M. Jegermalm[2], C. Henning[1], *1. Jönköping University, Jönköping, Sweden, 2. Ersta Sköndal University College, Stockholm, Sweden*

Sweden has been characterised as a "strong state" country with high taxation levels and a policy of universal welfare which aim to cover much of the population. Old-age care has been largely financed and provided by the formal care system, i.e. the public sector. Even though private financing coming from higher fees has become somewhat more common, wholly privately market solutions are still relatively uncommon, especially compared to other countries. It has been assumed that civil society is weak in this kind of welfare system since one would not expect older people and others to be particularly involved as informal caregivers or volunteers in organisations. Research has, however, showed that recently Sweden has scored relatively highly when it comes to civil society vitality (in a comparative context). Will these trends of increasing market and civility society contributions continue through the 21st century, or will the state remain the largest provider?

## SESSION 435 (SYMPOSIUM)

### RUSH ENHANCED DISCHARGE PLANNING PROGRAM: A SOCIAL WORK MODEL OF TRANSITIONAL CARE

Chair: *R. Golden, Older Adult Programs, Rush University Medical Center, Chicago, Illinois*
Discussant: *P.J. Volland, New York Academy of Medicine, New York City, New York*

Researchers estimate that one-fifth of all Medicare beneficiaries are rehospitalized within 30 days of discharge, and that 75% of readmissions are potentially preventable. Poor transition outcomes for older adults yield dangerous results including caregiver burden, medication errors, and mortality. Rush University Medical Center's Enhanced Discharge Planning Program (EDPP) is a social work based transitions of care model that provides phone follow-up and short term care coordination for at risk seniors as they transition from hospital to home. This model places equal importance on psychosocial factors impacting health outcomes, in particular for seniors who are more vulnerable to adverse events post-discharge. EDPP social workers utilize a biopsychosocial framework for assessing post-discharge adherence to the treatment plan including medication compliance, physician visits, strategies for coping with care demands, and other issues that impact health and quality of life. EDPP interventions focus on forming collaborative relationships with existing health care and community based providers. The goals of EDPP are to promote patient safety and satisfaction; to improve the quality of life for older adults and caregivers; and to reduce unnecessary health care costs, particularly those related to preventable rehospitalizations and emergency room visits. This presentation will have four parts: 1. An explanation of the imperative for transitional care programs for older adults, 2. An overview of an innovative social work-driven transitional care program, 3. A presentation of the outcomes from a 720-participant randomized controlled trial of the program, and, 4. A discussion of program sustainability and community partnerships around transitional care.

### EDPP: A SOCIAL WORK MODEL OF TRANSITIONAL CARE

G. Shier[1], S. Altfeld[2], M. Rooney[1], D. Markovitz[1], M. Packard[1], R. Golden[1], A. Perry[1], W. Rosenberg[1], *1. Older Adult Programs, Rush University Medical Center, Chicago, Illinois, 2. University of Illinois at Chicago, Chicago, Illinois*

The Enhanced Discharge Planning Program model provides transitional care to older adults identified as at risk for adverse events after an inpatient hospitalization. Eligible patients are identified daily through a risk stratification tool drawing upon clinical documentation in the hospital's electronic medical record. Master's prepared social workers with experience in health care and aging communicate telephonically with identified older adults and caregivers post-discharge and intervene around a wide array of issues including available social support, transportation, financial resources, health literacy, and mental health. EDPP's social workers utilize their training in care coordination, extensive knowledge of community resources, and understanding of strategies for navigating complex systems to create a bridge between the hospital and the community, ensuring the direction provided by the medical team is not lost. This presentation will describe this innovative model, focusing on program's unique use of social workers as transitional care managers.

### STRATEGY TO SUSTAIN SUCCESSFUL TRANSITIONAL CARE PROGRAMS VIA COMMUNITY PARTNERSHIP

R. Golden, G. Shier, W. Rosenberg, S. McFolling, M. Noonan, *Older Adult Programs, Rush University Medical Center, Chicago, Illinois*

Transitional care programs must remain sustainable to address the challenges posed by looming health care reform, growing attention paid to quality care, and an increasing older adult population. Programs must forge strong relationships with community partners in order to remain viable in today's changing economic and health care climates. Partnerships that streamline care coordination, ensure the accurate transfer of information, and monitor patient and provider follow-up will reduce service duplication, build efficiency across care settings, and transverse silos of care. Findings from Rush University Medical Center's Enhanced Discharge Planning Program provide an evidence-based look at successful methods for building and maintaining effective community partnerships that directly impact quality of life for patients and caregivers. Findings from a randomized control trial will be shared with an emphasis on the program's replicability, impact on policy, and strategy to sustain a successful transitional care program via community partnerships.

### THE TRANSITIONAL CARE IMPERATIVE IN CHALLENGING TIMES

A. Perry[1], S. Altfeld[2], S. Sims[1], T. Johnson[1], M. Rooney[1], R. Golden[1], *1. Rush University Medical Center, Chicago, Illinois, 2. University of Illinois at Chicago, Chicago, Illinois*

Care transitions can be dangerous and costly for older adults moving from one care setting to another. Older adults often suffer from multiple chronic conditions, have physical or cognitive limitations, take multiple medications, experience various psychosocial issues, and are more likely to be socially isolated, depressed, or have financial strain. The lack of support across transitions results in unnecessary readmissions and nursing facility placement, and approximately 40% to 50% of hospital readmissions are linked to social problems and lack of community services. Additionally, changes in Medicare reimbursement policies for patients readmitted within 30 days of a hospital discharge are likely. This presentation will focus on the imperative for transitional care programs that support older adults and their caregivers during the vulnerable transition from hospital to home. Attention will be paid to clinical, institutional, and community factors that influence care transitions for older adults.

### THE ENHANCED DISCHARGE PLANNING PROGRAM: RESEARCH DESIGN AND OUTCOMES

S. Altfeld[1], G. Shier[2], V. Nandi[3], L. Weiss[3], S. Sims[2], T. Johnson[2], A. Perry[2], *1. School of Public Health, University of Illinois at Chicago, Chicago, Illinois, 2. Rush University Medical Center, Chicago, Illinois, 3. New York Academy of Medicine, New York, New York*

A randomized controlled trial moved the Enhanced Discharge Planning Program (EDPP) beyond the pilot stage to test the efficacy of the intervention. The study randomized older adults (N=720) at risk based on clinical and psychosocial criteria. Intervention group participants received a biopsychosocial assessment within 72 hours of discharge and services until problems were resolved. Control group participants received usual care after discharge. A follow-up survey was administered to both groups thirty days post-discharge. Hospital administrative data provided further variables for comparison. The most common reasons for referral were: prior hospitalization in the past 12 months (56.9%), lives alone (36.1%) and high risk for falls (25.3%). Almost 90% of patients had post-discharge needs. Intervention group participants were more likely than control group participants to communicate with their physicians (chisquare=9.88, p=.001) and attend scheduled outpatient appointments (chisquare=26.29, p=.0001). EDPP is a promising intervention with potential to reduce adverse outcomes in this population.

## SESSION 440 (PAPER)

## STATE LEVEL POLICY INITIATIVES I

### THE MINNESOTA RETURN TO COMMUNITY INITIATIVE: PLANNING AND EVALUATION OF A STATE ADMINISTERED NURSING HOME TRANSITION TO COMMUNITY PROGRAM

K. Abrahamson[1], G. Arling[2,3], V. Cooke[4], T. Lewis[4], K. Boston[4], D. Buttke[4], *1. Western Kentucky University, Bowling Green, Kentucky, 2. Indiana University School of Medicine, Indianapolis, Indiana, 3. Regenstrief Institute, Indianapolis, Indiana, 4. Minnesota Department of Human Services, St. Paul, Minnesota*

The Minnesota Return to Community Initiative addresses rebalancing of long-term care by promoting community discharge for nursing home residents who wish to return to the community and can be appropriately cared for in a community setting. This program differs fundamentally from the Federal Money Follows the Person program because it is directed primarily at persons early in their nursing home stays who have not spent down to Medicaid. The initiative, which began April 1, 2010, targets transition candidates based on MDS data. Targeting criteria include admissions with no prior history of nursing home use, preference and/or support for discharge, and fitting a profile of health/functional conditions that increases the probability of successful community discharge. Options counselors from Aging & Disability Resource Centers contact all residents who meet the targeting criteria at admission to assist with the transition. Approximately 700 residents annually will be transitioned back into the community who would have otherwise remained in a facility. Once residents have re-entered a community setting, follow-up occurs at 3 days post discharge, and every 90 days thereafter for up to 5 years. Follow-up assessment focuses on health/functional status, community resources, caregiving requirements, and the influence of these factors on the ability to remain in the community. Findings from the first six months of community transitions and follow-up assessments will be presented. Also, we will discuss how follow-up assessment data are being used to refine targeting criteria, identify risk factors for readmission or adverse health outcomes, and develop needed community support options.

### DO FLORIDA NURSING HOMES IMPROVE QUALITY AS NURSE STAFFING LEVELS INCREASE?

K.S. Thomas, K. Hyer, L. Branch, *School of Aging Studies, University of South Florida, Tampa, Florida*

Publicly reported deficiency citations found in nursing homes during annual inspections are important indicators for residents and families seeking information about nursing home quality of care and quality of life. This study examines the relationship between nurse staffing ratios and deficiencies in Florida nursing homes over a four year period. Data from Florida cost reports (nurse staffing) and the Online Survey Certification and Reporting database (deficiencies) track deficiencies and quality trends for 663 Florida nursing homes between 2002-2005. Using a generalized estimating equation approach, a negative binomial distribution, and a log link function in SAS Proc Genmod, we estimate the relationship between nursing assistant and licensed nursing staff and facilities' deficiency scores. The deficiency score is calculated using CMS' Nursing Home Compare Five-Star Quality Rating System which accounts for the complexity of the scope and severity of the citations. Our results confirmed our hypothesis that higher nursing assistant (est. = -.18; 95%CI = 2.73–3.86) and licensed nurse (est. = -.21; 95%CI = -.32– -.10) staffing levels were predictors of a lower deficiency score after controlling for facility characteristics over time. With a large sample size, longitudinal design, and advanced methods, we have found that there is a relationship among both levels of nurse staffing and quality as defined by deficiency citations.

### TRACKING PROGRESS ON BALANCING THE SYSTEM OF LONG-TERM SERVICES AND SUPPORTS: OHIO GOES PUBLIC

R. Applebaum, S. Mehdizadeh, *Miami University, Oxford, Ohio*

As part of a state effort to create better balance in the long-term care system, a state advisory committee appointed by the Governor recommended the development of a profile tool to track reform progress. The goal was to create an ongoing record of state long-term care performance, documenting such areas as a comparison of community-based and institutional utilization and expenditures, nursing facility occupancy rates, consumer satisfaction, and health care expenditures. The objective of the effort was to have the internet based profile available to policy makers and consumers and to include data across all age groups. This required researchers to use data from a range of sources across various state departments. In many instances the forms of data collections, the unit of measurement, and the long-term care data definitions varied, creating challenges to the development of a comprehensive state profile. This paper will present a version of the profile and will describe the research and policy challenges faced in constructing such a tool.

## SESSION 445 (SYMPOSIUM)

### EXERCISE AS AN AGING INTERVENTION

Chair: *G.J. Lithgow, Buck Institute for Age Research, Novato, California*

Co-Chair: *H.M. Brown-Borg, University of North Dakota, Grand Forks, North Dakota*

The health benefits of exercise are well known and of great importance to the aging population. However, an understanding of what happens at the molecular and cellular level as a consequence of exercise is emerging. In addition, remarkable systemic benefits of exercise provide and great deal of hope that exercise can be thought of as an intervention in aging. Does aging slow or reverse certain features of aging? We will explore this question in this session. Speakers: Adeel Safdar. Ph.D., McMaster University Simon Melov Ph.D., The Buck Institute

## SESSION 450 (PAPER)

### ALTERNATIVE AND FOLK HEALTH PRACTICES

### EXPLAINING AGE-RELATED DIFFERENCES IN USE OF SPECIFIC COMPLEMENTARY AND ALTERNATIVE MEDICINE (CAM) PRACTICES: THE ROLE OF HEALTH BELIEFS

G. Bostean[1], L. Ruppanner[2], *1. University of California, Irvine, Irvine, California, 2. University of Hawaii, Hilo, Hawaii*

Research shows that older adults are less likely to use Complementary and Alternative Medicine than middle-age adults. Yet, there are gaps in understanding the reasons for these age-related differences, and the scope of use of individual modalities. Using the 2007 National Health Interview Survey, this study examines age differences (controlling for sociodemographic and health factors) in use of vitamins, herbs, massage, relaxation and chiropractic care for treatment, prevention, or both. Further, health beliefs are an integral part of the decision to use health care, conventional or CAM, and some attribute middle-aged adults' higher CAM use to their health beliefs, which may be congruent with CAM use due to the influence of the holistic and self-care movements of the 1960-70's. However, to the authors' knowledge, there are no national-level quantitative studies which examine differences in the belief in CAM (or its effectiveness). To address this, this study examines the factors, especially age, related to an individual not using CAM (chiropractor, herbs, and relaxation) because he/she "does not believe in it" or "doesn't think it works." Preliminary regression results reveal significant age differences in the likelihood of using selected CAM practices for treatment versus prevention, and for both compared to prevention only. Generally, older adults are more likely to use some modalities for treatment than for prevention and both, rather than prevention only. Additionally, few age differences in the belief in CAM, or CAM effectiveness, are significant, bringing into question claims about middle-aged adults' predisposition to CAM because of their health beliefs.

### A QUALITATIVE EXPLORATION AND ANALYSIS OF HEALTH PRACTICES AND HOME REMEDIES AMONG ENSLAVED AFRICANS

T.A. Nuriddin, *Sociology and Anthropology, Howard University, Washington, District of Columbia*

Few items are of such importance and consequence as good health. Slavery made it difficult if not impossible for enslaved Africans to lead both healthy and fulfilling lives. Enslaved Africans were constantly under fear of punishment, familial separation, sexual abuse, and intimidation. Forcibly working during such extremely difficult conditions has had an enormous and profound effect on the health and well-being of enslaved Africans in the United States, especially since the institution of slavery lasted for over 200 years. The current paper will examine the recorded interviews of former slaves collected by the Works Progress Administration in the early twentieth century as a context for the present study. A content analysis of the narratives of the formerly enslaved will be utilized in order to capture depictions of health status and subsequent treatment remedies. Although there is not a lack of information about the institution of slavery in the United States, there is less known about the health behaviors of slaves, key differences in health status based on privilege, and how enslaved Africans coped with various health problems. Preliminary analyses indicate enslaved Africans as extremely resilient despite the severity of the institution of slavery based on their participation in an array of health practices including the elaborate use of herbs, roots, and potent elixirs to prevent and treat illnesses.

### "IT'S PROBABLY JUST ARTHRITIS:" TRANSITIONING TO AN INTEGRATIVE MEDICINE (IM) MODEL OF CARE FOR MANAGING PAIN IN LATE LIFE—A CASE STUDY

L. Martin, *Wayne State University, Detroit, Michigan*

What is an older adult to do when they experience a major health transition, but encounter physicians who do not take the problem seriously because of their age? This presentation analyzes the life history and illness narrative of an 89 year old female, and her transition from being a healthy, active older adult to suddenly experiencing debilitating and unmanageable pain. This in depth case study illuminates key themes on life course disruption from dissertation research conducted in an integrative medicine (IM) pain clinic (August 2008-August 2009) that utilizes conventional biomedicine and complementary medicine for treatment. Using Gay Becker's (1997) theoretical approach of continuity and life course disruption, this case study highlights how the clinic's IM approach in treating this older adult patient through a combination of trigger point injections, massage and physical therapy helped her manage her pain and transition from this state of life course disruption back to a state of continuity where she reengaged with her active retirement. Her narratives describe how, due to her age, she experienced negative attitudes from other health care practitioners who did not take her pain seriously, attributing it to "just arthritis." Her previous experiences ultimately led her to this IM pain clinic. Participants attending this presentation will be able to 1) identify the value of qualitative methods in highlighting the nuances that can emerge in life course research, and 2) discuss how in depth case study analysis demonstrates the need for a more integrative model of pain management care in late life.

### ARE "ANTI-AGING MEDICINE" AND "SUCCESSFUL AGING" TWO SIDES OF THE SAME COIN? VIEWS OF "ANTI-AGING" PROVIDERS

M. Flatt[1], R. Settersten[2], R. Ponsaran[1], R. Binstock[1], *1. Bioethics, Case Western Reserve University, Cleveland, Ohio, 2. Oregon State University, Corvallis, Oregon*

The practice of "anti-aging" medicine (AAM) is flourishing. But little is known about whether or how providers of AAM perceive their efforts as aiming to achieve "successful aging" (SA). Through in-depth interviews with practitioners in the U.S., we unearth their perspectives on SA, reveal how these ideas are exemplified in their goals and practices, and compare them to notions of SA in mainstream gerontology. Our sample of 31 providers was drawn from the directory of the American Academy of Anti-Aging Medicine. Interviews ranged from 40-120 minutes. Transcripts were analyzed using codes to capture provider goals and modes of treatment, patient goals and characteristics, and differences between anti-aging and conventional medicine. Analyses reveal that providers hold some views that are surprisingly consistent with those of SA in gerontology and some views that are significant departures. For example, while gerontologists have heavily debated whether and how to conceptualize and measure SA, providers see SA as the very essence of their work. Rather than adopting extreme goals, such as stopping or reversing aging, AAM providers emphasize goals that are remarkably aligned with SA—to lower the risk of disease, maintain functionality, and continue active engagement in life. Providers target ongoing aging processes among those who are in middle age, while gerontologists often focus on successful outcomes among those who are already in late life. Providers are also likely to challenge normative aspects of aging and insist on the need for intense medical interventions to optimize individuals' functioning.

## SESSION 455 (POSTER)

## ANXIETY, DEPRESSION AND DEPRESSIVE SYMPTOMS

### THE ROLE OF PRESENTING SYMPTOMS IN PREDICTION OF TREATMENT RESPONSE TO ESCITALOPRAM AMONG OLDER ADULTS WITH GENERALIZED ANXIETY DISORDER

C.M. Ciliberti[1], E.J. Lenze[2], B. Edelstein[1], *1. Psychology, West Virginia University, Morgantown, West Virginia, 2. Washington University in St. Louis, St. Louis, Missouri*

Generalized Anxiety Disorder (GAD) is common in late-life (Beekman et al., 1998) and is associated with negative outcomes (e.g. Stanley, Diefenbach, & Hopko, 2003; Wetherell et al., 2004). Because of the multiple possible combinations of diagnostic and presenting symptoms that can result in diagnosis, GAD is a heterogeneous disorder. Age-related differences in presentation further complicate the picture (Palmer, Jeste, & Sheikh, 1997). Little is known about which treatments work best for which constellation of symptoms. The present study sought to better characterize the presenting symptoms that differentiate older adults with GAD from those without, and to examine the predictive value of those symptoms on treatment response to escitalopram. Data from 70 participants, age 60 and older, with a primary diagnosis of GAD using DSM-IV criteria, were examined. All were randomly assigned to escitalopram, and completed 12 weeks of blinded treatment. Data from 42 control participants were also examined. Baseline symptoms were derived by examining responses to the Structured Interview Guide for the Hamilton Anxiety Scale (SIGH-A; Shear et al., 2001). The SIGH-A is a 14-item measure which incorporates diagnostic symptoms of GAD and other anxiety symptoms. A discriminant function analysis revealed two symptom clusters (anxious mood and tension) that differentiated GAD and control participants. These symptoms are consistent with the proposed criteria for GAD in DSM-V. A logistic regression analysis found that neither cluster predicted treatment outcome scores when controlling for baseline scores. However, baseline scores on outcome measures were very strong predictors of week 12 scores.

### PREDICTORS OF CHANGE IN QUALITY OF LIFE IN GENERALIZED ANXIETY DISORDER IN OLDER ADULTS

S. Shrestha[1], H.M. Rhoades[3], M.E. Kunik[1,2,5], N. Wilson[1,2], J. Cully[1,2,5], D.M. Novy[4], A. Greisinger[6], M. Stanley[1,2,5], *1. Houston Center for Quality of Care and Utilization Studies, Baylor College of Medicine, Houston, Texas, 2. Houston Center for Quality of Care and Utilization Studies, Houston, Texas, 3. The University of Texas Health Science, Houston, Texas, 4. The University of Texas M D Anderson Cancer Center, Houston, Texas, 5. Michael E. DeBakey Veteran's Affairs Medical Center, Houston, Texas, 6. Kelsey Research Foundation, Houston, Texas*

Quality of life (QoL) is reduced in older adults with Generalized Anxiety Disorder (GAD) relative to those with other anxiety disorders and non-psychiatric samples (Bourland et al., 2000; Stanley et al., 2003). QoL improves following CBT for GAD (Stanley et al., 2003), but little is known about what predicts change in QoL for older people. This study examined predictors of change in QoL using baseline, post-treatment and follow-up data from a randomized clinical trial of CBT, relative to Usual Care (UC), for participants 60 years or older with GAD. Patients were recruited from Kelsey-Seybold Clinic and Baylor Family Medicine, Houston, TX. Linear mixed analysis was used to examine whether treatment groups, demographic variables (age, race, and gender), baseline worry (PSWQ), anxiety (BAI) and depression symptoms (BDI-II), co-morbidity of psychiatric diagnoses, social support (MSPSS), self-efficacy (SES) and optimism (LOT) predicted change in quality of life from baseline to post-treatment and follow-up. Preliminary analyses show that QoL changed significantly from baseline to follow-up, but change was comparable across the two treatment groups. Gender and baseline scores of depression, general self efficacy and social support predicted change in QoL from baseline to follow-up. The interactions between general self-efficacy and social support with time were significant, suggesting a stronger relation between personality variables and QoL at baseline compared to follow-up. Depression and time interaction were not significant. Our findings suggest that the severity of psychological symptoms and personality factors contribute to change in QoL in older adults with GAD.

### EFFECTS OF DAILY UNCONSTRUCTIVE REPETITIVE THINKING ON SLEEP QUALITY IN OLDER ADULTS

J. Mogle[1], J. Smyth[2], M. Sliwinski[1], *1. Gerontology Center, Penn State University, University Park, Pennsylvania, 2. Syracuse University, Syracuse, New York*

Research has established a relationship between unconstructive repetitive thinking (e.g., rumination) and poorer ratings of subjective sleep quality. For example, Cropley et al. (2006) found that elevated levels of rumination in the evening were associated with sleep quality reported the next morning regardless of total sleep time. The current study examined 1) whether end of day unconstructive repetitive thought (URT) predicted sleep quality the following night, and 2) how age moderated this relationship. Given the prevalence of sleep disturbance in the elderly (e.g., Kamel et al., 2006) and that older adults have increased difficulty inhibiting intrusive thoughts (Hasher & Zacks, 1998), we predicted that age would amplify the effect of URT on sleep quality. An experience sampling study was conducted in which participants (Mage = 45.8, range 20-78 years, 53% female) reported on their negative affect (end of day), frequency of URT (end of day), and sleep quality (at waking) on 7 consecutive days. Hierarchical mixed models indicated that higher levels of URT predicted poorer sleep quality during the following night ($p<.05$). This effect was exacerbated by age; sleep quality of older individuals was affected to a greater degree than younger adults by the frequency of URT on the previous day ($p<.05$). These effects remained significant after accounting for evening levels of negative affect and total sleep time. The present findings suggest that age-related vulnerability to the effects of URT may play a role in accounting for the increased prevalence of sleep problems in older adults.

### EFFECTS OF PSYCHOLOGICAL TREATMENTS FOR DEPRESSION ON SLEEP DISTURBANCES IN DEPRESSED PATIENTS

A. Yon[1], F. Scogin[2], *1. G.V. (Sonny) Montgomery VA Medical Center, Jackson, Mississippi, 2. University of Alabama, Tuscaloosa, Alabama*

It has been shown that, for people seeking treatment of insomnia, the severity of depressive symptoms decrease after a course of cognitive behavioral therapy for insomnia; however, questions remain about whether targeting the primary disorder reduces insomnia symptom severity. To answer this question, hierarchical linear modeling was used to analyze archival data collected from 14 separate studies examining the efficacy of several types of psychological treatments for depression in the adult and older adult populations. Only those participants reporting difficulty sleeping prior to treatment were included in the final analysis (n = 948). Results indicated that participating in a course of psychotherapy for depression significantly decreased problems with early-, middle- and late-night sleep when compared to those not receiving such treatment. Also revealed was that the severity of depressive symptoms prior to treatment helped predict sleep outcomes in most; participants experiencing less severe depressive symptoms typically experience fewer sleep disturbances post-treatment than those with more severe symptoms. Clinical considerations generated from the results are offered.

### ASSOCIATION BETWEEN SOCIAL NETWORK AND DEPRESSION AMONG LOW-INCOME ELDERLY KOREAN IMMIGRANTS

B. Kim, L.B. Maradik Harris, *UCLA, Los Angeles, California*

Background: Isolation and lack of social support have been identified as correlates of depression in elderly immigrants. However, few studies have examined the relationship between social network and depression for low-income elderly Korean immigrants in particular. Purposes & Methods: The study aims to investigate the association of social network with depression among low-income elderly Korean immigrants. The study utilized cross-sectional survey design with a sample of 215 older Korean immigrants in Los Angeles County. The Lubben Social Network Scale (LSNS) was used to measure the various aspects of social network. In an attempt to measure depression, the Geriatric Depression Scale (GDS) was utilized. All participants completed face-to-face interviews which included questions about contacts with family members and friends. Results: The study found that 67 of the 215 elderly Korean immigrants reported significant levels of depressive symptoms as measured by GDS. The study indicated that depressed individuals had fewer family members to contact than non-depressed individuals. Moreover, the depressed group was less likely to have close friends to engage in private conversation than the non-depressed group. Implications: Findings suggest that poor social network is significantly associated with depression among low-income elderly Korean immigrants. Family members or service providers should be encouraged to develop strategies to decrease depression by increasing the social networks amongst their elderly clients.

### ASSOCIATIONS OF MUSCULAR STRENGTH AND CARDIORESPIRATORY FITNESS WITH DEPRESSIVE SYMPTOMS IN MEN

R. Liu[1], D. Lee[1], X. Sui[1], J.N. Laditka[2], N. Colabianchi[1], J. Hussey[1], S. Blair[1], *1. Rui Liu, University of South Carolina, Columbia, South Carolina, 2. University of North Carolina at Charlotte, Charlotte, North Carolina*

We sought to examine prospectively the independent and joint association of muscular strength and cardiorespiratory fitness (CRF) with depressive symptoms in men. Participants were 3,704 men ages 20 to 81 years in the Aerobics Center Longitudinal Study. All participants had voluntary strength testing and completed a maximal exercise treadmill test at baseline (1980-1989), in conjunction with a regular clinical examination protocol. An age-specific composite muscular strength score combined the body weight adjusted 1-repetition maximal leg and bench press measures. CRF was quantified by maximal treadmill test duration in minutes. Depressive symptoms were assessed at follow-up with the 10-item Center for Epidemiologic Studies Depression Scale (CES-D). Age- and examination year-adjusted logistic regressions examined the associations between strength, CRF, and the follow-up measure of depressive symptoms. During an average follow-up of 11.5 years, 367 men reported depressive symptoms. In unadjusted results, a significant inverse association was observed between muscular strength and depressive symptoms (p-trend=0.042), and also between CRF and depressive symptoms (p-trend<0.001). The adjusted association between strength and depressive symptoms was not significant. The association between CRF and depressive symptoms remained significant after controlling for potential confounders and further adjusting for muscular strength; the odds of reporting depressive symptoms, comparing middle- and high-CRF thirds to the lowest third, were 0.67 and 0.69 (p = 0.01 each), respectively. Higher baseline CRF was independently associated with lower risk of reporting depressive symptoms at follow-up. Results suggested the possibility that greater muscular strength may have added to the protective effect of CRF.

### HEAVY FOCUS ON INDEPENDENCE EXPLAINS DEPRESSIVE SYMPTOMS AND SUICIDE IDEATION IN RURAL OLDER ADULTS

J.J. Gregg, E.C. Price, R. Petts, J. Cleary, D. Mallow, A. Fiske, *West Virginia University, Morgantown, West Virginia*

Suicide rates in rural areas in the United States exceed those in urban areas. Additionally, older adults are the most vulnerable population for death by suicide and it is estimated that 85% suffer from depression before death by suicide. In prior research, rural ideology (i.e., focus on independence) has been proposed as one explanatory variable in the relation between rural residence and death by suicide (Hirsch, 2006). However, this link has not been established empirically. The current study examined focus on independence as a mediator between rural residence (population ≤ 2500) and depressive symptoms or suicide ideation in older adults. Our sample consisted of 89 older adults who participated in a mailed survey. Emphasis on independence was assessed using the “need for control” subscale of the Personal Style Inventory (PSI; Robins et al., 1994). Individuals who live in rural vs. non-rural areas endorsed higher levels of depressive symptoms, F(1,74)=4.85, p<.05, and greater “need for control,” F(1,80)=6.62, p<.05. In turn, greater “need for control” predicted higher levels of depressive symptoms, F(1,72)=16.19, p<.001. A mediation analysis revealed that “need for control” mediated the relation between rural residence and depressive symptoms. This same pattern was found for suicide ideation. Rural individuals had higher levels of suicide ideation, F(1,84)=4.64, p<.05, and suicide ideation was predicted by higher “need for control,” F(1,79)=4.67, p<.05. “Need for control” mediated the relation between rural residence and suicide ideation. The study suggests that level of emphasis placed on independence may contribute to urban/rural differences in depression and suicidal behavior.

### FUNCTIONAL CAPACITY AND PERSONALITY AS PREDICTORS OF DEPRESSIVE SYMPTOMS AMONG CENTENARIANS

G.D. Da Rosa, P. Martin, J. Margrett, *Human Development and Family Studies, Iowa State University, Ames, Iowa*

The purpose of this study was to investigate the effects of activities of daily living and personality traits as predictors of depressive symptoms among 152 community-dwelling and nursing home centenarians from Iowa. A hierarchical multiple regression analyses were computed using mental status, gender, education, age, and residential status in the first block. ADL was added in the second block, and the Big-5 personality traits were included in the third block. Our results suggest that mental status was a significant predictor of depressive symptoms in all three blocks, suggesting that centenarians with a high number of cognitive errors reported higher levels of depressive symptoms, ($B$=.30; $p$ < .05). There were two statistical trends the first suggests that women were more likely to report high levels of depressive symptoms, ($B$= -1.86; $p$ > .05), and the second trend was found for ADL on predicting depressive symptoms, ($B$=.13; $p$ > .05), indicating that centenarians with higher ADL impairments were more likely to report depressive symptoms. The personality variables in block 3 significantly contributed to the increase in variance explained in depressive symptoms among centenarians, ($F_\Delta$= 14.99; $p$ < .001; Adj.$R^2$=.61).Centenarians with high levels of Neuroticism and lower levels of Extraversion showed more depressive symptoms, ($B$=.46; $p$ < .001; $B$ =-.17; $p$ < .05), respectively. Our study concluded that mental status, ADL, Neuroticism, and Extraversion was significantly associated to lower depressive symptoms among Iowans' centenarians. The influence of ADL on depressive symptoms was in part explained by the personality variables.

## META-ANALYSIS OF THE EFFECTS OF EXERCISE AND USE OF NINTENDO WII FOR REDUCING DEPRESSION AMONG OLDER ADULTS

G.Y. Slater[1], D. Dickin[2], M. Dishman[1], *1. Social Work, Ball State University, Muncie, Indiana, 2. Ball State University- Exercise Science, Muncie, Indiana*

Background: It is well established that increasing activity helps improve a variety of health and mental health outcomes in late life, including depression. The purpose of the present meta-analytic study was to 1) analyze the effects of exercise on depression outcomes, 2) compare traditional exercise to Nintendo Wii on cardiovascular outcomes. Methods: We searched the following databases: Academic Search Premier, JStor, ERIC, Medline, CINAHL, HealthSource (Nursing Academic Edition), Military and Government Collections, PSYCHarticles, and PsychInfo. Key words used in the search were older adults, elders, elderly, geriatric, treatment, intervention, activities, mental health, depression, anxiety, self-efficacy, physical activity, exercise, Wii, Nintendo, and video games. Reference lists and several key journals were hand-searched for additional articles. Sixteen studies (N=8,406) were used in the final analysis. Results: Effect sizes ranged from no effects to significant effects (r= .770) with a moderate mean effect (r= .288) for the 13 exercise studies (N=8,361). Effects for Nintendo Wii studies (N=45) ranged from no effect to significant effects (r=.984) and mean effects were strong (r=.641). Nintendo Wii was significantly more effective than traditional exercise (F1, 14= 3.204, p=. 095). Conclusions: Small samples and few published studies of Nintendo Wii's effects were a limitation. Nintendo Wii shows significant promise for improving health and mental health outcomes, however future RCT or matched controls designs are needed.

## GENDER DIFFERENCE IN THE RELATIONSHIP BETWEEN SPOUSAL SUPPORT AND DEPRESSIVE SYMPTOMS AMONG OLDER ADULTS

N.G. Choi, *University of Texas at Austin, Austin, Texas*

Based on data from the first wave of the National Social Life, Health, and Aging Project (2005-2006), the purpose of this study was to examine gender difference in the relationship between depressive symptoms and spousal support among persons age 57 and older (n=2,924), controlling for other risk and protective factors, including support from other sources. Nearly 70% of the sample reported that they were married or cohabiting with a partner and provided data on their perception of spousal support using a 4-item spouse support scale. The scale scores, ranging from 4-12, were categorized into three groups to represent low, medium, and high levels of support. The nonmarried respondents served as the reference group. Depressive symptoms were measured with the 11-item Center for Epidemiologic Depression Scale (CES-D). Women reported a significantly higher level of depressive symptoms. Married/partnered women also reported a slightly higher level of spousal support than their male counterparts (p <.05). The gender-separate, hierarchical multivariate regression results show that the high level of spousal support was significantly negatively associated with the CES-D scores for both genders. On the other hand, the low level of spousal support was significantly positively associated with the women's CES-D scores only. Spousal support alone explained 1.8% and 3.8% of the variances of the CES-D scores for women and men, respectively. The addition of the spousal support variable did not change the relationship between the CES-D scores and the other risk and protective factors for both genders. The implications for the gender difference are discussed.

## COMPARING THREE TIME-METRICS TO EXAMINE CHANGES IN LATE-LIFE DEPRESSIVE SYMPTOMS OVER AGING, DISABLEMENT, AND MORTALITY PROCESSES

E.B. Fauth[1], D. Gerstorf[2], N. Ram[2], B. Malmberg[3], S.H. Zarit[2,3], *1. Family, Consumer, and Human Development, Utah State University, Logan, Utah, 2. Pennsylvania State University, State College, Pennsylvania, 3. Jönköping University, Jönköping, Sweden*

Developmental processes are inherently time-related. However, time can be characterized in different ways and indexed in relation to different starting or ending points. The appropriate time metric to best describe a developmental phenomenon of change depends on the underlying process. To test whether depressive symptoms are primarily driven by aging (primary), disablement (secondary), or mortality (tertiary) processes, we compare descriptions of late-life depressive symptoms across "time from birth", "time to and from the onset of disability", and "time to death" time metrics. Data come from four Swedish studies of individuals aged 70-100+ (N=1,067) who measured every two years for up to five occasions of measurement. Depressive symptoms were assessed using a 10-item version of the CES-D. Disability onset was indexed as the wave at which impairment in Activities of Daily Living were first reported. Mortality data were derived from follow-up records. Applying growth models, we use model fit indices and the amount of variance accounted for to compare descriptions of change in depressive symptoms across the three time metrics. Results indicate that "time to and from disability onset" and "time to death" models provided more efficient descriptions of changes in depressive symptoms than did "time from birth" models. Our findings suggest that these late-life changes are less likely driven by aging processes (primary aging), but rather by processes underlying disablement (secondary aging) and mortality (tertiary aging). By better understanding the mechanisms underlying trajectories of late-life depressive symptoms, we may be better equipped to promote and maintain well-being for older individuals.

## COMORBID ANXIETY IN OLDER PRIMARY CARE PATIENTS WITH MAJOR DEPRESSION: EFFECTS OF VASCULAR RISK

A.R. Azar[1], M.P. Chopra[1,2,3], J. Rudolph[1,4,3], *1. VA Boston Healthcare System, Brockton, Massachusetts, 2. Boston University School of Medicine, Boston, Massachusetts, 3. Harvard Medical School, Boston, Massachusetts, 4. Brigham and Women's Hospital, Boston, Massachusetts*

**Introduction:** While previous research has identified risk factors for comorbid anxiety and depression in later life, the impact of vascular risk on this relationship is less understood. This analysis examined whether increasing vascular risk was associated with comorbid anxiety disorder diagnosis in patients with major depressive disorder (MDD) using the PRISM-E study. **Methods:** Older primary care patients with MDD were included in the analyses (n=792). Depression and anxiety disorder (i.e., panic disorder, GAD) were diagnosed according to DSM-

IV criteria using a structured interview. Self-report vascular risk factors (i.e., hypertension, diabetes, heart trouble, hardening of the arteries, smoking) were summed and dichotomized as follows: Low Risk=0-1, High Risk=2+. Outcome was defined as the absence or presence of an anxiety disorder. Multivariate logistic regression examined the effect of vascular risk on anxiety diagnosis in MDD while accounting for related demographic and clinical factors. **Results:** Thirty-three percent (n=265) of study participants with MDD also had a comorbid anxiety disorder. In bivariable analyses, the presence of ≥2 vascular risk factors was associated with higher rates of comorbid anxiety (Low=26% vs. High=39%, p<0.001). After controlling for demographic and clinical factors, (high) vascular risk was independently associated with anxiety diagnosis in MDD (OR=1.62, 95% CI=1.17-2.26). **Conclusions:** This analysis found that elevated levels of vascular risk were independently associated with anxiety diagnosis in older patients with major depression. Because treatment options and goals may be altered in patients with both MDD and anxiety, the impact of vascular risk in patients with these comorbid conditions warrants further study.

## PREDICTORS OF DEPRESSION AND QUALITY OF LIFE BETWEEN THE RURAL AND URBAN ELDERLY IN SOUTH KOREA

Y. Son*, Ederly Care Management, Catholic University of Pusan, Busan, Republic of Korea*

This study attempted to investigate the factors of influencing depression and examine six areas of quality of lives. A sample of 2,955(Urban 1,752; Rural 1,203) Korean elderly was drawn from the first wave of Korean Longitudinal Study(KLoSA). Six areas of quality of lives included social networks with adult children, supportive social networks, health-related behaviors, utilization of health services, health-promoting behaviors and several domains of life satisfactions. The socioeconomic disparity between the urban and rural residence pervaded into most areas of quality of lives. Being the rural elderly was more likely to be poor, weaker in family networks, fewer in social networks, and 49.1% of the rural elderly was reported to have depression. The urban elders tended to have adult children living nearby, see more frequently, and make more contacts than rural counterparts. The rural residents were more likely to receive both monetary and non-monetary assistance, tended to have higher level of regular exercise, and use public health facilities four more times than the rural counterparts. Although the rural residents had fewer chronic diseases, they rated their conditions worse than urban older people and viewed their future life condition as negative. The results of multivariate analyses with rural adults showed that having contact with adult children weekly and social networks tended to lower level of depression, suggesting the effectiveness of informal networks. Public health plans alleviating and preventing depression were suggested.

## THE EFFECTS OF PHYSICAL HEALTH AND FINANCIAL SATISFACTION ON DEPRESSIVE SYMPTOMS AMONG OLDER KOREAN IMMIGRANTS IN CANADA: DOES ACCULTURATION MATTER?

W. Kim, Y. Chen*, University at Buffalo, Buffalo, New York*

Korean immigrants experience higher levels of depressive symptoms than do other ethnic/racial groups. As one of the most recent groups to immigrate to Canada, Korean immigrants may experience higher levels of adjustment stress. The purpose of this study was to investigate factors that influence depression among older Korean immigrants in Toronto. A total of 149 participants ages 60 years or older (mean age=74.07, SD=8.24) completed face-to-face interviews conducted in Korean. Hierarchical regression analyses were performed in four steps: 1) demographic variables, 2) acculturation variables (years of immigration and English proficiency), 3) social integration (living arrangement and social activity), and 4) physical health and financial satisfaction. At step 1, education was negatively associated with depression (b=-.291, p<.05). At step 2, after adding acculturation variables, acculturation did not appear to be significant. At step 3, after adding social integration variables, the model was significantly improved and social integration variables were significantly associated with depression scores (living arrangement: b=.224, p<.05; frequency of social activity: b=-.233, p<.05). In the final model, physical health status (b=-.379, p<.001) and financial satisfaction (b= -.169, p<.05) were negatively associated with depression. The final model explained about 38% of variance of depression in the sample. The results suggest that health and financial status, and not acculturation, are important factors to explain the levels of depression in older Korean immigrants. Implications for future study and social work practice will be discussed.

## MULTI-METHOD ANALYSIS OF DEPRESSION IN GRANDMOTHER CAREGIVERS

C. Musil, A. Jeanblanc, J.A. Zauszniewski, C. Warner*, Case Western Reserve Univ, Cleveland, Ohio*

Depressive symptoms are among the most commonly measured outcomes in gerontology research. Since different methods of assessing depressive symptoms may produce varying conclusions, the purpose of this secondary analysis was to examine concordance of the Center for Epidemiological Studies-Depression (CES-D) Scale with other methods of identifying mental health problems, collected at the same time wave. This sample included 323 community-dwelling women who participated in two waves of a study on caregiving to grandchildren. Using mailed questionnaires, participants completed the CES-D, a checklist of provider-diagnosed mental health problems (depression, anxiety, bipolar disorder) and a self-report of mental health problems and health actions. Analysis: CES-D scores were classified as low (<16), moderate (16-22) or high risk (>23) for clinical depression. Chi-square tests and analysis of variance were used to compare risk groups on provider-assessed and self-reported mental health problems. Results: There was a strong concordance between methods. For example, 21% had CES-D scores >23, and of those, 69% had been diagnosed with clinical depression by a health provider, and 78% indentified depression as a current problem. Across groups, 36% identified depression as a health problem, 65% considered it to be an illness, and 87% reported that they treat their depression: 71% take medication, 20% see a physician/mental health specialist, 14% pray or meditate, and less than 1% use alternative treatments. Longitudinally, 78% reporting a diagnosis of depression did so in the following wave. Using multiple methods to gather depressive symptom data appears to enhance the validity of study findings.

## PREDICTING THE TRAJECTORIES OF DEPRESSIVE SYMPTOMS AMONG SOUTHERN, COMMUNITY-DWELLING OLDER ADULTS: THE ROLES OF RELIGIOUSNESS

F. Sun[1], N. Park[2], L. Roff[3], D. Klemmack[3], M. Parker[3], H. Koenig[4], P. Sawyer[5], R.M. Allman[5], *1. School of Social Work, ASU, Phoenix, Arizona, 2. University of South Florida, Tampa, Florida, 3. The University of Alabama, Tuscaloosa, Alabama, 4. Duke University, Durham, North Carolina, 5. The University of Alabama at Birmingham, Birmingham, Alabama*

Purposes: This study examined the effects of religiousness on the trajectories of depressive symptoms in community-dwelling older adults over a four-year period. Methods: Five waves of data from the University of Alabama at Birmingham Study of Aging were analyzed using a hierarchical linear modeling (HLM) method. The study included 624 participants (Mage = 74, SD=5.5, at baseline) who completed interviews annually from 1999 to 2003. Participants were 49% African American and 51% Caucasian; 53% were women; and 49% resided in rural areas. Depressive symptoms were measured using the short form of the Geriatric Depression Scale (M = 1.98, SD = 2.1). Religiousness was assessed by 3 subscales (i.e., religious service attendance, private religious activities, and intrinsic religiousness) of the Duke University Religion Index. Covariates were self-rated health, social support, ADL/IADL limitations and cognitive impairment. Results: The HLM results indicated that older adults experienced a gradual decline in depressive symptoms during the first two years, followed by a steady increase during the last two years. Participants who attended religious services more frequently had fewer symptoms of depression at baseline ($p < .01$). However, neither religious service attendance nor private religious activities were related to the trajectory of depressive symptoms. Participants with the highest levels of intrinsic religiousness experienced a steady decline in depressive symptoms, while those with lower levels of intrinsic religiousness experienced a short-term decline followed by an increase in depressive symptoms ($p < .05$). Implications: Intrinsic religiousness may have salutary effects on depressive symptoms in older adults with aging.

### HEALTH AND DEMOGRAPHIC PREDICTORS OF LONGITUDINAL CHANGE IN DEPRESSION SCORES

R.F. Kennison, *Psychology, California State University, Los Angeles, Los Angeles, California*

Age related longitudinal trends in the Health and Retirement Study's CES-D-8 depression score data (n = 24,733) were modeled from ages 51 to 90 with up to seven test occasions. Predictors of change included disease indicators (arthritis, high blood pressure, heart disease, diabetes, lung disease, cancer, and stroke) and demographic measures (sex, and education). Of the unconditional models examined, the best fitting included linear and quadratic slopes; both slopes indicating small but reliable increases in depression over age. However, when the health and demographic predictors were added in an associated conditional model, the observed linear and quadratic increases in depression disappeared, suggesting that age related increases in depression are due to the presence of various diseases, and being male and less educated. With the exception of cancer, the presence of any diseases resulted in higher depression scores at the intercept. Being male and having less education also predicted higher depression scores. The linear slope only was predicted by sex, and education, whereby linear increases in depression were associated with being male and lower education. The quadratic slope was not reliably predicted by any predictors. The importance of accounting for disease and demographic information when assessing depression is discussed.

## SESSION 460 (SYMPOSIUM)

### CONDUCTING MIXED METHODS AGING RESEARCH: VARIOUS WAYS OF INTEGRATING QUALITATIVE AND QUANTITATIVE METHODS

Chair: *L.K. Donorfio, Human Development and Family Studies, University of Connecticut, Waterbury, Connecticut*
Discussant: *P.H. Van Ness, Yale University, New Haven, Connecticut*

Last year the Qualitative Research Interest Group co-sponsored a symposium with the Measurement, Statistics, and Research Design Interest Group on various ways of integrating qualitative and quantitative methods in conducting mixed methods aging research. It was highly successful, with the audience requesting a similar symposium for this year. This symposium will present a balanced panel of researchers from both interest groups who have conducted aging research using mixed methods designs. The presenters will discuss the strengths and challenges of using both methods together, the thought processes behind conceptualizing a mixed methods design, and how the results can be effectively integrated and communicated. The symposium discussant will consider the strengths and challenges to conducting and communicating mixed methods research and how using mixed methods designs can deepen our understanding of aging issues.

### RURAL APPALACHIAN ADULTS WITH MULTIPLE MORBIDITIES: THE ROLE OF SOCIAL SUPPORT

S.H. Bardach[2,1], Y.N. Tarasenko[2,3,4], N. Schoenberg[2], *1. Graduate Center for Gerontology, University of Kentucky, Lexington, Kentucky, 2. University of Kentucky - Department of Behavioral Science, Lexington, Kentucky, 3. University of Kentucky - Department of Epidemiology, Lexington, Kentucky, 4. University of Kentucky - Department of Health Services Management, Lexington, Kentucky*

Rural Appalachian adults with scarce personal and community resources and multiple chronic conditions face considerable challenges in managing their illnesses. We conducted a series of in-depth interviews with 40 adults, employing both qualitative and quantitative measures, to examine how these individuals with multiple chronic conditions describe the potentially valuable asset of social support. Participants generally felt support was available, though perceptions of emotional/informational support were lower than other aspects of support. Participants' experiences suggest that placing a high value on independence, coupled by an emphasis on clinical and medical needs, leads to less reliance on social support than the literature suggests. Thus, social support may be a valuable asset, but may not play as prominent a role in managing health care needs as previously believed.

### USING MIXED METHODS IN A STUDY ON ATTITUDES

A. Kydd, *Health Nursing and Midwifery, university of the west of scotland, Hamilton, Lanarkshire, United Kingdom*

Measuring attitudes and exploring where such values and beliefs originate is of great interest to researchers. However, it is well-acknowledged in the literature that attitudes can be difficult to research. This paper discusses a large international study using a mixed methods approach. The study seeks to explore the attitudes of health care workers towards those who work with older people. The UK study has 474 returned questionnaires to date and 102 people willing to be interviewed. This paper focuses on the rational for a mixed method approach.

### A MIXED METHODS APPROACH TO UNDERSTANDING SERVICE NEEDS OF NEW YORK STATE CAREGIVERS

B. Chandler, *LIGEC, Stony Brook University, Stony Brook, New York*

In an effort to study the future service needs of elderly New Yorkers and their caregivers so that data-driven policy recommendations could be made to legislative decision-makers, the Center for Aging Policy Research at the Stony Brook University School of Social Welfare created "the Family Caregiving Research Program." In designing this program, a decision was made to use both qualitative and quantitative research methods. First, a statewide telephone sample survey was undertaken to establish baseline and statewide statistical prevalence data on the magnitude, intensity, type and repercussions of informal, unpaid family caregiving. Following that, a focus group study was conducted to gain an in-depth understanding of patterns of informal family caregiving and service use, especially among various ethnocultural groups. This paper will discuss both the rewards and challenges of using a mixed methods approach.

### DEVELOPING A SHORT GERIATRIC DEPRESSION SCREENING TOOL USING MIXED METHODS

F. Yang[1,2,3], D. Tommet[1], E.T. Crehan[1], B. Forester[4,3], S. Pinals[5,3], A.P. Abrams[2,3], R. Jones[1,2,3], *1. Institute for Aging Research, Hebrew SeniorLife, Boston, Massachusetts, 2. Department of Medicine, Division of Gerontology, Beth Israel Deaconess Medical Center, Boston, Massachusetts, 3. Harvard Medical School, Boston, Massachusetts, 4. McLean Hospital, Boston, Massachusetts, 5. Cambridge Health Alliance, Cambridge, Massachusetts*

Using a dominant-less dominant design for mixed methods research, we conduct a simulation study and small pilot validation study on a quasi-adaptive (paper-based) short (QASh) form for late-life depression with a short qualitative semi-structured interview regarding what depression means to a diverse community dwelling older adults (N=69). The QASh form for late-life depression was developed based on item response theory from the National Institutes of Health (NIH) Patient Reported Outcomes Measurement Information System (PROMIS) emotional distress item bank. We refine the QASh form for late-life depression based on a short qualitative interview that entailed a free-listing portion adapted from Barg and colleagues' (2006) research: "Please provide a list of words that describe: a) a person who is depressed; b) yourself when you are depressed, down in the dumps, or blue." We suggest a refined QASh form for late-life depression that considers acculturation characteristics and race/ethnic differences for further pilot testing and validation.

## SESSION 465 (POSTER)

## ELDER ABUSE AND PROTECTION

### WHO CARES FOR THEM?: MOTIVATIONS OF VOLUNTEER TEMPORARY GUARDIANS TO ELDERLY PERSONS

A.B. Edwards, C.M. Gillotti, E.R. Swaney, D. Robbins, *Institute for Social and Policy Research, Purdue University Calumet, Hammond, Indiana*

The purpose of this study was to investigate volunteer guardians for elderly persons and to descriptively examine their motivations for volunteering in this type of program. Changes in the demographic structure of the United Sates point to the growing need for care from non-family members. For example, in 2005, 9.9% of women in the U.S. over the age of 65 were childless and that percentage is only expected to increase (Kinsella & He, 2009). Data was obtained from the Volunteer Advocates for Seniors (VAS) program. The VAS program is a public form of temporary guardianship for cognitively incapacitated adults 55 years and older in Northwest Indiana. The VAS program is run by a project manager and two full-time program coordinators in conjunction with the hospital president, and most importantly, the Lake Superior Court system. The applications of 60 volunteers for the VAS program were content analyzed independently by four researchers. Different themes were developed by the researchers based upon common answers. Results indicate that motivations for becoming a volunteer guardian fall under themes which include: Personal experience with caregiving; Experiences in Job/Profession; Desire to give back to the community; Personal gain (knowledge, skills); and Religious/Spiritual. Implications for similar programs, as well as the future need for volunteer guardians will be discussed

### RISK FACTORS FOR FINANCIAL EXPLOITATION AND FRAUD AMONG AN URBAN ADULT POPULATION IN THE UNITED STATES

S. Strasser[1], B. Payne[2], A. Mistretta[1], P.S. King[3], *1. Georgia State University Institute of Public Health, Atlanta, Georgia, 2. GSU Department of Criminal Justice, Atlanta, Georgia, 3. Georgia Department of Human Services, Division of Aging Services, Atlanta, Georgia*

INTRODUCTION: Elder mistreatment is a growing problem in the United States. Current conservative estimates are that between 1-2 million older adults are victims of abuse every year. A common form of elder mistreatment is financial exploitation. AIM: The purpose of this study is to explore possible risk factors of financial exploitation among adults living in an urban area of the U.S. Data from older and younger respondents was examined to see if risk factors were different between the groups. METHODS: A random digit-dialing telephone survey was administered to an adult sample in the Norfolk Virginia metropolitan area. Descriptive statistics, t-tests, cross-tabulations, chi-square, and regression analyses were calculated to determine if participant age, ethnicity, gender, education and income were associated with reported telephone exploitation and fraud. RESULTS: Seven hundred and forty surveys were completed. Financial exploitation was reported by nearly forty percent of the sample (39.2%). A smaller sample reported being victims of fraudulent telephone scams (7.9%). An association was found between increasing age and increasing victimization by telemarketing fraud. Participant income was not significantly correlated with victimization. However, ethnicity, education, and gender were found to be significantly associated with telephone exploitation. DISCUSSION: The results from this study demonstrate that telephone exploitation presents a threat to urban-dwelling adults. Older adults are slightly more vulnerable to financial exploitation than younger adults. These results can help inform tailoring of future programming so that the health promotion / protection messages and interventions for vulnerable populations can be optimized.

### CONCEPTUALIZATIONS OF MISTREATMENT AMONG AMERICAN INDIAN ELDERS

L.L. Jervis, W. Sconzert-Hall, *University of Oklahoma, Norman, Oklahoma*

The problem of how to conceptualize elder mistreatment goes back several decades. Issues of conceptualization are especially important for ethnic minority populations, who may have perspectives that differ from the dominant society. This mixed methods CBPR study, which examined perceptions of mistreatment among 100 urban and rural older American Indians, permits a rare glimpse into how Native elders themselves understand this issue. Here, good treatment emerged as a complex mixture of behavioral factors (being taken care of, having one's needs met, spending time with family members, and being included in things) and attitudinal factors (being respected and being loved). Poor treatment, conversely, was defined as financial exploitation, neglect, psychological abuse, physical abuse, as well as lack of respect. Many of the elders who stated, in response to open-ended questions, that they had been mistreated did not endorse abuse items on the structured survey. Some of these elders sincerely felt that they were not treated well by family and were quite unhappy about it, but their perceived mistreatment did not come close to the level of a reportable offense. The complaints of these elders often revolved around feeling taken advantage of in a variety of ways (e.g., being unappreciated, financially exploited, babysitting excessively, not getting the help they needed). These findings point to the importance of understanding the underlying constructs that elders have in mind when they describe optimal and suboptimal treatment, and suggest that behavior that is highly distressing to elders may be outside the purview of elder protective services

### THE ROLE OF ELDER PARENT/ADULT CHILD RELATIONSHIP QUALITY IN OLDER ADULT PHYSICAL ABUSE: AN ECOLOGICAL, BI-FOCAL, PERSPECTIVE

L.B. Schiamberg, L. von Heydrich, *Family and Child Ecology, Michigan State University, East Lansing, Michigan*

Overview: The purpose of this investigation was to identify the risk factors involved in elder physical abuse by adult children in the family/community setting. An ecological theoretical perspective was used to model the contextual risk factors of elder physical abuse, moving from the immediate bi-focal, adult child/older adult relationship, to the effects of more distal contexts involving broader social relations/connections and support resources. Design and Methods: A Random Digit Dial (RDD) sample of 203 non-institutionalized, English-speaking, older adults (65 years+) from the Midlife Development in the United States (MIDUS II, 2004-2006) study was used. LISREL/ SEM data modeling was utilized to examine causal pathways and associations of elder physical abuse, involving 1) the immediate, bi-focal, older adult/adult child context (e.g. older adult demographics, physical/emotional health, and behavioral factors, adult child characteristics and relationship quality) and 2) broader social support contexts. Mplus, PAXW, and SYSTAT statistical software packages were used for data modeling. Results: Older

Adult Health (γ = -0.738; t-value = -3.072; p = 0.002), Adult Child Characteristics (γ = -0.270; t-value = -3.422; p = 0.001), and Older Adult Social Isolation (γ = -0.329; t-value = -2.157; p = 0.041), as latent factors, were significantly related to physical abuse when mediated/ moderated by the Victim/Adult Child Relationship Quality (γ = -0.831; t-value = -3.908; p = 0.000). Implications: This study supports the usefulness of an ecological, bi-focal, perspective for both understanding the complexity of elder physical abuse, including the critical role of the relationship quality, and developing sensitive interventions.

### IN THEIR SHOES: STRATEGIES DEVELOPED BY CERTIFIED NURSES' ASSISTANTS TO MANAGE AND PREVENT RESIDENT-TO-RESIDENT VIOLENCE IN NURSING HOMES

S. Sifford, *Arkansas State University, State University (jonesboro), Arkansas*

Resident-to-resident violence (RRV) is a threat to the safety and quality of life of residents in nursing homes. To date, little evidence exists regarding RRV or strategies for managing and preventing it. As part of a larger qualitative study that explored RRV and the triggers that precede it, strategies developed by certified nurses' assistants (CNAs) for the prevention of RRV were also explored. Using a semi-structured interview guide, eleven CNAs were asked what strategies they used to prevent and manage RRV in the nursing home. Data were analyzed using content analysis and constant comparison. Four factors that affected the ability of CNAs to manage and prevent RRV were "knowing the residents," "keeping residents safe," "spending quality time," and "something to do." These factors were combined into the over-riding theme "distraction." The results of this study reveal useful information regarding the successful prevention and management of RRV and may provide important baseline information for the future development of interventions.

## SESSION 470 (SYMPOSIUM)

### EXPANDING PARADIGMS OF CARE AND SUPPORT: CHALLENGES FACED AND LESSONS LEARNED

Chair: *J. Savla, Center for Gerontology, Virginia Tech, Blacksburg, Virginia*

Discussant: *A. Davey, Temple University, Philadelphia, Pennsylvania*

Families provide support for more older adults in need of care than ever before, and they provide it for longer periods of time. However, most of our research on caregiving relies on normative characterizations and is often devoid of contextual considerations. The presentations in this symposium bring rich qualitative investigations and nationally representative databases in order to expand our paradigms of care and support. Along the way, they reveal some of the challenges families face and lessons to take caregiving research to the next level. Brossoie, Roberto and Blieszner dismantle the popular imagery of the sources of support for African-American caregivers and provide recommendations for improved sensitivity in the context of the needs and perceptions of available support. Takagi and Davey present a profile of caregivers for the oldest-old, the fastest growing, yet under-studied group, coordinating care in tandem with informal and formal support systems. Dolbin-MacNab's paper discusses the emerging area of grandchildren proving care to their custodial grandparents. Savla and Almeida consider care from the context of adult children providing routine assistance and long-distance support with an emphasis on short-term and long-term consequences for caregiver health. Finally, Roberto and colleagues triangulate data from multiple family members in order to evaluate care needs and daily challenges faced by families providing care to a person with mild cognitive impairment. Davey concludes the session with a critique and integrative discussion focusing on the promises and challenges of caregiving contexts in order to expand the paradigms of care and support.

### SOURCES OF SUPPORT FOR AFRICAN AMERICAN CARE PARTNERS OF PERSONS WITH MILD COGNITIVE IMPAIRMENT

N. Brossoie, K.A. Roberto, R. Blieszner, *Center for Gerontology, Virginia Polytechnic Institute and State University, Blacksburg, Virginia*

Popular imagery and many studies hold that most African American caregivers seek support from their church, family, and friends. However, few studies point out barriers to receiving these supports. We investigated family dynamics and support among primary supporters of older adults diagnosed with mild cognitive impairment (MCI). Twenty two African American primary care partners were interviewed about their interactions with the older adult with MCI and the physical and social support they received or desired from family members, friends, and community members. Findings indicate that the relationship between the primary care partner and the elder, age, income, family involvement, and perceived support are related to the types of emotional and physical support received. Reliance on church for support is constrained by willingness to let others see them as vulnerable and in declining health. Implications and recommendations for improved sensitivity to the needs and perceptions of available support will be discussed.

### CAREGIVERS FOR THE OLDEST OLD: A NATIONAL PROFILE

E. Takagi[1], A. Davey[2], D. Wagner[1], *1. Health Science, Towson University, Towson, Virginia, 2. Temple University, Philadelphia, Pennsylvania*

Population aging has been most pronounced among the oldest old (85+), the group most likely to be in need of care for their functional and cognitive limitations. We used data from 1,923 caregivers and 3,320 care recipients with at least one functional limitation from the 2004 National Long-Term Care Survey. Care recipients over 85 were: more likely to have IADL and ADL limitations, less likely to be married, and more likely to be women and live alone. Those caring for individuals 85+ were: more likely to report being nonwhite, in better health, to be women, adult children, and a sole caregiver. They were also more likely to receive informal and formal supports. We consider the potential of using formal services as effect modifiers for the association between primary objective stressors and physical, emotional, and financial strains. Implications for policy and practice are considered.

### GRANDCHILDREN AS CAREGIVERS FOR THEIR CUSTODIAL GRANDMOTHERS: WHO ARE THEY AND HOW ARE THEY DOING?

M.L. Dolbin-MacNab, *Human Development, Virginia Polytechnic Institute and State University, Blacksburg, Virginia*

Caregiving research has provided valuable insight into the needs and experiences of family caregivers. However, one population of caregivers that is not well-understood is grandchildren who provide care to their custodial grandparents. Using survey data from 81 adolescents and their custodial grandmothers, this study examined the extent to which grandchildren provide IADL and ADL care for their grandmothers, the association between caregiving and grandchild well-being, and grandchildren's perceptions of the impact of their caregiving responsibilities on their lives. Results indicate that the majority of grandchildren were involved in IADL activities and that older, Caucasian grandchildren were most likely to be involved in ADL activities. Greater involvement with ADLs was associated with higher levels of grandchild behavior problems. Grandchildren with borderline or clinical levels of behavior problems reported more negative impacts of caregiving, although ADL caregiving was associated more positive self-perceptions. These findings provide important guidance for future research and intervention.

### DAILY ROUTINE ASSISTANCE AND LONG-DISTANCE SUPPORT: SHORT TERM AND LONG-TERM IMPACT ON ADULT CHILDREN'S HEALTH

J. Savla[1], D. Almeida[2], *1. Center for Gerontology, Virginia Tech, Blacksburg, Virginia, 2. Pennsylvania State University, University Park, Pennsylvania*

Although caregivers enact care roles in a range of situations, yet a preponderance of research focuses on continuous and intense caregiving to a chronically ill family member and much less attention is paid to the casual routine assistance to family members. We use diary data from 119 adult children from Wave 1 and 239 adult children from Wave 2 of the National Study of Daily Experiences, to examine the association of providing routine assistance to older parents amidst everyday circumstances and the short-term and long-term physical and psychological consequences for adult children providing assistance. Even after controlling for within-person daily situational factors and between-person stable characteristics, the enactment of this role in itself was found to have immediate consequences on daily health for adult children providing care, particularly for those with fewer resources and more demands on time. Stability of these consequences was assessed using the second burst of diaries.

### THREE VOICES ARE BETTER THAN ONE: FAMILY MEMBERS' ASSESSMENT OF COGNITIVE DEFICITS IN LATE LIFE

K.A. Roberto, R. Blieszner, M.C. McPherson, *Virginia Polytechnic Institute and State University - Center for Gerontology, Blacksburg, Virginia*

We examined subjective perceptions of memory loss among older adults diagnosed with mild cognitive impairment (MCI) and two family members. Interviews with 92 triads revealed divergent perspectives on the degree of memory loss and the effects of MCI on everyday functioning. Elders with MCI and non-resident relatives typically reported few deficits in the elder's memory while those living with the elder offered extensive examples of deficits in the elders' cognitive abilities. Interviewing three family members increased insights into the complexities associated with MCI and uncovered nuances about their lives that would have been less likely to emerge from interviews with just one member. Family-level investigations are important for furthering understanding of the daily challenges facing families in this early stage of memory loss; however, recruiting families and analyzing dyadic and triadic data presented methodological challenges that need to be addressed as scholars expand paradigms used in studies of late-life families.

## SESSION 475 (SYMPOSIUM)

### INNOVATIVE APPROACHES TO GERONTOLOGICAL EDUCATION: LESSONS LEARNED INSIDE AND OUTSIDE OF THE CLASSROOM

Chair: *K.E. Cichy, Human Development & Family Studies, Kent State University, Kent, Ohio*

Co-Chair: *G. Smith, Human Development & Family Studies, Kent State University, Kent, Ohio*

Discussant: *S. Kunkel, Miami University, Oxford, Ohio*

Studying gerontology encourages students to explore their feelings about being members of an aging society and to think more deeply about their own aging. Courses are intended to challenge students' myths and stereotypes about aging and to increase students' understanding of the realities of the aging process as well as the diverse experiences of older adults. Gerontological education also prepares the future leaders within the field who will respond to the needs of an aging population and shape the future of aging policies. This symposium highlights innovative approaches to gerontological education that are being implemented both in and outside of the classroom. The first two presentations describe classroom approaches that encourage students to gain knowledge and question their own belief systems. Cichy & Smith will describe how college students and older adults both benefit from participating in intergenerational discussion groups as part of an introductory gerontology course. Whitbourne & Freeman will discuss the impact of coursework and service learning on students' behaviors and attitudes toward older adults. The remaining presentations describe approaches to gerontological education that go beyond the classroom environment to prepare students to be leaders in the field of gerontology. Greenfield will describe a guided study abroad aging program that offered students the opportunity to learn about systems of care in Israel. Finally, Van Dussen, Falkenberg, & Franklin will discuss the barriers to employment for graduates of gerontology programs as well as ways to overcome these barriers. The discussant, Suzanne Kunkel, will offer insights into these approaches.

### BRIDGING THE GENERATION GAP: BRINGING TOGETHER UNDERGRADUATE STUDENTS AND OLDER ADULTS TO BENEFIT BOTH GENERATIONS

K.E. Cichy, G. Smith, *Human Development & Family Studies, Kent State University, Kent, Ohio*

Designing class activities that enable students to interact with older adults in meaningful ways is one of the most powerful tools of undergraduate gerontological education. This paper describes the benefits of participating in intergenerational discussion groups for undergraduate students and older adults. Throughout the semester, older adults attended 4-5 Introduction to Gerontology class sessions, where together with the undergraduate students they participated in thought provoking dialogues about current gerontological issues. The goal was for older adults and college students alike to gain knowledge, improve problem solving skills, and question their own belief systems. After participating in the intergenerational discussions students reported significantly less ageist attitudes as measured by the Fraboni Ageism Scale compared to a control group of students. Further, older adults' self-report questionnaires and focus group participation indicated that attending the groups helped them feel mentally sharp and more knowledgeable about aging. Benefits for both generations will be discussed.

### SOME OF MY BEST FRIENDS ARE OLD: IMPACT OF COURSEWORK AND SERVICE LEARNING ON AGEISM

S.K. Whitbourne, G.P. Freeman, *University of Massachusetts Amherst, Amherst, Massachusetts*

An ageism scale developed with behavioral items assessed changes in behaviors and attitudes towards older adults through a Psychology of Aging course. Changes were assessed in scores for the class as a whole and for 13 students who participated in service learning. The pre-test was completed by 138 (99 females) undergraduates; initial scores revealed low ageist behaviors overall, however, certain items had elevated means indicating that the students believe older adults prefer to be younger, should not hold positions of responsibility after age 70, and typically live in the past. Previous studies employing similar methods failed to detect changes in attitudes because students who take these classes are self-selected to have more positive feelings toward older adults. By using a scale based on behaviors, greater sensitivity to interventions through coursework can be detected and recommendations can be made for using these experiences, particularly service learning, to help foster such interventions.

### STUDY ABROAD AS A STRATEGY FOR DEVELOPING LEADERS FOR THE FIELD OF AGING

E.A. Greenfield, *School of Social Work, Rutgers, The State University of New Jersey, New Brunswick, NJ*

There is increasing emphasis on the need for leaders within the field of aging who will help to bring about comprehensive changes in systems of care for older adults and their families. This paper addresses study abroad as one strategy through which higher education can promote leadership development among emerging cohorts of professionals. Study abroad provides students with first-hand experiences of systems of care that are similar and different to those in their home country. These experiences can help students to develop a better understanding of how socio- historical, cultural, and institutional factors fundamentally shape individual and population aging, and this understanding can powerfully contribute to students' leadership development. A guided study program in aging that took place in partnership between Rutgers University in New Jersey and Ben Gurion University in Beer-Sheva, Israel, provides insights regarding ways in which this theoretical model can be implemented in educational practice.

### OPPORTUNITIES AND BARRIERS TO EMPLOYMENT OF GERONTOLOGY STUDENTS IN THE AGING NETWORK

D.J. Van Dussen, H.M. Franklin, *Sociology, Anthropology, and Gerontology, Youngstown State University, Youngstown, Ohio*

Despite calls for increasing the number educated professionals with gerontological education in the aging network, many barriers to employment for graduates of our gerontology programs exist. Data from a sample of students in gerontology from a round table discussion at a state level conference and a paper and pencil survey of 89 professionals in aging indicated that employers want more employees with gerontological education which include internships in aging related workplaces and continuing education of existing workforce in gerontology. Barriers include time, the slow reaction of some employers within the aging network to include gerontology degrees as requirements, and limited job opportunities due to the Great Recession. The implications of the current research include policy changes in job descriptions, working with accreditation bodies, and educating employers about the unique and valuable knowledge provided by gerontology programs.

## SESSION 480 (PAPER)

## INTERGENERATIONAL RELATIONSHIPS: SOLIDARITY AND ESTRANGEMENT

### STRETCHING THE TIES THAT BIND: WHEN CHILDREN BECOME ESTRANGED FROM THEIR MOTHERS

M.M. Gilligan[1], J. Suitor[1], K. Pillemer[2], *1. Sociology, Purdue University, West Lafayette, Indiana, 2. Cornell University, Ithaca, New York*

Patterns of interaction between parents and adult children have been a major focus of research on later-life families for more than five decades. However, this line of work has explored interaction patterns that fall within the normative range of contact; virtually no attention has been directed toward understanding the circumstances that lead some parents and adult children to become estranged. In this paper, we use a combination of quantitative and qualitative data collected from 557 mothers about each of their adult children (n = 2,071) from the "Within-Family Differences Study" to explain patterns of estrangement between mothers and children. Two sets of factors that were expected to play central roles in estrangement were similarity and children's nonnormative behaviors. Preliminary results provided partial support for these hypotheses. Estrangement was least common among dyads in which the mother believed that she and the child shared the same values. However, contrary to homophily theories, daughters were more likely to become estranged than were sons. Also counter to expectations, children's nonnormative behaviors did not predict estrangement uniformly. Deviant behaviors were important only when they violated the mothers' normative expectations, regardless of whether those expectations matched broader societal norms. Theoretical and practical implications of these findings are discussed.

### PATTERNS OF EMOTIONAL RELATIONS AND INTERGENERATIONAL SUPPORT IN FAMILIES: A THREE-GENERATION-PERSPECTIVE

I. Albert, T. Michels, D. Ferring, *University of Luxembourg, Walferdange, Luxembourg*

Along with socio-demographic changes regarding increasing life expectancies and lower fertility rates, members of different generations within the family spend more and more life time together. This may provide new challenges for the regulation of intergenerational family relations as the needs and tasks of family members change over time. Referring to theoretical models of intergenerational solidarity, the present study aims to examine patterns of emotional relationship quality and exchange of functional support in three family generations. More precisely, different solidarity patterns are identified and their occurrences are compared between generations. A sample of 55 three-generation families (adolescent daughters, mothers, and grandmothers) from Luxembourg and Germany was studied by means of a standardized questionnaire measuring emotional relationship quality, perceived support provision and reception as well as family values. Drawing on notions of a leniency or an intergenerational stake effect, it was studied if a) older generations rate aspects of intergenerational solidarity more positively, and if b) support provision by older generations is less dependent on relationship quality compared to younger generations. Results are discussed with respect to intrafamilial processes underlying the regulation of intergenerational relations. Furthermore, norms with regard to the family are taken into account in order to explain simultaneous occurrences of a negative affectual relationship quality with high functional support. The paper will elaborate and explain different aspects of intergenerational solidarity and it discusses the implications of different patterns of solidarity in three generational families.

### INTERGENERATIONAL SOLIDARITY FROM 1971 TO 2005: A GENERATIONAL SEQUENTIAL DESIGN

L. Baker, M. Silverstein, *Andrus Gerontology Center, University of Southern California, Los Angeles, California*

This study examines adult children's reports of intergenerational solidarity with their mother over more than 30 years in order to address two research questions. First, how does the quality of intergenerational relationships change over the lifespan? Second, does the quality of intergenerational relationships differ by historical time? Data are taken from the Longitudinal Study of Generations (LSOG), a survey of four generations conducted from 1971-2005. We limit our analysis to two generations - G2 respondents who averaged 44 years of age in 1971 and their G3 children who reached the age of their parents between 1991 and 2005. Using data from eight waves of the LSOG, we assess growth curves in affectual solidarity over time, concatenating generations to form a synthetic cohort. G2s and G3s are "centered" by the time at which G3 children most closely matched the age of their parents. Results suggest that intergenerational solidarity declined over time for both generations. Further, affectual solidarity with adult parents was higher for the generation of adult children in 1971 as compared to their age-matched adult children in the 1990s/2000s. Implications of these results, as well as possible explanations for these changes will be discussed.

### CONTINUITY AND CHANGE IN INTERGENERATIONAL FAMILY RELATIONSHIPS

P.A. Dykstra, N. Schenk, *Sociology, Erasmus University Rotterdam, Rotterdam, Netherlands*

Using data from Wave 1 (2003-2004) and Wave 2 (2006-2007) of the Netherlands Kinship Panel Study (NKPS), we examine shifts in solidarity, conflict and ambivalence in over 5000 adult child-parent relationships. Our theoretical point of departure is that relationships change in response to changes in the lives of the parties involved and are shaped over the course of ongoing negotiations over demands, obligations, normative expectations, and time schedules. In both waves, the same general typology of adult child-parent relationships emerged. The typology is robust across dyads varying by gender composition and age. The five types are harmonious (akin to relationships with friends), ambivalent (intensive exchange of practical support accompanied by strain), obligatory (just keeping in touch), affective (emotionally supportive with few other meaningful exchanges), and discordant (predominantly negative engagement). Ambivalent ties are particularly likely to shift type (e.g. to harmonious or to discordant) which is consistent with the notion that they are under constant negotiation. The kind of shift is governed by escape options, such as the ability to defer responsibilities to other family members (geographic proximity, number of siblings), normative obligations to care (gender of the adult child), and dependence (stage of the life course). Harmonious ties show fewest shifts over time. Shifts in affective ties (e.g. to harmonious or to discordant) or in discordant ties (e.g. to ambivalent or to harmonious) are largely structured by biographical changes such as divorce, residential moves, and the arrival of grandchildren.

# SESSION 485 (POSTER)

## MENTAL HEALTH ISSUES

### EFFECTS OF INDIVIDUAL DIFFERENCE VARIABLES ON REACTIONS TO MENTALLY ILL OLDER ADULTS

A. Webb, J.M. Jacobs-Lawson, *University of Kentucky, Lexington, Kentucky*

Stigma has a negative impact on the quality of life of mentally ill older adults. The purpose of this study was to determine how individual difference variables influence perceptions of and reactions to mentally ill older adults, in an effort to reduce stigma. Participants (N = 276, aged 19-88 years, M age = 49.88) were presented with four vignettes depicting older men and women with one of four mental illnesses. In response to each vignette, participants indicated their (a) perceptions of the individual (i.e., how dangerous, dependent, and responsible the mentally ill older adult was), (b) emotional responses (how much pity, fear and anger they felt toward the person), and (c) behavioral reactions (their willingness to help and interact with the mentally ill older adult). Participants also responded to questions that assessed their knowledge of mental illness in old age. Results indicated that self-rated knowledge was associated with more positive perceptions and reactions toward mentally ill older adults, and that compared to men, women expressed less anger toward and more desire to help mentally ill older adults. Level of education and actual objective knowledge also had some effect on perceptions and reactions. These findings indicate that individuals' personal characteristics influence whether and how they stigmatize mentally ill older adults. This suggests that targeting educational efforts toward certain groups of individuals, such as men and those with low knowledge of mental illness in old age, may help reduce stigma against mentally ill older adults.

### THE IMPACT OF RELIGIOUSNESS/SPIRITUALITY AND SOCIAL SUPPORT ON DEPRESSION AND LIFE SATISFACTION AMONG ELDERLY KOREAN IMMIGRANTS

S. Roh, *Social Work, New York University, Woodside, New York*

Aim of study: The present study examined the relationships between religious experience, spiritual practice, and social support to depression and life satisfaction among elderly Korean immigrants, ages 65 to 89 years, in the New York City metropolitan area. Method: The study utilizes a cross-sectional survey design. Through face-to-face interviews, two hundred participants, 115 male and 85 female, were recruited from Korean senior centers in the New York City metropolitan area. The Brief Multidimensional Measures of Religiousness/Spirituality (BMMRS) was employed to measure various domains of religiousness/spirituality, including daily spiritual experiences, values/beliefs, forgiveness, private religious practice, religious/spiritual coping, and religious support. The Lubben Social Network Scale-Revised (LSNS-R) was used to measure a broad range of social support. Depression was assessed with the Geriatric Depression Scale-30 Korean version (GDS-K). The Satisfaction with Life Scale (SWLS) (Diener, Emmons, Larsen, & Griffin, 1985) was used to measure life satisfaction. Results: Multivariate analyses found that social support is related to higher life satisfaction, while religiousness/spirituality is associated with decreased depression, after controlling for demographic variables. In addition, social support is related to lower depression. Conclusion: Results from this study can help geriatric mental health professionals, healthcare providers and social work practitioners to better understand the adjustment processes of elderly Korean immigrants in order to develop culturally appropriate interventions and programs.

### COHORT DIFFERENCES IN MENTAL HEALTH AND PERCEIVED ECONOMIC STATUS: FINDINGS FROM THE GEORGIA CENTENARIAN STUDY

J. Cho[1], P. Martin[1], M. MacDonald[2], M. Johnson[3], L. Poon[3], *1. Iowa State University, Aems, Iowa, 2. Kansas State University, Manhattan, Kansas, 3. University of Georgia, Athens, Georgia*

The purpose of this study was to examine cohort differences in levels of mental health for 211 community-dwelling centenarians (whose Mini Mental Status Examination score was over 21) of Phase I and III of the Georgia Centenarian Study. The early cohort was defined as the one born between 1881 to 1895 and the later cohort included those born between 1896 to 1906. Six measures were used for comparison; the Life Satisfaction Index, the Geriatric Depression Scale, the Bradburn Affect Balance Scale (i.e., positive and negative affect), the Perceived Economic Status Scale from the OARS and the SPMSQ (Short Portable Mental Status Questionnaire). Result showed that there were significant cohort differences in five measures: life satisfaction, $M = -.13$ for the early cohort and $M = 2.25$ for later cohort; depression, $M = 3.95$ for the early cohort and $M = 2.21$ for the later cohort, $F(1,194) = 37.10$, $p < .001$; positive affect, $M = 12.41$ for the early cohort and $M = 11.63$ for the late cohort, $F(1,191) = 3.06$, $p = .08$; negative affect, $M = 8.20$ for the early cohort and $M = 6.39$ for the later cohort, $F(1,202) = 21.74$, $p < .001$; and perceived economic status, $M = 5.26$ for the early cohort and $M = 5.77$ for the late cohort, $F(1,174) = 9.38$, $p = .003$. This result suggests that the later cohort was more satisfied with life, felt less depressed, showed less positive or negative emotion, and had higher scores on perceived economic status when compared to the early cohort. In conclusion, cohort effect should be considered when studying centenarians.

### PSYCHOMETRIC PROPERTIES OF THE COPE SCALE IN OLDER ADULTS

M. Marty, D.L. Segal, *Psychology Department, University of Colorado at Colorado Springs, Colorado Springs, Colorado*

Researchers have encountered a number of difficulties with the measurement of coping in general (Coyne & Gottleib, 2006; Parker & Endler, 1992) and most coping scales lack sufficient validation among older adults. This study explored the reliability and validity of the Coping Orientation to Problems Experienced (COPE) scale among community-dwelling older adults. Participants (N = 109, M age = 71.4, SD = 8.2, range: 60–95 years) completed the COPE Scale (a dispositional measure of coping), NEO-Five Factor Inventory (measure of personality traits), Dysfunctional Attitudes Scale (measure of attitudes that predispose individuals to depression), and Geriatric Hopelessness Scale (measure of pessimism and hopelessness). Internal consistency (Cronbach's alpha) values were .88 for the problem-focused coping cluster, .85 for the emotion-focused coping cluster, and .77 for the dysfunctional coping cluster. Correlational analysis revealed positive relationships between problem-focused coping and extraversion (r = .33), agreeableness (r = .27), and conscientiousness (r = .39), and a negative relationship with neuroticism (r = -.31). Emotion-focused coping had positive correlations with extraversion (r = .39) and agreeableness (r = .34), and a negative correlation with hopelessness (r = -.54). Dysfunctional coping had positive relationships with neuroticism (r = .60) and dysfunctional attitudes (r = .35) but a weak nonsignificant relationship with hopelessness. Results indicate the COPE has strong internal consistency in the current sample and correlations were in the expected directions, providing modest evidence of convergent validity. Further validation of the COPE among older adults should include more diverse samples and factor analysis of underlying factors.

## DIRECT AND INDIRECT EFFECTS OF HEARING LOSS ON MENTAL HEALTH IN OLDER ADULTS

Y. Ishioka, Y. Gondo, I. Kurokawa, N. Renge, M. Kawasaki, *Osaka university, Suita, Japan*

Introduction Many studies demonstrated that age-related hearing loss can lead to diminished mental health. But our understanding of the process is limited. The purpose of this study was to examine direct and indirect effects on mental health of hearing loss in older adults. Methods Participants were 98 healthy community-dwelling older adults. The mean age of the sample was 67.4 years; the range was 60 to 85 years. 61.2% of the sample participants were female. Hearing losses were assessed by subjective and objective measurements. Subjective measurement was evaluated with the 3 questions with 4 response categories. As objective measurement, pure-tone threshold screening was conducted with an audiometer. The average hearing level was defined as the average of the participant's hearing thresholds at 500, 1000, and 2000 Hz for the better ear. In addition to sociological background of age, sex, and education, we also measured amount of chronic disease, self-rated health, 5 dimensions of personality traits, participation in learning and educational activities as social activities, and WHO-5 well-being index as mental health. Result We conducted a path analysis to test a model incorporating subjective and objective hearing losses and social activities as predictors of mental health. The result indicated that subjective hearing loss indirectly influenced mental health through social activities, while subjective and objective hearing losses were not related to mental health directly. Conclusion Subjective hearing loss is indirectly associated with reduced mental health in older adults.

## GENDER DIFFERENCE IN THE LONGITUDINAL RELATIONSHIPS BETWEEN DRINKING BEHAVIOR AND DEPRESSION FROM MIDDLE-AGED TO OLDER ADULTS

O. Baik, K.J. Farkas, *Mandel School of Applied Social Sciences, Case Western Reserve University, Cleveland, Ohio*

There is a special need to understand not only the co-variation of alcohol use, alcohol-related problems and depression, but also how the relationships change over time from mid life to later life. The aim of the present study was to clarify and extend previous studies by examining gender differences in the relationships among alcohol consumption, alcohol-related problems, and depression from middle-aged to older adults. The two-wave of Wisconsin Longitudinal Study collected in 1993-1994 and 2003-2005 were used for this study. For analyzing longitudinal relations, multivariate model by logistic regression was tested, while controlling for prior depressive symptoms, socioeconomic and health variables. For only males, after controlling for all other possible confounders and prior depressive symptoms, problem drinking at baseline was inversely associated with depressive symptoms at follow-up (OR = 1.367, 95% CI: 1.008-1.854). For females, there were no statistically significant relationships between alcohol consumption or drinking problems and subsequent depression. These results support the hypothesis of this study that for males, alcohol problems predicted subsequent depressive symptoms unlike females. Conversely, baseline depressive symptoms significantly predicted later drinking problems for both gender (OR = 1.726, 95% CI: 1.304-2.285 for males, OR = 1.892, 95% CI: 1.347-2.657 for females, p<.001). The results indicate that developing drinking problems from mid-life through later life are crucial factors in the development of later life depressive symptoms. Future research examining the mechanisms behind these findings would be useful in developing effective prevention and treatment programs for this population with depression and/or alcohol use-related problems.

## VASCULAR HEALTH AND ACTIVITY LEVEL: UNIQUE PATHWAYS TO ANXIETY AND DEPRESSION

A. Mueller, K. Kane, L. King, B. Yochim, *University of Colorado at Colorado Springs, Colorado Springs, Colorado*

Introduction: This study examined cerebrovascular risk factors (CVRFs), non-vascular medical conditions (e.g., arthritis), activity level, and depressive and anxiety symptoms in older adults at baseline and 15-month follow-up. Method: Community-dwelling older adults (N = 110) self-reported CVRFs and other medical problems, and were administered the Florida Cognitive Activity Scale (FCAS), Geriatric Anxiety Scale (GAS), and the Geriatric Depression Scale (GDS). Participants (N = 67) returned for follow-up assessments at 15 months. Results: At baseline, CVRFs significantly predicted higher GDS scores, $\beta = .24$, $p < .05$, and GAS scores, $\beta = .23$, $p < .05$. FCAS total score significantly predicted lower GDS scores, $\beta = -.28$, $p < .05$, but not GAS scores. CVRFs did not predict FCAS total. Non-vascular conditions predicted GAS total, $\beta = .21$, $p < .05$, but not GDS scores. CVRFs at baseline were significantly correlated with follow-up GAS, r = .40, and GDS, r = .33, $p < .05$. Discussion: Baseline data indicates differential relationships exist among activity, vascular health, depression, and anxiety. Longitudinal data support the vascular depression hypothesis and extends the hypothesis to anxiety. More data will be collected to examine the longitudinal relationship between depressive symptoms and activity. Given these findings, prevention and treatment of CVRFs may be effective interventions in treating late life anxiety and depression, and engagement in valued activities may improve depressive symptoms more than anxiety symptoms.

## SHARED PERCEPTIONS AND DIVERGENT SOCIAL EXPERIENCES OF COUNSELING AMONG AFRICAN AMERICAN AND WHITE OLDER ADULTS

J. Joo[1], M. Wittink[2], *1. Department of Psychiatry, University of Pennsylvania, Philadelphia, Pennsylvania, 2. Department of Family Medicine and Community Health, University of Pennsylvania, Philadelphia, Pennsylvania*

Despite evidence that suggests that older adults, and African American older adults in particular, prefer counseling over medications for treatment of depression, few older adults use such psychological treatments. In this study, we explore attitudes, beliefs and experiences of counseling in order to illuminate factors which may contribute to low counseling and psychotherapy use for depression care among African American and White older adults. We used a grounded theory approach to analyze semi-structured interviews with older African American and white older adults from primary care, comparing African American and White respondents to identify similarities and differences. Our analysis suggested that older adults believe in the usefulness of counseling based on a strong belief in the value of talking about emotional problems; however, they may not use counseling due to a reluctance to talk about emotional problems with professionals, whom they may not trust. We also found that African American men were a subgroup among older adults who were least familiar with counseling as a treatment for depression. Finally, African American older adults did not mention use or influence of their social relationships when talking about depression and depression care whereas white older adults described various ways in which their personal relationships influenced their perceptions of counseling or helped them navigate available counseling services. Given the proven efficacy of psychological treatments and the preference for counseling and psychotherapy among older adults, psychosocial interventions which address conceptual barriers, lack of familiarity about services and incorporate the lived social experience of depression are needed to increase acceptability and use.

### PRELIMINARY VALIDATION OF A PROFESSIONAL GEROPSYCHOLOGY COMPETENCIES ASSESSMENT TOOL

M. Karel[2], C. Holley[3], S.K. Whitbourne[4], D.L. Segal[1], *1. University of Colorado at Colorado Springs, Colorado Springs, Colorado, 2. Psychology Service, VA Boston Healthcare System, Brockton, Massachusetts, 3. Stratton VA Medical Center, Albany, New York, 4. University of Massachusetts Amherst, Amherst, Massachusetts*

Based on competencies outlined in the Pikes Peak Model for Geropsychology Training (Knight, Karel, Hinrichsen, Qualls, & Duffy, 2009), a workgroup of the Council of Professional Geropsychology Training Programs (CoPGTP) recently developed a competency assessment instrument called the Pikes Peak Geropsychology Knowledge and Skill Assessment Tool (Karel et al., 2010). This assessment tool is designed to help psychologists and trainees identify relative strengths and weaknesses in order to inform geropsychology training goals. The present study evaluated group differences on the nine competency domain subscales in a sample of self-identified geropsychology professionals and graduate students. The full sample (N = 120) consisted of 85 professionals and 35 graduate students who completed the tool via an online survey. Results indicated that professionals reported significantly greater self-rated levels of competence than students on all subscales (all t-scores > 8.97, p< .01). Among professionals, the number of geropsychology training experiences (e.g., specialized internship, postdoctoral training, CE workshops) was significantly and positively related to perceived competence in all knowledge and skill domains (correlations ranging from .29 to .53, p<.01). Likewise, for students, the number of training experiences was significantly and positively related to perceived competence in all domains (correlations ranging from .35 to .60, p < .05). Of note, number of training experiences was more closely related to perceived competence than simply years in practice or, for students, years in training. Ongoing research is warranted to continue to develop and refine the tool.

### PREVENTABLE HOSPITALIZATIONS AMONG ASSISTED LIVING AND NURSING HOME RESIDENTS

M.A. Becker, T. Boaz, R. Andel, J. DiGennaro, *Aging & Mental Health Disparities, University of South Florida, Tampa, Florida*

Preventable hospitalizations place an enormous burden on an already overtaxed healthcare system. There is growing interest in reducing hospitalizations for ambulatory care-sensitive (ACS) conditions, which by definition can be treated safely in non-hospital settings. There has been little research comparing ACS hospitalizations among assisted living facility(ALF) and nursing home (NH) residents. This study compared the prevalence rates and risk factors among Medicaid-enrolled ALf and NH residents in Florida. We analyzed data for 72,251 NH and 16,208 ALF residents. Approximately 11% of the NH population (8,382 residents) and 16% of the ALF population (2,587 residents) were hospitalized for an ACS condition. ACS hospitalizations accounted for 18.2% of all hospitalizations among nursing home residents and 17% among assisted living residents. Among NH residents, younger age, non-White race, serious mental disorder, dementia, alcohol and drug use, and co-morbidity were all independently associated with a greater risk of ACS hospitalization (p<.05). Among AL residents, older age, non-White race, and co-morbidity were associated with greater risk of ACS hospitalization, whereas dementia and psychotic disorder were associated with reduced risk (p<.05). We also found that being in an ALF as opposed to NH was associated with a 43% greater risk of ACS hospitalization (p<.001). The availability of 24-hour medical care in nursing homes may allow for earlier identification and appropriate treatment of ambulatory care-sensitive conditions, thus reducing the proportion of nursing home residents requiring hospitalization. Given the higher cost of acute medical care, reducing avoidable hospitalizations in these populations could result in substantial savings.

### PATHWAYS OF PHYSICAL AND MENTAL HEALTH IN OLD AGE: LONGITUDINAL FINDINGS FROM THE IGS AND THE NAS

C. Jones[1], A. Spiro[2], C.M. Aldwin[3], *1. California State University, Fresno, Fresno, California, 2. VA Boston Healthcare System, Boston, Massachusetts, 3. Oregon State University, Corvallis, Oregon*

While physical and mental health are positively associated (Aldwin et al., 2004), the ability to maintain good mental health in the face of declining physical health may be a resilience factor in optimal aging. Data from two longitudinal studies—the Intergenerational Studies (IGS; N=82; Mean age=83.4, SD=3.7, 51% men) and the Normative Aging Study (NAS; N=792; Mean age=65.1, SD=6.9; 100% men)—were used to examine the associations between changes in self-rated physical and self-rated mental health across 10 years (1993/6 – 2002/6). The SF-36 was used in the IGS, while the comparable Veterans Rand 36 (VR-36) was used in the NAS. In both samples, physical health was more stable than mental health, and the former was more likely to decline. Physical health seldom improved, but mental health sometimes did improve, despite declines in physical health. Those in poor mental health almost never reported good physical health. In the IGS, 70% of those with constant or declining physical health still showed good mental health in old age; this resilience was unrelated to gender or cohort. In the NAS, individuals with better mental health at baseline were most likely to improve in mental health. Assuming that this does not simply reflect reporting biases sometimes seen in very late life (Johnson & Barer, 1996), the processes through which older adults maintain or even improve their mental health despite physical declines should be a major focus in the study of optimal aging.

### WILLINGNESS TO USE MENTAL HEALTH SERVICES AMONG OLDER RESIDENTS IN ASSISTED LIVING

N. Park, Y. Jang, B. Lee, L. Schonfeld, V. Molinari, *University of South Florida, Tampa, Florida*

Purpose: Little is known about how AL residents perceive mental health services. The purposes of this study were (1) to examine residents' willingness to use mental health services and (2) to explore its predictors based on Anderson's health behavior model. Method: Data based on face-to-face interviews with a sample of 150 older residents from 17 AL settings in Florida were used in analyses (Mage = 82.8, SD = 9.4). Multivariate logistic regression estimated the likelihood of willingness to use mental health services in relation to predisposing (demographics and physical health), mental health needs (depressive symptoms), and enabling variables (social network, instrumental support, emotional support, informational support, satisfaction with support, and previous use of mental health services). Results: More than 27% of the sample fell within the category of probable depression measured by Geriatric Depression Scale-Short Form. Approximately 80% of the sample indicated willingness to use mental health services. In one model with only predisposing variables, older age and being married were associated with less willingness to use mental health services. In the final model, lower emotional support and higher informational support were found to predict greater willingness to use services. Implications: The direct link between informational support and higher willingness to use mental health services suggests that AL residents may benefit from education regarding interventions for late-life depression. Considering that late-life depression has debilitating effects, concerted efforts need to be made to identify and treat depression for the AL population.

### STYLE VS. SUBSTANCE: DIFFERENTIAL EFFECTS OF DISPOSITIONAL AND GOAL-SPECIFIC COPING ON MENTAL HEALTH

K. Boerner, *Jewish Home Lifecare/Mount Sinai School of Medicine, New York, New York*

When goal pursuit is challenged, adaptive coping responses can involve the persistent effort to change one's situation to reach the goal (assimilation) and, when this no longer seems viable, to adjust one's goals to what is feasible (accommodation; Brandtstädter, 1999). The present study examined the understudied topic of coping with chronic disability in middle adulthood. Participants were 216 adults aged 40-64 who experienced adult onset of vision loss. We conducted hierarchical regressions to assess the unique contributions of general and goal-specific assimilative and accommodative coping to explaining variance in depression, anxiety, and life satisfaction. General coping was assessed with a scale designed to measure dispositional assimilative and accommodative coping tendencies. Goal-specific coping was assessed with four coping questions that were asked in reference to specific goals reported by participants (e.g., assimilative: still working on or putting effort into this goal; accommodative: adjusting the goal or letting it go). The two indicators of goal-specific accommodative coping were entered separately, to examine adjusting and letting go of a goal as two facets of accommodative coping. Overall, general coping explained more variance in depression and anxiety than goal-specific coping, whereas both explained a similar amount of variance in life satisfaction. For all three outcomes, higher levels of general accommodative coping were linked to more positive adaptation. Differential findings emerged for goal-specific accommodative coping: goal adjustment was related to higher levels of distress, whereas letting go of a goal was related to greater life satisfaction. Implications for theory and future research are discussed.

## SESSION 490 (SYMPOSIUM)

### NOW YOU SEE IT, NOW YOU DON'T: MODERATORS OF THE POSITIVITY EFFECT

Chair: *T.M. Hess, North Carolina State University, Raleigh, North Carolina*
Discussant: *M. Mather, University of Southern California, Los Angeles, California*

Recent theoretical perspectives have suggested that old age is associated with an increasing emphasis on emotional goals. This developmental shift is reflected in regulatory processes designed to either maximize positive affect or minimize negative affect, manifested as a relative increase in a focus on positive versus negative information. Empirical support for this positivity effect is mixed, however, leading to questions regarding the factors moderating this effect. Empirical data relating to two specific questions are presented in this symposium. First, are there individual differences in factors supporting regulatory functions promoting the positivity effect in later life? Second, are there contextual factors that moderate the strength of the positivity effect? For example, do chronic emotion-focused goals in later life always lead to a focus on positive information? Following up on findings emphasizing the importance of cognitive control in emotion regulation, Allard and Isaacowitz demonstrate that there are conditions under which older adults exhibit positivity effects even when cognitive resources are occupied. Grühn examines the degree to which participant characteristics interact with task material in determining age-related patterns of memory for emotional material. Zhang, Fung, Li, and Isaacowitz present data suggesting that older adults may focus on less positive, but more realistic information to promote a positive self-image. Finally, Hess and Kotter-Grühn demonstrate that older adults are more sensitive to the information value of positive and negative information when making social judgments, focusing more on negative information when it is informative.

### MOTIVATIONAL PRIORITY AND COGNITIVE CONTROL EFFORT: MODERATORS OF OLDER ADULTS' POSITIVITY IN GAZE?

E.S. Allard, D. Isaacowitz, *Psychology, Brandeis University, Waltham, Massachusetts*

Previous findings suggest that cognitive control effort plays a significant moderating role in older adults' motivated preferences for positive relative to negative emotional stimuli. In two studies, older adults viewed a series of emotional-neutral images while their eyes were tracked. Cognitive control effort was manipulated by having participants view images while their attention was divided by a challenging short-term memory task (auditory n-back with 3-back lag in Study 1; tonal discrimination task in Study 2). In each study, there were conditions where older adults were instructed to focus on an emotion regulation goal. In these conditions older adults' were able to display fixation preferences toward positive and away from negative images; this was observed despite distraction from challenging secondary tasks in divided attention. These results indicate situations where positivity effects in older adults' emotional information processing may not necessitate full cognitive control effort.

### EMOTIONAL BIASES IN MEMORY: THE IMPACT OF MATERIAL AND INTERINDIVIDUAL DIFFERENCES

D. Grühn, *Psychology, NC State University, Raleigh, North Carolina*

Some authors suggest that older adults, relative to younger adults, focus more on positive than negative information. In memory studies for emotional material, the pattern of findings is, however, inconsistent. Some studies find this so-called positivity effect; some studies don't. In this paper, we are discussing two factors that may moderate a positivity effect: Person characteristics (e.g. current mood, emotion regulation) and material characteristics (e.g. arousal, imagery). In two memory studies (one with words and one with pictures as to-be-remembered material) with young and older adults, we investigated the independent and joined impact of these two factors in moderating age differences. The findings of both studies suggest that person characteristics had little impact on remembering emotional material. In contrast, material characteristics played a crucial role in explaining age differences. Findings are discussed in light of contextual accounts of human cognition and aging.

### HOW UNREALISTIC POSITIVE IMAGES OF AGING ATTRACT ATTENTION

X. Zhang[1], H. Fung[1], T. Li[1], D. Isaacowitz[2], *1. Chinese University of Hong Kong, Hong Kong, China, 2. Brandeis University, Boston, Massachusetts*

This study examined whether the positivity effect exists in attention toward images of aging. Sixteen sets of negative, neutral, positive and overly (i.e., unrealistically) positive images of aging were presented to younger, middle-age, and older Chinese. Each set of images was presented simultaneously. An eye tracker was used to record gaze time towards these images. Findings revealed that participants from all age groups paid more attention towards overly positive images compared with positive images. However, gaze time towards overly positive images was moderated by participants' realistic ratings of them, such that the more unrealistic an image, younger and middle-aged participants gazed at it more while older participants gazed at it less. These results suggested that older adults might selectively ignore unrealistically positive images of aging to maintain a positive self-image.

### ATTENTION TO POSITIVE VERSUS NEGATIVE SOCIAL INFORMATION: THE EFFECTS OF AGE, SITUATIONAL GOALS, AND DIAGNOSTICITY

T.M. Hess, D. Kotter-Gruehn, *North Carolina State University, Raleigh, North Carolina*

In certain social situations, negative information is more informative than is positive information. Thus, a focus on the latter might have long-term maladaptive consequences when, for example, choices of a social partner ignore diagnostic negative information. In this study, 150+ adults (ages 19-88) made either general evaluative judgments or judgments regarding attractiveness as a social or work partner based on behavioral descriptions of others. Consistent with past research, we observed an age-related increase in attention to trait-diagnostic information, regardless of valence. Older adults' use of such information in making trait inferences was also unaltered by situational goals. Finally, older adults' judgments regarding work and social partners were more likely to reflect the valence of the relevant diagnostic information for each judgment (e.g., negative moral-trait information for social partner). These results suggest that older adults are sensitive to specific contextual constraints and do not indiscriminately focus on positive information.

## SESSION 495 (PAPER)

## RECRUITMENT AND RETENTION OF RESEARCH PARTICIPANTS

### CHARACTERISTICS OF CAREGIVING FAMILIES WHO LEAVE AN EVIDENCE-BASED INTERVENTION REPLICATION

H. Menne[1], S. Bollin[2], D. Bass[1], J. Johnson[1], S. Ambro[1], *1. Margaret Blenkner Research Institute, Benjamin Rose Institute, Cleveland, Ohio, 2. Alzheimer's Association - Northwest Ohio Chapter, Toledo, Ohio*

Results of intervention studies highlight the improvements experienced by individuals or families completing an intervention; these results often serve as the basis for replication of an intervention or program. Less talked about are those families and individuals who begin but do not complete the intervention. Interestingly, information about intervention program "leavers" may be a better indicator of the generalizability of the program to a target population than outcomes for program "stayers." The evidence-based program, Reducing Disability in Alzheimer's Disease, is being replicated in Ohio with support from the Alzheimer's Disease Supportive Services Program of the Administration on Aging. Eight-five families started the 12-month Reducing Disability in Alzheimer's Disease program; however, 21 families left before completing the first 3 months of the program. In 15 of the 21 cases, the family left the program because of poor health of the person with dementia (including hospitalization, nursing home or assisted living placement, or hospice). To determine whether "stayers" and "leavers" differed at the start of the program, independent samples t-tests were conducted to assess difference on demographics, health, and functional ability. Results suggest poorer health for persons with dementia who left the program. For example there is a mean difference in depression levels for persons with dementia (t(47)=2.207, p=.06), and a mean difference in person with dementia's ability to balance on one leg (t(60)=-2.236, p=.03). A better understanding of program "leavers" may lead to enhanced recruitment processes, eligibility requirements, and program content that could result in few "leavers" in future replications.

### SHOULD I STAY OR SHOULD I GO NOW?: EXAMINING RESPONDENTS' CHARACTERISTICS REGARDING CONTINUOUS PARTICIPATION VERSUS ATTRITION IN A LONGITUDINAL PANEL STUDY

O. Hautz, S. Kunkel, *Sociology and Gerontology, Miami University, Oxford, Ohio*

The Ohio Longitudinal Study of Aging and Adaptation (OLSAA) started in 1975 and continued through 2005, covering a time span of 30 years. Originally designed as a biannual panel study, the OLSAA now consists of 7 waves of data collection (1975, 1977, 1979, 1981, 1991, 1995, 2005). The initial survey was sent to 1,805 individuals 50 years and older (representing the total population of people 50 years and older in a small Midwestern town) and resulted in a study population of 1,271 individuals (response rate 70.5%). Thirty years after the initial survey, 111 individuals were still participating in the OLSAA study, ranging in age from 85 to 100 (mean age 89.46) with fifty-two being male (46.8%) and 59 female (53.2). For this study, we examine differences and similarities between the group of individuals who continuously participated over the course of 30 years with those individuals who participated in Wave 1 and with those who dropped out due to mortality or other reasons (e.g., refusal to participate, moved to different location). The groups are compared regarding their gender, age, self- rated health, marital status, morale, life satisfaction, acceptance of stereotypes about aging, and goal orientation. Preliminary analyses show significant differences between those who participated in 2005 and those that dropped out at baseline (1975). For example, the findings show that the 2005 participants have significantly more years of education than the other two groups. Discussion focuses on the impact of attrition versus continuous participation in a longitudinal panel study.

### PHENOMENOLOGY- ENHANCED INTERVIEWING TECHNIQUES WITH PHONE CONFERENCING

J. White, S.J. Barthelmeus, *Capella University, Minneapolis, Minnesota*

Phenomenology is a qualitative process for researching lived experiences in order to gain an understanding of the essence of those subjective experiences. In order to explore and document their world, event, or phenomenon, researchers traditionally ask open-ended or broad semi-structured questions utilizing digital devices such as recorders and videos. Because the procedure is labor-intensive and involves a considerable amount of time, the participants for a recent rural grandfather study refused face-to-face interviews and requested instead telephonic interviews. To meet this challenge, the investigator developed an interview setting that allowed participants to participate via recorded and transcribed conference calls. This variation on the original proposed methodology enhanced the understanding of the rural grandfather experience by expanding geographical boundaries for recruitment, reduced experimenter effects, and provided anonymity for eliciting rich, candid responses. In addition, the conference call center provided a CD recording and transcription option, thereby streamlining the coding process. This telephonic methodology for phenomenological aging studies may be valuable for conducting grounded-theory studies using more structured interviewing techniques. After attending this activity, participants will be equipped to apply this methodology to phenomenological data collection.

### CHALLENGES IN RECRUITING DRIVERS WITH PARKINSON'S DISEASE FOR RESEARCH STUDIES

A. Crizzle[1], A. Myers[1], Q.J. Almeida[2], *1. Health Studies and Gerontology, University of Waterloo, Waterloo, Ontario, Canada, 2. Wilfrid Laurier University, Waterloo, Ontario, Canada*

Few driving studies, most with small samples, have been conducted on individuals with Parkinson's disease (PD). The present study is examining the impact of Parkinson's symptoms on comfort level and driving patterns, compared to healthy older drivers. The PD group is being recruited from a Movement Disorders Centre in Waterloo, Ontario. To determine study eligibility, a driving screening form is being administered to patients living in the region. Of the 97 patients screened to date, only 12% have been successfully recruited even after lowering the age criteria from 65+ to 55+. While recruitment to achieve our target of 40 PD drivers continues, a great deal is being learned in the process. Those screened to date range in age from 39 to 90 (mean 68.3 ± 10.1); 64% are men. Motor scores on the UPDRS (Unified PD Rating Scale) range from 8.5 to 68 (mean 30.3 ± 11.3). Although all had driven at some point, only 62% are currently driving. Compared to former drivers, current drivers are significantly younger (mean 66.3 ± 10.2 versus 72.2 ± 9.6, p <.05), less severe (mean UPDRS 27.2 ± 8.3 versus 38.1 ± 12.4, p <.001) and more likely to be taking dopamine agonists (DA) in comparison to levodopa (p<.01). Preliminary findings suggest that persons with PD may stop driving at an earlier age than the general population.

Not surprisingly, those who are still driving are fearful of being reported to licensing authorities, despite assurances to the contrary.

## SESSION 500 (PAPER)

## REDUCING DISABILITIES AND FALLS

### EFFECTIVENESS OF GARDENING ACTIVITIES ON IMPROVING OLDER ADULTS' GAIT AND BALANCE

T. Chen, M. Janke, *School of Aging Studies, University of South Florida, Tampa, Florida*

Falls are a common concern among older adults, and decreasing the incidence of falls among this population is considered a major public health concern due to the related financial and social burdens of fall-related injuries. Activities such as Tai Chi and yoga have been shown to be effective in improving gait and balance to reduce the incidence of falls in older adults. This study explores whether gardening, one of the most common physical activities among older adults, could serve a similar purpose and benefit older adults by improving gait speed and balance and consequently reduce their risk of falling. The data for this study comes from the Health and Retirement Study (HRS, 2006) and Consumption and Activities Mail Survey (CAMS, 2005). Our sample included 3237 adults age 65 and older, and was 46.8 % male and 84.8 % White. In this study, gardeners were defined as who gardened at least 25 minutes per week based on the definition of HRS. This resulted in a total of 742 gardeners and 595 non-gardeners. Independent t-tests, correlations, and regression analysis were conducted to analyze the relationship between gardening and health outcomes. Our findings indicate that gardeners reported significantly better balance and gait speed and had fewer chronic diseases and physical limitations than non-gardeners. Significantly fewer gardeners reported a fall in the past two years compared to the non-gardeners. Our findings suggest that gardening is associated with better balance and gait speed and may prove to be beneficial in future fall intervention programs.

### THE EFFECT OF COMMUNITY ACTIVITIES ON WALKING BEHAVIOR OVER FOUR YEARS AMONG THE OLDEST-OLD

J. Gaines, K. Marx, K.L. Burke, J.M. Parrish, *The Erickson Foundation, Baltimore, Maryland*

Leisure time physical activity among older adults has increased in the last ten years with walking as the preferred activity. However, many older adults continue to participate in less physical activity and/or less vigorously than is usually recommended. Within this longitudinal study, participants live in a CCRC physically designed to promote walking. Also, as part of the research study, participants are encouraged to walk. This report covers changes in walking activity over a four year period. At baseline, 364 older adults (mean age 81.04 (sd=5.9), 75% female) reported a mean of four chronic medical conditions. The total number of reported internal and external community activities was 8.0 (sd=2.7). After four years, data was available on 160 participants (44%). The mean age of the participants at Year 4 was 84.6 (sd=5.6). The number of chronic medical conditions had significantly increased to 4.48 (sd=2.1; t=-2.1, p=.04). There was a non-significant increase in the total number of community activities (8.9; sd=2.8). Walking activity was measured at baseline and Year 4 using a StepWatch™ over a three day period. The baseline mean step total was 8031.6 (sd=3460.0). At Year 4, there was a non-significant decline to 7784.0 (sd=3644.8; t=.76; p=.45). The results of a linear regression demonstrated that the combination of age (beta = -.30), total number of medical conditions (beta = -.25) and community activities (beta =.16) explained 22% of the variance in total step count. The promotion of participation in community activities may be a way to increase walking activity.

### CORE SELF-EVALUATION AS A NOVEL PREDICTOR OF STRENGTH TRAINING ADOPTION IN OLDER ADULTS

M.K. Baker[1], D.J. Kennedy[4], P.L. Bohle[4], M.A. Fiatarone Singh[1,2,3], *1. Exercise Health and Performance Research Group, The University of Sydney, Lidcombe, New South Wales, Australia, 2. Jean Mayer USDA Human Nutrition Research Centre on Aging at Tufts University, Boston, Massachusetts, 3. Hebrew SeniorLife, Harvard Medical School, Boston, Massachusetts, 4. Ageing and Human Development Research Group, The University of Sydney, Lidcombe, New South Wales, Australia*

Declining physical function is associated with morbidity and mortality. Progressive resistance training (PRT) counteracts sarcopenia and has been demonstrated to improve physical function and quality of life in older adults. Despite the clear benefits of PRT, participation remains low. Core self-evaluation (CSE) is a relatively new concept within the personality domain first introduced in the industrial-organizational literature by Judge et al. (1998). The core self-evaluation construct is theoretically antecedent to four traits: locus of control, self-esteem, neuroticism (emotional stability), and generalized self-efficacy. We have examined the association of CSE with exercise adoption among older adults invited to participate in a PRT trial. We hypothesized that CSE would positively predict adoption of PRT. METHOD All residents of two retirement communities were invited to complete questionnaires assessing demographics, physical activity, CSE, and general health. Following completion of questionnaires, residents were invited to take part in an on-site, 10-week randomized controlled trial of a PRT-based exercise trial. RESULTS 38 of 358 residents (63.2% women; 76.6±6.1 yr; range 58 to 92) enrolled, and 118 residents completed the questionnaires. Multiple regression analysis of predictors of adoption of PRT indicated that the demographic variables accounted for 38% of the variance. Inclusion of CSE ($\beta = .405$) accounted for an additional 10% of the variance in PRT adoption ($\Delta R2 = .10$, $p = .025$). DISCUSSION CSE was predictive of PRT adoption in this cohort, adding significantly to known demographic predictors. This is the first study to show that CSE may influence adoption of PRT in any cohort.

### SELF-EFFICACY AND NEIGHBORHOOD WALKING IN OLDER ADULTS WITH AND WITHOUT A HISTORY OF FALLING

N. Gallagher[1,2], K. Gretebeck[2], C. Loveland Cherry[2], D.L. Ronis[2,3], P. Clarke[4], *1. Michigan State University College of Nursing, East Lansing, Michigan, 2. University of Michigan School of Nursing, Ann Arbor, Michigan, 3. Department of Veterans Affairs, Ann Arbor, Michigan, 4. University of Michigan Institute for Social Research, Ann Arbor, Michigan*

Walking is an excellent form of physical activity (PA) for older adults (OA). Outdoor falls are more common in physically active OA, and OA who have fallen have lower PA self-efficacy. This cross-sectional study examined the association of self-efficacy (for walking duration, PA barriers, neighborhood barriers, gait and balance) with neighborhood walking in OA (n = 326, age 60-99 years, M =76.1, sd = 8.34) who had and had not fallen during the previous year. Multiple regression indicated that total self-efficacy explained 34.5% of the variance in neighborhood walking in fallers ($F(5,102) = 10.744$, $p < .001$); self-efficacy for PA barriers had the strongest influence ($\beta=.383$, $p < .001$) followed by self-efficacy for neighborhood barriers ($\beta = .199$, $p < .05$). For non-fallers, total self-efficacy explained 19.7% of the variance in neighborhood walking ($F(5, 208) = 10.237$, $p < .001$). Self-efficacy for PA barriers had the strongest influence ($\beta = .286$, $p < .001$) followed by self-efficacy for walking duration ($\beta = .186$, $p < .05$). Gait and balance self-efficacy were nonsignificant for both groups. Compared to non-fallers, fallers reported lower confidence performing PA when care-giving responsibilities ($t = 2.649$, $p < .01$) and balance problems ($t = 2.046$, $p < .05$) were present. Walking interventions tailored for fallers should address increasing self-efficacy in overcoming neighborhood barriers (e.g. lighting and safety) and PA barriers (e.g. health problems and caregiving responsibilities); for non-fallers, increasing confidence in walking for longer duration and overcoming PA barriers (e.g. health or balance problems).

## SESSION 505 (PAPER)

## SOCIAL ACTIVITY AND SOCIAL NETWORKS

### HOW IS SOCIAL ACTIVITY INVOLVEMENT EXPLAINED BY DEMOGRAPHIC AND SOCIOECONOMIC CHARACTERISTICS AMONG THE POPULATION AGED 45 AND OLDER IN CHINA?-AN EXPLORATORY STUDY OF CHARLS-PILOT

J.J. Liang, *MU,Ohio, Oxford, Ohio*

Although it is widely recognized that participation in social activities can have a positive effect on both physical and mental well-being among older adults, this topic is under-addressed in studying the aging population in China. The purposes of this exploratory study are to identify the patterns of social activities of interest to Chinese older adults and to explore how the demographic and socioeconomic factors influence their social activity involvement. This study is a secondary data analysis of the pilot survey conducted by China Health and Retirement Longitudinal Studies (CHARLS), which has 2,685 individuals (1,570 households) participating. The three activities (among the ten) with the highest participation rate: (1) helping family, friends and neighbors, (2) interaction with friends, and (3) light recreation such as playing ma-jong and chess. These activities are analyzed as dichotomous outcomes in a series of logistic regressions. For each outcome (participation in the activity or not) the same predictors are used for building three logistic models, respectively. According to the research findings, social activity involvement declines as one ages, regardless of the type of activity. The significance of each predictor varies and the direction of its impact differs with the activity. For example, older women are more likely to help family, friends and neighbors, as well as to participate in light recreation, while they are less likely than older men to interact with friends. Older adults with lower socioeconomic status are more likely to interact with friends, as well as to participate in light recreation.

### SOCIAL SUPPORT NETWORK CHANGES AND THEIR EFFECTS ON MENTAL HEALTH AMONG KOREAN ELDERLY IMMIGRANTS

H. Oh, *Sociology, University of Florida, Gainesville, Florida*

By taking the longitudinal, life-course perspective into consideration, this study investigated the association of social support network changes due to immigration with the level of depressive symptoms among community-dwelling Korean elderly immigrants aged 60 years and older (N=203). Survey participants have currently received more supports (esp., from children) than they did before immigration. Along with consistent emotional support, Korean elderly immigrants have sought for more instrumental and practical supports, i.e., informational and financial supports from their family members than they did before immigration. Nested multiple regression analysis revealed that along with poor health and recent occurrences of stressful life events, elderly Koreans who used to have nonkin-oriented support history and have failed to maintain or gain support from nonkin members and family members, respectively, after immigration, turned out to have more depressive symptoms than their peers who have continued to receive support from their family members. Confirming the hypothesis that there exists the lasting effects of previous social support network on the mental health of Korean elderly immigrant samples, the findings signify the importance of the life course perspectives for better understanding how and to what extent the history of social relations come into play in determining the quality of life of the elderly in general as well as Asian elderly immigrants.

### THE EFFECTS OF HEALTH STATUS AND SOCIAL STRUCTURE ON AGE-RELATED CHANGES IN SOCIAL NETWORKS

C.S. Marcum, *Sociology, University of California - Irvine, Irvine, California*

Gerontologists have long been interested in the intersection between age-related changes in social networks and health. Prior research has found that older people tend to incorporate a larger proportion of family members in their social networks than younger people. Leading explanations for this finding emphasize older peoples' agency, or preferences, for more kin-focused interactions. A complimentary hypothesis, however, is that other age-related changes in behavior, ability, and social structure affect the social networks of older people. In this paper, I test the hypothesis that age and poor health status both increase the ratio of time spent with family members to time spent with other types of relations. Results indicate that the ratio increases with age, but that the increase is faster for older people who are sick, net of other factors. The findings suggest that, while increasing the amount of social contact with family members relative to others is normative in old age, declining health status cannot be ruled out as a cause of extreme decline in the breadth of social interactions for older people. Further tests also show that working and high income mediate the affects of age, but not health status, on social contact with non-kin. This likewise suggests that changes in social structure associated with aging are important factors to consider in explaining why networks change as people age. Research and policy implications are discussed.

### ELDERS' LEVEL OF SOCIAL PARTICIPATION AND QUALITY OF LIFE MEASURED BY OBJECTIVE AND SUBJECTIVE INDICATORS

S. Choi[1], K. Ju[2], *1. Social Welfare, Seoul National University, Seoul, Republic of Korea, 2. Hanshin University, Osan, Republic of Korea*

Previous studies on the relationship between the older persons' social participation and quality of life showed little attention had been paid to the quality of life by both objective and subjective measures. This study aims at exploring the relationship between the level of social participation and quality of life measured by objective indicators (objective QOL) and subjective indicators (subjective QOL). For this study, 586 elderly persons aged 60 and over residing in Metropolitan areas were interviewed with structured questionnaires. Social activities were categorized into fives areas: economic, social support, social gathering, religious, and self-development activities. The level of social participation was measured with whether or not participating in activities and the length of time for activities. The objective QOL was measured by an index of health status, level of living, housing conditions, family relations and social relations, whereas the subjective QOL was measured by a modified index of QOL originally developed by WHO. Social participation in itself in all five areas of social activities was positively related to the subjective QOL while participation in itself in only economic, social gathering, self-development activities were positively related to the objective QOL. Of the five areas of social activities in terms of the length of participation, only religious activities were positively related to subjective QOL while economic, religious and self-development activities were positively related to the objective QOL. In regard to these findings, theoretical and social policy implications will be discussed.

### SOCIAL RELATIONS AND PHYSICAL ACTIVITY AMONG OLDER ADULTS: A NEW MEASURE OF SOCIAL STRAIN

K. Cotter, *Psychology, Sacramento State University, Sacramento, California*

Social relationships influence health directly and indirectly via health behaviors including physical activity. Higher social support typically predicts more physical activity, but the relationship of social strain to physical activity remains controversial. To determine the influence of social strain on physical activity, I examined a newly created measure of social strain for exercise (SE) for its potential efficacy among older adults. As expected, based on cross-sectional data from 166 older adults (64% women), SE from the spouse/partner was significantly related to perceived spouse/partner strain (r = .61, p < .001), SE from family members was significantly related to perceived family strain (r = .53, p < .001), and SE from friends was significantly related to perceived friend strain (r = .41, p < .001). SE was also positively correlated with social support for exercise from the spouse/partner (r = .52, p < .001), family (r = .44, p < .001), and friends (r = .29, p = .003). However, neither SE from the spouse/partner (r = -.18, p = .26), nor family (r = -.10, p = .47), nor friends (r = -.10, p = .40) was significantly related to physical activity, potentially due to the limited variability of SE in this sample. While SE was not directly related to physical activity, results suggest a potential similarity between social support for exercise and social strain for exercise. Future investigations should examine whether interactions intended as positive (e.g., encouragement for exercise) are actually being interpreted by recipients as negative (e.g., nagging).

## SESSION 510 (SYMPOSIUM)

### SOCIAL SUPPORT, SOCIAL CONTROL, AND DISEASE MANAGEMENT IN LATER LIFE

Chair: *K. August, University of California, Irvine, Irvine, California*
Co-Chair: *M.P. Stephens, Kent State University, Kent, Ohio*
Discussant: *C.A. Berg, University of Utah, Salt Lake City, Utah*

Social network members, particularly spouses, often are involved in the disease management of their chronically ill partners. Spouses can promote health behaviors related to their partners' disease management by serving as sources of support and influence. Health-related social support refers to network members' efforts to encourage individuals to maintain health-enhancing behaviors. Health-related social control refers to network members' attempts to monitor and influence individuals' health behaviors. Although these two social network functions are conceptually and empirically distinct constructs, they often co-occur in close relationships. Rarely, though, have researchers examined both dynamics of relationships in the context of disease management. This symposium presents data from The 2-partner Diabetes Management (T2DM) study that addressed how social support and control influenced the disease management of 129 older adult couples in which one partner had type 2 diabetes. The study objectives, methodology, and sample characteristics will be discussed first (Stephens). Next, associations of spouses' support and control with patients' diet adherence and diabetes anxiety will be reported (Franks, Iida). Data then will be presented on how gender and spouses' dietary responsibilities influence patients' dietary management (Hemphill, Khan). The implications of patients' and spouses' discrepant commitment to disease management will be discussed next (Rook). Finally, the impact of engaging in support and control on spouses' health will be examined (August). The presentations highlight that disease management occurs in an interpersonal context, with implications for both patients and their spouses. The discussant (Berg) will identify major themes from the presentations and offer suggestions for future research.

### T2DM STUDY: PURPOSE, DESIGN AND CHARACTERISTICS OF COUPLES

M.P. Stephens, *Kent State University, Kent, Ohio*

Our study investigated associations of spousal support and control with patients' dietary adherence, as well as health outcomes for both patients and their spouses, and how these associations differed by gender. Data were collected using a 3-wave design with assessments at baseline (T1), six months (T2) and twelve months later (T3). At all waves, in-person interviews were conducted with each partner, and at T1 and T3, each partner completed end-of-day diaries for 24 days. Patients had to be at least 55 years of age, have a diagnosis of diabetes and be in a heterosexual marriage-like relationship with a non-diabetic partner. T1 sample comprised 129 couples. On average, patients and spouses were 66 years old, had 14 years of education, had an annual income of $35,000, and had been married for 38 years. Three-quarters of couples were Caucasian and the remainder was African American. Female patient dyads represented half the sample.

### SPOUSES' DAILY SUPPORT AND CONTROL AND PATIENTS' DAILY DIETARY ADHERENCE AND DIABETES ANXIETY

M. Franks[1], M. Iida[2], *1. Purdue University, West Lafayette, Indiana, 2. Kent State University, Kent, Ohio*

This dyadic study examined spouses' efforts to support and to control daily diet behaviors of their partners with diabetes, and associations with patients' daily dietary adherence and diabetes-related anxiety. On each of 24 days, spouses recorded their provision of diet-related support, persuasion, and pressure to their partner. Patients recorded their diet adherence and diabetes-related anxiety. Multilevel analyses revealed that on days when spouses provided greater diet-related support than usual, patients had increased diet adherence. On days when spouses provided more diet-related persuasion than usual, patients had (marginally) decreased diet adherence. On days when spouses provided more diet-related pressure than usual, patients had (marginally) decreased diet adherence and increased diabetes anxiety. Findings suggest the beneficial role of spouses' diet-related support for their partners' daily diet management, but also indicate that spouses' control attempts can have unwanted consequences for patients' daily diet adherence and their illness adjustment.

### DIET-RELATED INTERACTIONS AND DIETARY MANAGEMENT IN COUPLES COPING WITH DIABETES

R.C. Hemphill, C. Khan, *Department of Psychology, Kent State University, Kent, Ohio*

Little is known about each partner's role in diet-related interactions in couples in which one partner has diabetes. Moreover, patients' gender and the dietary behaviors of the nondiabetic partner could have implications for the influence of couples' diet-related interactions on patients' dietary management. This study of older adults with diabetes and their nondiabetic spouses investigated the influence of patients' gender and spouses' diet on the associations between couples' diet-related interactions and patients' dietary management. Female patients' diet was better when meal planning was primarily their responsibility, whereas, male patients' diet was better when meal planning was primarily their wives' responsibility. Additionally, wives' dietary choices were more influential to male patients' diet when wives were responsible for meal planning compared to when couples shared meal planning. Findings indicate that traditional gender roles in dietary interactions are beneficial to patients' dietary management.

### REACTIONS TO SPOUSAL CONTROL WHEN PATIENTS AND SPOUSES DIFFER IN THEIR COMMITMENT TO THE MANAGEMENT OF DIABETES

K.S. Rook, *University of California, Irvine, California*

Health-related social control is believed to arouse psychological distress when social network members, but not target persons, want the target person's health behavior to change. In the context of chronic illness, patients and their social network members are more likely to share a commitment to the patient's disease management, including health behavior change. Here, too, however, social network members and patients can differ in their degree of commitment to the disease management goal, which may affect patients' reactions to social control. We examined this idea in the current study by contrasting couples in which the diabetic patients and their spouses had similar versus discrepant disease management commitment. When the spouse's commitment exceeded that of the patient, spousal social control elicited significantly more negative emotional and behavioral reactions (ps < .01). The findings help to identify the specific conditions in which social network members' influence attempts may elicit negative reactions.

### HOW ARE SPOUSES AFFECTED BY ENGAGING IN HEALTH-RELATED SOCIAL SUPPORT AND CONTROL?

K. August, *University of California, Irvine, Irvine, California*

To date, research has focused on recipients of health-related social support and control; little is known about consequences for the support or control provider. Spouses may experience negative effects from having to spend considerable time and effort making sure their partners are adhering to their treatment regimen. We examined whether spouses' daily involvement in patients' food choices was associated with adverse psychological consequences. Spousal exertion of social control was significantly related to same-day increases in spousal stress and marital tension, whereas provision of support was significantly associated with same-day decreases in spousal stress and increases in marital enjoyment. Greater patient dietary adherence buffered the adverse effects of control, and magnified the positive effects of support, on marital interaction quality. Findings underscore that managing a chronic condition in the context of a marital relationship has implications for not only the patient, but also for the spouse.

## SESSION 515 (SYMPOSIUM)

### THE AGING SERVICES NETWORK AS A PUBLIC HEALTH INTERVENTION

Chair: *S. Albert, University of Pittsburgh, Pittsburgh, Pennsylvania*

The important Institute of Medicine report, Retooling for an Aging America (2008), focused on the health care workforce, defined as health care professionals, paraprofessional direct care workers, and unpaid family caregivers. The report neglected another workforce, the aging services network, a loose network of profit, nonprofit, and government organizations that deliver mandated services to disabled elders. These agencies provide meals, transportation, home modification, social visiting, daily monitoring, house cleaning, and medication management when families are unable to provide such care. This symposium will examine how we can best harness the aging services sector for public health intervention research. Presenters will cover cutting-edge efforts to harness the aging services network for public health interventions. Studies include: (i) Use of the aging services network to promote uptake of clinical preventive services using the Sickness Prevention Achieved through Regional Collaboration (SPARC) model (Benson); (ii) Large-scale roll-out of an arthritis exercise program (Fit and Strong!) in area agencies of aging (Hughes); (iii) Use of home health paraprofessionals to deliver the Fit & Strong! program in elders' homes (Prohaska); and (iv) Assessment of the capacity of aging services agencies to screen for depressive symptoms and deliver preventive services (Albert). Discussants from CDC (Anderson) and AoA (Tilly) will provide comment.

### SPARC (SICKNESS PREVENTION ACHIEVED THROUGH REGIONAL COLLABORATION) AS A MODEL FOR ENGAGEMENT OF AGING SERVICES IN PUBLIC HEALTH

W.F. Benson, *CDC, Atlanta, Georgia*

CDC's Healthy Aging Program (HAP) has long viewed the "Aging Services Network" (ASN) as a critical partner in prevention related to chronic disease and other health conditions associated with aging. This presentation will emphasize efforts undertaken by CDC with the ASN to promote increased access to and use of recommended clinical preventive services (CPS — e.g., immunizations, cancer screenings) among older adults, particularly the delivery of multiple CPS in community settings. CDC's work with SPARC (Sickness Prevention Achieved through Regional Collaboration) will be highlighted. SPARC has shown great promise in increasing use of CPS to older adults including through an area agency on aging covering a large diverse community. SPARC's pioneering Vote & Vax initiative will be discussed. Also emphasized will be collaborative efforts between CDC and the Administration on Aging (AoA) to increase the use of CPS by older adults, including making essential data more accessible by the ASN.

### DISSEMINATING FIT AND STRONG WITH AREA AGENCIES ON AGING: LESSONS LEARNED

S.L. Hughes, *Center for Research on Health and Aging, University of Illinois Chicago, Chicago, Illinois*

Little is known about the successful translation and diffusion of evidence-based programs for older adults. Arthritis is currently the most common chronic condition affecting older adults and the number one cause of disability among them. This presentation will describe collaborative efforts currently underway to translate and diffuse Fit and Strong!.- an evidence-based physical activity/ behavior change program for older adults with lower extremity (LE) osteoarthritis. Fit and Strong! is an 8-week program that was tested in two prior efficacy and effectiveness randomized trials. Results showed that participants experienced significant improvements in exercise adherence, LE stiffness, pain, and function, and depression/ anxiety as well as LE strength and aerobic capacity at 18 months. Fit and Strong! is currently being diffused in Illinois and North Carolina through partnerships with local Area Agencies on Aging with funding from the Centers for Disease Control and Prevention (R18DP001140). Glasgow's RE-AIM framework is being used to guide dissemination efforts. To date, 32 providers have adopted the program, enrolling over 430 new participants. A total of 101 instructors have successfully completed Fit and Strong! instructor training. We have used qualitative methods to examine barriers and facilitators to adoption and maintenance, site visits to monitor fidelity, and pre-post participant outcomes to monitor continued program effectiveness. Findings from all of these efforts will be presented. Successful strategies for overcoming barriers to program implementation and maintenance will be described along with revisions to Instructor training to boost program fidelity.

### USING HOME CARE AIDES IN TRANSLATING STRONG FOR LIFE INTO THE COMMUNITY CARE PROGRAM

T. Prohaska, *Center for Research on Health and Aging, University of Illinois Chicago, Chicago, Illinois*

Given the high prevalence of sedentary behavior among older adults and the potential benefits of PA in secondary and tertiary prevention, it is critical that successful PA programs reach those who typically do not participate in group-based exercise programs, especially frail home bound adults. Illinois provides home and community based services to over 50,000 frail older adults annually through their Community Care Program (CCP). Home Care Aides (HCA) provides personal care services to CCP clients in their home. The presentation present findings on the feasibility of implementing Strong for Life, an evidence-based exercise program designed for frail older adults, by training home care workers to administer the program in the care recipient's home. Using a two group 4-month pre-test post-test design, HCA trained in delivering SFL are compared to a treatment delay control group. Measures include levels of reported PA and functional status.

### ASSESSING CAPACITY OF NONPROFIT SENIOR SERVICES AGENCIES TO IMPLEMENT DEPRESSION SCREENING, TREATMENT, AND REFERRAL

S. Albert, *University of Pittsburgh, Pittsburgh, Pennsylvania*

The aging services network provides meals, transportation, home maintenance, and other supports for seniors at risk for nursing home placement. Owing to such contact, these agencies are well placed to screen seniors for depressive symptoms and prevent onset of depression. We assessed the capacity of aging services providers in Pittsburgh, PA to provide depression screening and referral. Of 70 agencies randomly sampled, 42 participated in a web-based survey. The survey showed that less than 20% screen for depression with structured assessments. Only a third have regular referral sites for depression care. Among agencies that make referrals, only half consider the referral sites effective in providing treatment. Agencies that used formal screening tools were more likely to follow-up on referrals and to consider referral partners effective. Thus, we have introduced a depression prevention model that trains front-line home care providers to screen using formal assessment tools. A randomized controlled trial will follow.

### DISCUSSION: AGING SERVICES AND PUBLIC HEALTH INTERVENTIONS: THE VIEW FROM CDC

L. Anderson, *CDC, Atlanta, Georgia*

Discussion by Lynda Anderson, PhD, Director, Healthy Aging Program, Division of Adult and Community Health, NCCDPHP, CDC

### DISCUSSION: AGING SERVICES AND PUBLIC HEALTH INTERVENTIONS: THE VIEW FROM THE ADMINISTRATION ON AGING

J. Tilly, *Administration on Aging, Washington, DC, District of Columbia*

Jane Tilly, PhD, Project Officer, Administration on Aging, will discuss efforts at AoA to mobilize aging services for public health prevention efforts

### COGNITIVE HEALTH: AN OVERVIEW OF COGNITIVE INTERVENTION RESEARCH

S. Pasupuleti, *Social Work, The University of Toledo, Toledo, Ohio*

Intervention research linking cognitive functioning with physical, mental, and social activities has huge implications for policy and programs shaping the lifestyle of older adults. On the whole, the notion of enriched and stimulating environment is imperative for healthy cognitive aging because neurons in the brains of individuals exposed to intervention stimulation and enriched environments showed improved neural health (Greenough, McDonald, Parnisari, & Camel, 1986). This promising research evidence needs to be translated into interventions and promote public health. The National Institutes on Aging, Health and Mental Health, and Center for Communicable Diseases have recognized the need for a public health movement focusing on the cognitive health of the aging population and have crafted the "Cognitive and Emotional Health Project" (CEHP) to begin to address issues related to this area of concern. More interventions are needed at community level for promotion of healthy aging and prevention of cognitive impairment and dementias.

## SESSION 520 (SYMPOSIUM)

### BSS PRESIDENTIAL SYMPOSIUM: THE GREAT TRANSITION: HOW MORTALITY ORGANIZES BEHAVIOR IN LATER LIFE

Chair: *D. Ekerdt, University of Kansas, Lawrence, Kansas*
Discussant: *S. McFadden, University of Wisconsin, Oshkosh, Wisconsin*

All around, no transition is more consequential than death. The temporal logic of behavioral and social science favors the study of antecedents and consequences—things happen and people react or cope. Yet expectations for the future are also a powerful motivation for behavior. If people foresee a likely occurrence, they may adapt to it in advance or incline their actions in some way. This symposium will explore how people live and behave in light of the finitude of life time. We will step back from immediate issues about patient care and decisions at the end of life to consider how human mortality shapes people's outlooks, affairs, and daily life for years, even decades, in advance. Modernization has brought a progressive removal of death from childhood and middle age; in later life, medicine offers a promise to fight and postpone it. Yet, even if the hour of death is uncertain, people remain strongly aware of its eventuality, and progressively so as life proceeds. The distinguished presenters at this symposium will explain elders' growing awareness that life's time is short; how that awareness shapes practical affairs, relationships, and the imagination of the future; and how reminders of death are a persistent feature of culture. Even in an era that is said to deny death, mortality very much dwells among the living.

### TAKING TIME SERIOUSLY IN LIFE-SPAN DEVELOPMENT

L. Carstensen, *Stanford University, Stanford, California*

To the best of our knowledge, humans are unique in their ability to anticipate their mortality early in life. Gradually chronological age comes to serve as a marker of time left in life. Socioemotional selectivity theory – a life-span theory of motivation- maintains that this shift in perceived time has profound and systematic implications for the types of goals people pursue, the decisions they make, and even what they see, hear and remember. In this talk, I will argue that a deep understanding of human development must take time very seriously.

### ANTICIPATING WIDOWHOOD: WHO AVOIDS, WHO PREPARES, AND WHY?

D. Carr, *Rutgers University, New Brunswick, New Jersey*

The vast majority of older adults will die of chronic illness; thus, for most older adults – especially women - the death of a spouse is an anticipated transition. Despite this demographic reality, older adults often report shock and severe grief symptoms upon spousal deaths they deem "unexpected," and couples often fail to discuss how the surviving spouse will manage financially after the loss. Thus, I explore two questions. First, what factors affect an older adult's perceived likelihood of their spouse's death; this analysis uses data from the Wisconsin Longitudinal Study, a long-term study of men and women who graduated Wisconsin high schools in 1957. Second, I use data from the Changing Lives of Older Couples study to explore whether expected versus unexpected spousal deaths trigger psychological distress and perceived financial strain among older recently bereaved widow(er)s. I discuss implications for policy and practice, particularly for formal end of life planning.

### HUMANS ARE MORTAL?! I'M CALLING MY ATTORNEY

M. Kapp, *College of Medicine, Florida State University, Tallahassee, Florida*

Humans reluctantly acknowledge that we are mortal, and that "You can't take it with you." Nonetheless, many people still desire and attempt to exercise some degree of control—even postmortem—over their individual legacies. A variety of legal tools exist for helping individuals accomplish such postmortem control, or at least influence, over their legacies, and awareness of the potential legal consequences of failure to adequately plan for the certain eventuality of death (for example, excessive estate taxes or family disputes over inheritances) acts for many as a powerful incentive to take advantage of available planning opportunities. This presentation will survey the legal incentives and opportunities people have to plan regarding their legacies, as well as impediments that interfere with the timely use of legal planning options by many people. Research questions examining how people respond to legal incentives surrounding anticipation of death will be suggested.

### WHEN DEATH WAS EVERYWHERE: NINETEENTH-CENTURY RESPONSES TO THE THREAT OF MORTALITY

C. Haber, *School of LIberal Arts, Tulane University, New Orleans, Louisiana*

Over the course of the last century, expectations of when and how an individual should die have undergone a dramatic transformation. With the elimination of childhood diseases and public health threats, we now assume that dying is largely the concern of the old. Although this belief is so pervasive it seems almost timeless, in truth, it is a very modern phenomenon. Before the recent century, death could come at any age; individuals had to be constantly aware that at any point, they could face the end of their days. This perception had an important impact on the way people approached their daily lives, constructed their families and even prepared themselves for dying. By examining beliefs about mortality in nineteenth-century America, this paper will discuss how the ever-constant presence of death not only organized behavior in later life but cast a long shadow over every stage of existence.

## SESSION 525 (SYMPOSIUM)

### THE SCHMIEDING CAREGIVER TRAINING PROJECT: REPLICATION OF A PROVEN PROGRAM

Chair: *R.E. McAtee, Donald W. Reynolds Institute on Aging, University of Arkansas for Medical Sciences, Little Rock, Arkansas*

The Donald W. Reynolds Foundation awarded the Arkansas Aging Initiative, Donald W. Reynolds Institution on Aging at the University of Arkansas for Medical Sciences, a grant to replicate the Schmieding Home Caregiver Training program in four Arkansas rural sites. The Schmieding program is designed to train persons who want to become geriatric home caregivers and/or family members who want more skills to care for an older adult in the home. It is built around four levels of progressive classroom training and has a ten year history of success. This program uses the infrastructure of the Arkansas Aging Initiative's (AAI) network of eight regional Centers on Aging to implement the training. The AAI's mission is to improve health outcomes of older Arkansans through interdisciplinary clinical care and innovative education programs. Therefore, these centers provide a wonderful educational base of support for implementing this training in the regional communities. A nine-month planning grant was awarded to the AAI in 2008 to carefully examine what was needed and how the actual training programs could be established statewide. During this time, a strategic plan was developed which included the development of goals, objectives and strategies to accomplish the overall mission. The four main goals revolve around the administrative and operational structure, implementation details, process and outcome evaluation, and sustainability plans. We now have two sites that have started classes and two more to start in the spring of 2011. The outcomes of the first two sites are very exciting and will be reviewed.

### THE ARKANSAS AGING INITIATIVE: AN INFRASTRUCTURE FOR SUCCESSFUL REPLICATION

C.J. Beverly, R.E. McAtee, *College of Nursing, University of Arkansas for Medical Sciences, Little Rock, Arkansas*

The Arkansas Aging Initiative (AAI) is a rural network of eight Centers on Aging whose mission is to improve the quality of lives and quality of care for older adults through two primary components, education and clinical care. The education program is funded through a portion of Arkansas' share of the Master Tobacco Settlement and the clinical program is fully supported by partner hospitals in the local/regional area. A primary mission of the education program is to increase geriatric expertise of health care professionals, para-professionals, students, and older adults and their families and the community. The education and clinical components are co-located resulting in increased synergy and visibility to the community. Thus, the AAI infrastructure is poised to quickly move strategic programming throughout the state thereby increasing access to the more rural part of the state.

### THE REPLICATION GRANTS FROM THE DONALD W. REYNOLDS FOUNDATION

R.E. McAtee, L.D. Wright, C.J. Beverly, S.L. White, *University of Arkansas for Medical Sciences, Little Rock, Arkansas*

The AAI first received a planning grant from the Reynolds Foundation in 2009 to examine the feasibility and the readiness of the AAI network to start such a large endeavor. During this phase, a strategic plan was developed that included four basic objectives: development of the potential administrative structure, development of an implementation plan, examination of sustainability options, and the development of a comprehensive evaluation plan. While writing the implementation plan, a site readiness evaluation was completed for all eight centers on aging, a comprehensive budget was created and the decision was made to have an active state advisory committee as well as local advisory committees when the sites begin operations. After fifteen months of operation, two sites are up and operating with two more sites in the start-up phase. Challenges and outcomes of the planning and implementation phases will be reviewed.

### OUTCOMES OF THE SCHMIEDING HOME CAREGIVER TRAINING REPLICATION PROJECT

S.L. White, *Donald W. Reynolds Institute on Aging, University of Arkansas for Medical Sciences, Rogers, Arkansas*

Over the course of the startup period for this grant much has been accomplished and many lessons have been learned. Grant personnel conducted ongoing process evaluation at the state and local levels which was used to improve the process for other sites. This section presents an overview and summary of the outcomes data resulting from the start up of the first two sites, explains how the information was collected and discusses how the information is being used to improve the start up and implementation of future sites. Specific information will include the method of evaluation, selected tools, and specific qualitative and quantitative outcomes data collected. A discussion of the successes, challenges and outcomes of the planning and implementation phases will also be addressed.

## SESSION 530 (SYMPOSIUM)

### VA GRECC SYMPOSIUM: DELIRIUM AND DEMENTIA IN OLDER PATIENTS FOLLOWING CRITICAL ILLNESS

Chair: *E.W. Ely, GRECC, VA Tennessee Valley Healthcare System, Nashville, Tennessee, Vanderbilt University, Nashville, Tennessee*

This symposium will present state-of-the-art reviews of the latest data on delirium and the increasingly recognized persistent cognitive impairment being reported following hospitalization for acute medical and surgical illnesses. Delirium is a classic geriatric syndrome serving as the strongest determinant of hospitalized patients' length of stay and disposition. It carries enormous financial and societal burdens due to its association with increased morbidity, mortality, prolonged hospital stay, and cost of care. Due to the increased aging of our population—who have multiple medical problems, pre-existing cognitive impairment and increased risk of functional decline—the toll of delirium is growing exponentially. This toll is not merely measured in lives lost, but also in reduced quality of life, frailty, depression, posttraumatic stress disorder, and most importantly the persistent cognitive dysfunction akin to dementia. The talks will include (a) the epidemiology and public health impact of delirium and long-term cognitive impairment, (b) clinical interactions between delirium and psychiatric comorbidities including PTSD and depression, (c) pharmacological and non-pharmacological management of delirium following acute illness, and (d) new data exploring the role of cognitive rehabilitation following delirium and critical illness to regain executive function.

### FACING THE CHALLENGE OF DELIRIUM AMONG OLDER HOSPITALIZED MEDICAL PATIENTS

J.H. Flaherty, *1. Internal Medicine/Geriatrics, St. Louis VA GRECC, St. Louis, Missouri, 2. Saint Louis University, St. Louis, Missouri*

This section of the symposium specifically focuses on older hospitalized medical patients who are admitted with delirium or develop delirium during admission. After this section, participants will (1) understand, based on the complex pathophysiology of delirium, why this syndrome is so difficult to manage; this understanding is key to the next two objectives; (2) understand, based on the pathophysiology and all the available data on use of antipsychotics and delirium why antipsychotics have limited use in the prevention and treatment of delirium; (3) have knowledge of the non-pharmacological preventive and management interventions that have been shown to be effective.

### PATHOPHYSIOLOGY OF DELIRIUM: POSSIBLE MECHANISMS OF BRAIN DAMAGE IN CRITICAL CARE SETTINGS AND IMPLICATIONS FOR INTERVENTION

B. Kamholz, *Durham VA, Duke University, Durham, North Carolina*

This session will update our knowledge regarding the pathology of cellular and molecular mechanisms in delirium. While there are many hypotheses regarding these causes, including theories of neuronal aging, disorders of neurotransmitter metabolism, inflammation, and the HPA axis as well as oxidative stress, it appears that the most basic mechanisms of cellular function may represent the "final common pathophysiological pathway." A review of oxidative metabolism and the impact of its disorders on neurotransmitter function and availability in delirium will be provided. In addition, inferences about the impact of systemic inflammation on cognition and behavior in delirium will be addressed. The implications for potential pharmacological treatments will be reviewed.

# SESSION 535 (POSTER)

## WORK AND RETIREMENT

### EXPECTATIONS OF FORCED RETURN TO WORK FOLLOWING RETIREMENT: A CROSS-CULTURAL COMPARISON

C.M. Darling[1], D.A. Hershey[1], K. Henkens[2,3], H. van Dalen[2,3], *1. Psychology, Oklahoma State University, Stillwater, Oklahoma, 2. Netherlands Interdisciplinary Demographic Institute, The Hague, South Holland, Netherlands, 3. Tilburg University, Tilburg, Netherlands*

Many individuals find they have to return to work for economic reasons after having retired. Although articles on this topic routinely appear in the popular press, scientific studies on this return-to-work phenomenon have lagged behind. In the present investigation, we examined workers' expectations of whether they would need to re-enter the workforce after having been retired. Data were analyzed from Dutch (N=787) and American (N=603) working adults, 25-64 years of age. In addition to measuring perceptions of the need to return to work for economic reasons, all participants completed a questionnaire that assessed psychological, social, and economic determinants of financial preparedness for retirement. Across the entire sample, one in six workers believed that they would need to return to work based on financial concerns; however, analyses failed to reveal a cross-national difference along this dimension. Separate country-specific regression analyses were also carried out that were designed to predict expectations of returning to work using the three qualitatively different sets of (psychological, social, and economic) predictors. In these analyses, striking cross-national differences were observed, with roughly twice as much explained variance seen in the American models relative to the Dutch models. Cross-national differences were also observed among the specific indicators that were predictive of the criterion: advanced age was a powerful predictor for the Dutch, whereas failing health and inadequate savings were strong predictors for Americans. Findings are discussed in terms of the importance of identifying characteristics of individuals who might benefit from pre-retirement interventions.

### BURDEN OF EMPLOYED CAREGIVERS

A.D. Boer[1], S. Keuzenkamp[1], M. Broese Van Groenou[2], *1. Care, The Netherlands Institute for Social Research, The Hague, Netherlands, 2. VU University Amsterdam, Amsterdam, Netherlands*

Paid employment and informal care can get in each other's way because both can make claim on the available time and because combining tasks can be burdensome. This study discusses whether the burden of giving care and working characteristics and strategies of combining work and informal care related. Bivariate analyses has shown that informal carers with a full time job and those who apply care and work strategies experience a higher burden than people who work part-time and non-appliers. However, when other factors were taken into account, such as intensity of care and characteristics of informal carers, the relationship between flexible working hours and burden was no longer significant. Taking time off and reduced working hours remained positively related to burden. In general, working characteristics and strategies only partly explain variance on the burden. The most important factors proves to be the social relation between informal carer and receiver and the intensity and the complexity of the care situation.

### WHO WORKS AMONG OLDER BLACK AND WHITE, WELL-FUNCTIONING ADULTS IN THE HEALTH ABC STUDY?

R.N. Rooks[1], T.B. Harris[2], *1. Health and Behavioral Sciences, University of Colorado Denver, Denver, Colorado, 2. National Institute on Aging, Bethesda, Maryland*

Productive aging relates to employment through active social and physical functioning, but it may have a bi-model pattern, where elderly work to stay healthy or for economic necessity. Political economy of aging suggests that unequal power in society causes unequally-distributed resources through educational, labor force, and health care systems, resulting in racial groups experiencing aging differently. We examine if working vs. not is associated with greater financial and/or social needs and Black vs. White adults being more likely to work. Logistic and multinomial logistic regression (MLR) analyses were used to model working or not and full-time, part-time, and non-workers by sex in the Health, Aging, and Body Composition study, a 14-year cohort study with 3,075 community-dwelling, well-functioning Black (42%) and White, women and men, aged 70-79 in Memphis, TN and Pittsburgh, PA. Among men, Black vs. White adults, those in Memphis vs. Pittsburgh, those with ≥\$50,000 vs. <\$10,000 family income, and those who drank ≥1-7 times per week had a significantly greater odds of working vs. not. Among women, Black vs. White adults and being overweight vs. normal BMI had a significantly greater odds of working vs. not; however, those with diabetes had significantly lower odds of working vs. not. MLR analyses showed similar significant trends existed for men for full-time vs. non-workers only and for women, in part-time vs. non-workers only, except that having ≥\$50,000 vs. <\$10,000 income was significantly associated with full-time vs. non-workers. Future research could examine cultural and community differences in site, possibly impacting work status.

### WORKING RETIREMENT: LESSONS ABOUT AGING, PRODUCTIVITY, PURPOSE, AND SOCIAL ENGAGEMENT FROM A SUBURBAN BOSTON FACTORY

C. Lynch, *Olin College of Engineering, Needham, Massachusetts*

This poster engages questions about work, aging, gender, community, value, and business profitability by examining the motivations and experiences of workers and employers at Vita Needle Company, a family-owned factory that produces stainless steel needles in a suburban Boston factory. The average age of the 40 employees is 75, and the eldest is a 98-year-old former waitress who joined the factory when she was 85. As U.S. senior citizens face dwindling retirement savings and rising costs of living, many seek work that simultaneously satisfies their social and economic needs. This poster is based on a book project called _Working Retirement: Age and Value in a Suburban Factory_. The book (in process) is an ethnographic study that comes at a critical time—when social and economic changes in the United States and Europe challenge us to examine our cultural assumptions about the value of work, the experiences of retirement, and what constitutes "successful aging." The poster will include vivid photos from inside Vita, and will focus on particular Vita employees and specific workplace and family interactions that illuminate understandings of work, community, value, and belonging. The poster also situates Vita in the context of global concerns about the "graying of society" and ethical and policy debates about the value of work for older adults. The poster is based on four years of anthropological fieldwork, interviews, and literature review, including an intensive period of participant observation in summer 2008 when the researcher worked on the Vita production floor making, inspecting, packing, and shipping needles.

### SPORTS ACTIVITIES IN RETIREMENT: A COMPARISON ACROSS COHORTS

R. Cozijnsen, N. Stevens, T. Van Tilburg, *VU University Amsterdam, Amsterdam, Netherlands*

An active life style after retirement is beneficial for health and well-being in later life. Involvement in formal and informal social participation after retirement has been studied extensively. Participating in sports activities, however, has received much less attention. The aim of the current study is to investigate trends in participation in sports activities of successive birth cohorts of early retirees in The Netherlands. Opportunities for exercise change after retirement and incentives change as well. Moreover, the importance attached to sports activities has increased in recent decades. Data are from seven observations (between 1983 and 2007) of a nationally representative Dutch survey. At each observation a sample of early retirees (aged 56-64) was drawn. For cross-sectional comparison older workers (aged 56-64) were included in the analysis. The total number of respondents was 2475 (early retirees, N=799, older workers, N=1676). Results demonstrate increases in participation in sports activities among successive birth cohorts of early retirees. Logistic regression analysis showed that increased sport club membership and participation in organized sport activities was related to cohort changes in level of education, working class and health. No differences were demonstrated between those who retired early and those who continued working. The observed trend in sports activities among successive Dutch cohorts of retirees suggest that policies promoting a healthy post-retirement lifestyle should aim at increasing participation in sports activities earlier in the life course.

### PREDICT SAVING BEHAVIOR FOR RETIREMENT: APPLICABILITY OF THE THEORY OF REASONED ACTION

C. Liou, I. Leech, *Virginia Tech, Blacksburg, Virginia*

Social Security will not provide an income in retirement on which many people will be content to live (Cook & Johnson, 2000). Therefore, it becomes essential to promote saving for retirement. The researchers are curious about how people save for their retirement during this tough economic downturn. According to the theory of reasoned action, a decision to engage in a behavior is directly predicated by an individual's intention to perform the behavior (Fishbein & Ajzen, 1975). Individuals' assessment of salient outcomes for retirement saving can be measured and combined into a testable casual model that links beliefs to intention to save and the behavior to save. In this study, we examined the utility of the theory of reasoned action for predicting saving for retirement. A structural equation model was used. In addition to outcome beliefs, normative beliefs, attitude, subject norm, and intention to save for retirement, the model also included some demographic variables to enhance the theoretical model. The data came from a southern Virginia population with participants' age ranging from 25 to 70. Almost half of sample reported having no dependent child now but having three different loans (e.g., credit card loan, auto loan and mortgage). Although 86 % of participants have no specific retirement plan, more than half of them would like to learn more about retirement. The implications of these findings will provide researchers, policy makers, and financial planners with a picture of current attitudes on saving for retirement.

### RETIREMENT AS AN OPENING GATE: EXPECTATIONS AND IDENTITY IN THE THIRD AGE

M. Dickhans, M. Takahashi, *Northeastern Illinois University, Chicago, Illinois*

For many retirees in our society, continued vitality into the seventh and eighth decades of life is ushering in a "third age," a period of time with potential for prolonged developmental activity and productive engagement that may last 20 to 30 years. This study examined the transition to retirement in terms of "mode of adaptation" (one's views and expectations of retirement), and "identity style," (level of identity balance; or one's predominant approach to maintaining identity in the face of retirement and aging changes). 38 female (mean age=71.32) and 20 male (mean age=70.75) retirees, who had been retired, on average, 8.33 years (SD=5.95), were recruited from several retirement communities in a metropolitan city in the Midwest. The participants completed seven instruments on retirement expectations, identity balance, financial and lifestyle retirement planning, quality of life, and socioeconomic status. The overall results revealed that people in the "new beginning" mode of adaptation had a high level of identity balance. Results also showed that mode of adaptation and identity balance were associated with quality of life. A major implication of the study is that an individual's expectations of retirement and manner of coping with changes in later life may be essential factors in his or her adjustment to the retirement transition.

### PRE-RETIREMENT INDIVIDUALS' EXPECTATIONS FOR POST-RETIREMENT LIFE

E.A. Fenster, *Miami University, Oxford, Ohio*

Research has concentrated on the transition into retirement and post-retirement living situations, but has largely ignored the pre-retirement phase itself. Previous work has examined satisfaction with retirement after making the retirement transition, but this study extends that literature by examining a measure of anticipated (or expected) satisfaction among those who have not yet retired. The goal of this study is to examine how someone's perception of their living standard after retirement and their demographic characteristics are related to whether or not they are looking forward to retirement. Respondents (n = 8,579) come from the 1992 wave of the Heath and Retirement Study (HRS). Due to the lack of studies that focus on the pre-retirement phase, analysis includes variables identified by previous work as important to other phases of retirement and then examines their relationship with pre-retirement based on the life-course perspective (i.e., education, age, income, assets, gender, race, health status, and marital status). Multinomial logistic regression is used to examine the impact of demographic characteristics, as well as the mediating relationship of expected post-retirement living standard, on how one anticipates retirement. Results indicate that expectations for a higher post-retirement living standard are related to a more positive retirement anticipation. Clear differences in regards to gender and marital status are evident. However, racial differences provided a more mixed perception of anticipation, a finding not present in previous research. These varying attitudes about retirement expectations highlight the impact of past experiences and feelings related to agency and social structure.

### FALLING BEHIND IN YOUR RETIREMENT SAVINGS? FINDINGS FROM A CROSS-CULTURAL COMPARATIVE INVESTIGATION

D.A. Hershey[1], J.M. Jacobs-Lawson[2], K. Henkens[3,4], H. van Dalen[3,4], *1. Psychology, Oklahoma State University, Stillwater, Oklahoma, 2. University of Kentucky, Lexington, Kentucky, 3. Netherlands Interdisciplinary Demographic Institute, The Hague, South Holland, Netherlands, 4. Tilburg University, Tilburg, North Brabant, Netherlands*

Making regular long-term financial investments over the course of one's working life is a key to establishing a successful individual retirement savings program. Unfortunately, many people procrastinate when it comes to putting a saving plan in place, which can lead them to feel "behind schedule" in meeting their financial goals. Delaying the onset of a program of retirement savings not only results in the accumulation of fewer financial resources, but it can also lead to the onset of psychological distress—such as retirement anxiety (Hayslip et al., 1997) and retirement-oriented financial worry (Neukam & Hershey, 2002). The present study examined cross-cultural differences in individuals' perceptions of whether they were behind schedule when it comes to saving for retirement. Respondents were 632 Americans and 1040 Dutch pre-retirees, all between the ages of 25-64. The independent variables in this investigation included nationality (2 levels: Dutch/American) and age group (8 levels in 5-year increments: 25-29, 30-34…60-64). Analyses revealed that on average, across all age groups American pre-retirees felt significantly further behind schedule than the Dutch. This was true despite the fact that both groups intended to retire at approximately the same age, and Americans reported starting thinking about retirement planning some 8.3 years earlier than their Dutch counterparts. Additional analyses also identified cross-cultural differences in the indicators that were predictive of feeling behind schedule. The discussion focuses on how these cross-national findings could have emerged due to stable cultural differences in the channels of retirement support found in the two countries.

### INTERDISCIPLINARY INFLUENCES ON PERSONAL FINANCIAL PLANNING IN BRAZIL

L.H. Franca[1], D.A. Hershey[2], *1. Graduate Studies in Psychology, UNIVERSO - Salgado de Oliveira University, Niterói, Rio de Janeiro, Brazil, 2. Oklahoma State University, Stillwater, Oklahoma*

Brazil will face significant economic challenges in the coming decades when attempting to provide adequate public pension benefits for its retirees. One factor that could potentially mitigate this anticipated financing challenge will be the extent to which individual workers engage in retirement planning and saving activities. Little is known, however, about the mechanisms that underlie personal financial planning practices in this economically emerging nation. In the present study, we test an established interdisciplinary model of financial planning (Hershey, Henkens & van Dalen, 2010), in which psychological, social and economic indicators are posited to motivate engagement in the planning process. The conceptual model, which was evaluated based on responses from 167 Brazilian working adults (21-69 years of age), posited that psychological and economic forces would have a proximal influence on planning activities and savings. Social forces were anticipated to have a distal influence on planning and saving, with their effect hypothesized to be mediated through the psychological indicators. Path analyses revealed substantial support for the role of all three sets of forces in the planning process, as well as support for the model's overall conceptual structure. However, relative to comparable empirical models developed using Dutch and American workers, the Brazilian model revealed unique pathways involving social force indicators, such as the impact of early learning experiences on the development of financial knowledge, and the positive influence of friends and colleagues on savings adequacy. Findings are discussed in terms of cultural constraints on the development of interdisciplinary models of financial planning.

### WORK QUALITY OF LIFE AND INTENDED RETIREMENT AGE

F. Alpass, C. Stephens, A. Towers, J. Noone, *Psychology, Massey University, Palmerston North, New Zealand*

Early exit from the workforce provides policy challenges as the population ages. The main determinants of early retirement are health and wealth. A further factor, quality of work life, which may indirectly influence health status and wealth accumulation, has also been linked to early exit from the workforce. To investigate the relationship of these determinants to intended retirement age in a representative New Zealand sample, data from the Health, Work and Retirement study were obtained from 1574 full-time workers aged between 55 and 60 years of age. Data on intended retirement age, wealth (current income and anticipated finances), measures of well-being (self-rated physical and mental health, total number of illnesses), and quality of work life (work involvement, work social support, career commitment, career satisfaction, job satisfaction, leisure orientation) were obtained from postal questionnaires. As anticipated, those with higher incomes and higher anticipated retirement wealth intended retiring earlier. Those in poorer health and those who had a poorer quality of work life were also more likely to anticipate an early retirement. When controlling for wealth and health, work quality of life contributed significantly to the explained variance in retirement intentions. These findings support previous work linking poor work life quality with intentions to retire early. Quality of work life for older adults, as a factor in the retirement decision making process, is amenable to intervention. Investment in improving quality of work life will motivate older workers to stay in the workforce longer.

## SESSION 540 (SYMPOSIUM)

### AGING AND THE INTERPLAY AMONG ENERGY, MASS AND MOBILITY: FINDINGS FROM THE BLSA

Chair: *L. Ferrucci, National Institute on Aging, Baltimore, Maryland*
Discussant: *T. Manini, University of Florida, Gainesville, Florida*

Age-related changes in energy production and utilization and body composition have profound effects on mobility and autonomy. Improved understanding of these changes has become a central aim of the Baltimore Longitudinal Study of Aging (BLSA), established in 1958 as a continuous enrollment cohort of individuals as young as 20 to the end of life. Examinations occur every 1-4 years depending on participant age and last 2-3 days. The organizing paradigm consists of a hierarchical network of interdependent homeostatic processes and physiological domains that together impact mobility and speed of movement, hallmarks of aging. In this symposium we begin to address our central hypothesis that a progressively larger discrepancy between energy demand and energy availability produce the aging phenotype. We present secular trends in body composition change with age over the past 50 years and introduce an improved prediction model for resting metabolic rate that incorporates quantitative assessments of lean and fat mass to account for increased fatty infiltration of muscle mass with age. Next, we explore the energetic cost of performing a standardized walking task, a measure of energetic efficiency and how it changes from mid- to late-life. Lastly, we examine two potential threats to optimal energetic efficiency. The first focuses on knee osteoarthritis, a common condition of aging, and gait parameters relevant to biomechanical efficiency. The second evaluates thyroid function, a regulator of metabolic rate, and walking performance and energy use. Findings provide supportive evidence for our hypothesis, but also raise intriguing questions for further study.

### SECULAR TRENDS IN BODY WEIGHT: EVIDENCE OF AN EPIDEMIC OF INCREASING FATNESS FROM THE BLSA

S. Stenholm[2], E.M. Simonsick[1], L. Ferrucci[1], *1. National Institute on Aging, Baltimore, Maryland, 2. National Institute for Health and Welfare, Turku, Finland*

Estimates of increasing obesity in the US may simply reflect changing socio-economic and ethnic composition. This study examines secular trends in body weight in old age in three birth cohorts consisting of 1,364 well-educated Caucasian men born between 1877 and 1941 from the BLSA followed until death. Body weight was measured biannually with the last visit occurring between 1959 and 2008. Men born between 1920 and 1941 had higher body weight over the entire follow-up time compared with men born between 1900 and 1919 ($p < .001$) and 1877 and 1899 ($p = .001$); the difference was also significant between the two earlier birth cohorts ($p < .001$) all independent of height. An increasing trend in body weight across birth cohorts was also observed in the few years prior to death. Results confirm the obesity epidemic extends into late life in current elderly and is not a function of socio-demographics.

### ANTHROPOMETRIC PREDICTORS OF RESTING METABOLIC RATE (RMR) IN HEALTHY OLDER PERSONS

L. Ferrucci[1], J. Schrack[2,1], S. Stenholm[3], E.J. Metter[1], E.M. Simonsick[1,2], *1. National Institute on Aging, Baltimore, Maryland, 2. Johns Hopkins Medical Institutions, Baltimore, Maryland, 3. National Institute for Health and Welfare, Turku, Finland*

RMR is proportional to body size; higher in highly muscular and lower in fat individuals, but may become elevated with chronic disease as extra energy is needed to fight pathology. Theoretically, optimal RMR could be estimated from lean body and fat mass with levels beyond this estimate suggestive of excessive homeostatic effort. Using indirect calorimetry and DEXA data from 225 extremely healthy BLSA participants we derived estimates of disease-free RMR. Adjusting for age, lean body mass (kg) was strongly correlated with RMR in men (b=3.08RMR is proportional to body size; higher in highly muscular and lower in fat individuals, but may become elevated with chronic disease as extra energy is needed to fight pathology. Theoretically, optimal RMR could be estimated from lean body and fat mass with levels beyond this estimate suggestive of excessive homeostatic effort. Using indirect calorimetry and DEXA data from 225 extremely healthy BLSA participants we derived estimates of disease-free RMR. Adjusting for age, lean body mass (kg) was strongly correlated with RMR in men (b=3.08±0.82; p<.001) and women (b=4.42±0.86; p<.001). Fat mass (kg) was also independently correlated with RMR - strongly in men (b=3.79±0.88; p<.001) and weakly in women (b=1.27±0.66; p=.058). A significant interaction "muscle*fat" mass suggests that RMR per kg of lean mass is lower in obesity, possibly because of increased fatty infiltration of muscle. Estimating optimal RMR in older individuals requires assessment of both lean and fat parameters.

### WALKING SPEED AND ENERGETIC EFFICIENCY IN OLDER ADULTS

J. Schrack[1,2], E.M. Simonsick[2], P.H. Chaves[1], L. Ferrucci[2], *1. Epidemiology, Johns Hopkins School of Public Health, Baltimore, Maryland, 2. National Institue on Aging/National Institutes of Health, Baltimore, Maryland*

Walking speed declines with age and is predictive of negative health outcomes. With age, diminished biomechanical and metabolic efficiency may cause customary gait speed to slow in order to maintain optimal walking economy and conserve energy. To examine the relationship between walking efficiency (walking energetics) and usual walking speed, we measured: (1) the average energy expended per meter of walking (ml/kg/m) during 5 minutes of low-workload (0.67 m/s) steady-state treadmill walking, and (2) usual gait speed over 6 meters (m/s) in 382 (52% female) BLSA participants aged 50-96 (mean=70.6). Net efficiency (gross walking energy – resting energy) per meter of walking decreased significantly as walking speed declined (p<0.05) independent of age, sex, height, and ratio of fat-to-lean mass. These findings suggest that the energetic cost of walking increases with age, and that individuals slow down to conserve energy and maintain minimal energy cost at preferred speed due to reduced efficiency.

### IMPACT OF KNEE OA ON GAIT AND MECHANICAL WORK EXPENDITURE IN OLDER ADULTS: THE BLSA GAIT LAB

S. Ko, S.M. Ling, C. Schreiber, M. Nesbitt, L. Ferrucci, *NIH/NIA, Baltimore, Maryland*

Knee osteoarthritis (OA) is the most common age-related joint disease associated with mobility limitations. We evaluated specific gait patterns and mechanical work expenditure (MWE) during usual and challenging walking tasks in 153 BLSA participants (aged 53-87) classified as having symptomatic, asymptomatic, or no knee OA. Persons with knee OA walked slower with shorter stance compared to controls. For the fast walking task, those with asymptomatic knee OA used higher knee absorptive MWE (p = 0.012) and lower ankle generative MWE (p = 0.003) in the anterior-posterior (AP) plane compared to controls. Although mechanical energy usages in the AP plane for those with symptomatic knee OA were similar to no OA controls, the symptomatic knee OA group had a higher ankle range of rotation (p = 0.042). Whether these particular characteristics of gait increase the energetic cost of walking in persons with knee OA remains to be established.

### THYROID FUNCTION AND WALKING-RELATED PERFORMANCE AND ENERGETICS IN LATE LIFE

E.M. Simonsick[1,2], J. Schrack[2,1], L. Ferrucci[1], *1. National Institute on Aging, Baltimore, Maryland, 2. Johns Hopkins Medical Institutions, Baltimore, Maryland*

Recent findings indicate that older persons with mild subclinical hypothyroidism have moderately better mobility than those with normal thyroid function. We speculated that having a lower metabolic rate or "cooler engine" (lower free thyroxine; FT4) may explain this association. In 361 men (58%) and women aged 68+ years (mean=77.2) from the BLSA, we examined the relationship between FT4 and walking parameters including energy consumption during usual and fast paced corridor walks using a portable metabolic analyzer. Independent of sex, age, race, obesity, smoking and habitual walking behavior, increasing FT4 was associated with slower usual and rapid gait speeds (β=-.14, p=.013; β=-.26, p=.004), more seconds to walk 400m quickly (β=41.4, p=.008), and lower available energy measured as peak energy expenditure (ml/kg/min) during fast-paced endurance walking (β=-2.79, p=.016). Energy consumption per meter walked did not vary by FT4. Findings support the notion that having a "cooler engine" may sustain mobility with age.

## SESSION 545 (POSTER)

## ASSESSMENT, NUTRITION CONSIDERATIONS AND CHRONIC DISEASE MANAGEMENT

### SCREENING FOR INJURIOUS FALLS IN ACUTE CARE HOSPITAL

H.S. Sheth[1], K. Faust-Smith[2], R.M. Palmer[1,2], *1. Medicine, University of Pittsburgh, Pittsburgh, Pennsylvania, 2. University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania*

Background: Injurious fall is a serious hospital-acquired condition. Screening tools for injurious falls in hospitalized patients have received limited evaluation. Objective: To compare operating characteristics of University of Pittsburgh Medical Center (UPMC) injurious fall screen: mobility, fall history, nursing judgment (e.g., age, medications, recent surgery, confusion) with the ABCS tool[1] (age, bone, coagulation, surgery). Methods: Injurious fall patients were identified from the adverse events database for 2007-2008 admissions. A control group matched for age (>=65 and <65 years), location and time period of fall event was selected from administrative database. Both tools were evaluated by two independent screeners using electronic charts. Demographics, inter-rater agreement, sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) are reported. Results: ABCS and UPMC injurious fall screens were applied to 43 fall patients and 43 matched controls. Both groups were similar in age, gender, race. Inter-rater agreement was 72% for UPMC and 71% for ABCS screens. ABCS and UPMC screens had sensitivity of 55.8% and 62.7%, and specificity of 41.8% and 60.4% respectively. PPV was 48.9% and NPV 48.6% for ABCS. PPV for UPMC was 60% and NPV 61%. The differences were not statistically significant. Conclusion: 50-60% of injurious falls can be predicted by one of these screens. The UPMC screen is promising but prospective studies are needed to verify the results. 1. Quigley PA. et al. Reducing serious injury from falls in two veterans' hospital medical-surgical units. Journal of Nursing Care Quality 2009; 24:33-41.

## THE CS-PFP10 MAINTAINS ROBUSTNESS IN FIT, COMMUNITY DWELLING OLDER AND YOUNGER INDIVIDUALS WHEN COMPARED WITH THE SPPB

W.C. Logan[1], J.O. Brooks[2], M. Cress[3], *1. Geriatrics, Palmetto Health, Columbia, South Carolina, 2. Clemson University, Clemson, South Carolina, 3. University of Georgia, Athens, Georgia*

Introduction: Several physical function and mobility measures have been developed and validated for use with community dwelling populations; these include the Continuous Scale Physical Functional Performance 10 test (CS-PFP10) and the Short Physical Performance Battery (SPPB). Both instruments have been well validated. This study was designed to evaluate the performance of the CS-PFP10 and the SPPB in community dwelling older and younger individuals. Methods: Both the CS-PFP10 and the SPPB were completed by 249 college students (mean age 19.4 ± 2.3SD years) and 162 community dwelling elders (mean age 60.4 ± 8.5SD years). Results: The SPPB mean summary scores were similar for both groups (11.5 ± 0.9SD in elders, 11.9± 0.1SD in students). The mean CS-PFP10 total scores were significantly different (means 60.4 ± 13.6SD for elders and 72.2 ± 9.8SD for students, Student's t-test p<0.0001). The CS-PFP10 score was distributed normally while the SPPB summary score was a kurtosis distribution, limited by a 12-point ceiling. Conclusion: The SPPB was limited by ceiling effect in these community dwelling populations. The CS-PFP10 covers a broad range of ability - low to high functioning individuals. Further study will assess the implications of higher or lower CS-PFP10 scores in healthy populations. Being able to discriminate apparently healthy individuals at risk for future limitations may allow early intervention to protect from future disability.

## USUAL GAIT SPEED BEST PREDICTS CS-PFP10 SUMMARY SCORES IN COMMUNITY DWELLING YOUNG PEOPLE AND ELDERS

W.C. Logan[1], J.O. Brooks[2], M. Cress[3], *1. Geriatrics, Palmetto Health, Columbia, South Carolina, 2. Clemson University, Clemson, South Carolina, 3. University of Georgia, Athens, Georgia*

Introduction: Identifying healthy individuals who may be at risk for future disability is challenging. Both the short physical performance battery (SPPB) and usual gait speed have been identified as frailty markers in elders. Both have been proposed as screening tests to identify those who might need more robust testing, like the Continuous Scale Physical Functional Performance 10. This study was designed to evaluate the performance of SPPB and gait speed in relation to the CS-PFP10. Methods: The CS-PFP10, usual gait speed and the SPPB were completed by 248 young (mean age 19.4±2.26SD yr) and 162 older (mean age 60.4 ±8.47SD yr) individuals. Linear regression modeling was used to evaluate how well gait speed and SPPB summary scores predict CS-PFP10 total scores. Results: Adjusted for age, sex and body mass index (BMI), only usual gait speed (1.1±0.42SD m*s-1 in younger, 1.2±0.20SD m*s-1 in older participants) was a consistent, strong predictor of CS-PFP10 scores in both elders (60.4±13.6SD p<0.001) and young volunteers (72.2±9.85SD p=0.01). Conclusion: Usual gait speed is a good measure to predict physical performance on comprehensive functional measures like the CS-PFP10. Gait speed is inexpensive, simple to perform, and may identify individuals at risk for disability. Further research is needed to evaluate the utility of gait speed as a screening method to identify those at risk for loss of independence where evaluation with CS-PFP10 might yield more detailed information.

## WANDERING AWAY RISK ASSESSMENT IN HOSPITALIZED PATIENTS

H.S. Sheth[1], D. Krueger[2], S. Bourdon[2], R.M. Palmer[1,2], *1. Medicine, University of Pittsburgh, Pittsburgh, Pennsylvania, 2. University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania*

Background: Hospitalized patients with impaired cognition are at risk of "wandering away" (WA). The appropriateness of tools to identify hospitalized WA patients is not known. UPMC Presbyterian hospital created an electronic health record (EHR)-based WA risk assessment tool linked to interventions that are implemented by floor nurses. Aim: To evaluate the appropriateness of WA risk assessment and prevention interventions by the floor nurses. Methods: Consecutive series for 3 weeks of patients who screened positive by floor nurses for WA risk. Two expert advanced practice nurses (APN) performed EHR and bedside evaluation of appropriateness of positive screen and interventions. WA risk was defined as cognitively impaired and mobile, or nursing judgment. Results: APNs evaluated 81 patients with WA positive risk: 43(43.2%) females, mean age 64.9 yrs (16-92 years), 43 (53%) >=65 years, 8 (9.9%) AA; 33 % medical, 43% surgical, 16% trauma, 8% ICU; 13(16.1%) dementia and 58 (70.7%) impaired cognition. 37/81 (45.7%) patients were assessed appropriately (positive WA risk). 34/81 (42 %) patients were incorrectly documented in EHR but subsequently corrected. 10/81 (12.3%) patients were incorrectly assessed by the floor nurse. Appropriate interventions were implemented for 33/37 (89.2%) WA risk patients, while APN intervened in remaining 4 patients. 10/37 (27%) patients' risk status ameliorated before transfer/discharge, 2 identified by APN. Conclusion: The wander away risk assessments by floor nurses were accurate (71/81, 87.7%). APNs were valuable in ensuring appropriate interventions (4/37; 10.8%), changing risk status (2/37; 5.4%) and identifying incorrectly labeled positive risk patients (10/81; 12%).

## A COMPARISON OF QUALITY-RELATED PROCESSES OF CARE FOR MEDIGAP INSUREDS WITH AND WITHOUT FULL FIRST DOLLAR OUT-OF-POCKET PAYMENT COVERAGE

K. Hawkins[1], G.R. Bhattarai[1], R.J. Ozminkowski[3], R.J. Migliori[3], C. Yeh[2], *1. Ingenix, Ann Arbor, Michigan, 2. AARP Services Inc., Washington, District of Columbia, 3. UnitedHealth Group Alliances, Ann Arbor, Michigan*

Research Objectives: To compare quality-related processes of care between Medigap insureds with and without full first-dollar payment coverage. Study Design: Adherence to evidence-based medicine (EBM) measures of care processes was measured for members with AARP® Medicare Supplement Health Insurance (i.e., Medigap) plans underwritten by UnitedHealthcare. Medigap plans that cover deductibles for Medicare Parts A and B are often referred to as full first-dollar coverage plans and include plan types C, F and J. Adherence rates for Medigap insureds in these plans were compared to rates for insureds in Medigap plans without full first-dollar coverage. Data on 161 EBM measures pertaining to adults age 65 and older were used in the analysis. These measures covered medical or pharmaceutical treatment for common chronic conditions. For each measure, a logistic regression model estimated adherence related to plan type, controlling for patient demographics and health status. Population Studied: About 2.8 million Medigap insured were included in the analyses. Principle Findings: When considering only EBM measures where statistically significant (p<0.05) differences existed, individuals in full first-dollar coverage plans had higher rates 86% of the time. However, when we applied a notion of "practical significance" by assuming adherence rates must differ by more than 5% to be meaningful, the EBM adherence rates were similar for those with and without full first-dollar coverage. Conclusions: Full first-dollar coverage plans accounted for 63% of the sample, so while the actual percentage increases in adherence may be small, the potential for impacting many numbers of beneficiaries may be large.

### AN EXPLORATION OF MEDICATION ADHERENCE AMONG INDIVIDUALS WITH HIV

T. Davis, S.N. Munk, F. Zanjani, *Gerontology, University of Kentucky, Lexington, Kentucky*

Older adults often are required to take numerous medications, and having HIV increases that burden. For individuals with HIV, adherence to medication regimens is especially important to the success of drug therapy and can perhaps delay transitions in care. The purpose of this secondary data analysis was to explore the difference in HIV medication adherence in older adults as compared to younger adults. Specifically, we sought to identify factors that differentially contribute to medication adherence among 109 participants (young= 21-49, and old=50-88) from the University of Pennsylvania Center for AIDS. We hypothesized that medication adherence would be influenced by social support, apathy, and/or sleep (as measured by the Duke Social Support index, the Apathy Scale, and the Medical Outcome Sleep Scale, respectively) and that older adults would be less adherent to their HIV medication regimens (as measured by the HIV Medication Adherence Measure). We conducted chi-squares and ANOVAs to assess the relationship among these variables, using SAS 9.1. The results indicate that older adults are more likely to be adherent and that social support, apathy, and sleep do not significantly impact medication adherence in this sample. Further research is needed to better understand medication adherence among older adults with HIV. If it is the case that older adults with HIV are more likely to be adherent to their medications, then perhaps we can take what we learn from older adults with HIV and increase medication adherence among other groups.

### PAIN HURDLES IN LONG TERM CARE: A LITERATURE REVIEW

S.G. Robinson, *1. Wayne State University, Detroit, Michigan, 2. Hospice of Michigan, Detroit, Michigan*

Chronic pain is a significant problem that affects the quality of life of institutionalized elders. Much research has been completed linking chronic pain to psychological distress and overall patient declines. Of particular concern within the long term care (LTC) industry is the need to address pain control within a highly regulatory environment, despite a variety of patient, practitioner, and institutional barriers preventing progress. An evaluation of peer-reviewed articles published in the last decade was completed to identify pain management barriers and best practices. Using EBSCOhost Database search terms “pain” and “long term care” were used to isolate 27 English, peer-reviewed articles published from January 1999 to November 2009 that specifically addressed barriers and best practices of pain management LTC. The most common types of pain management barriers present in LTC facilities may be categorized into three major groups including personal, institutional, and professional. Common themes to improve programming included: increasing knowledge of patients, families, and practitioners regarding pain and pain treatments, increasing interdisciplinary involvement in the pain management process, and setting both measureable and achievable goals. As patient advocates with expertise in human science and health, nurses are best prepared to further the body of work in chronic pain—specifically by identifying whether or not chronic pain is the most significant factor in quality of life for institutionalized elders as well and what quality of life factors may need to be addressed prior to or in conjunction with pain control issues.

### THE IMPACT OF MEDICATION USE AND MEDICAL MORBIDITY ON SYMPTOM BURDEN IN OLDER PATIENTS

M.A. Han, L.M. Walke, M. Tinetti, *Yale University School of Medicine, New Haven, Connecticut*

Background: Older patients have more medical morbidities, consume a greater number of prescribed medications, and report lower levels of quality of life than their younger counterparts. Symptom burden directly contributes to the physical component of quality of life; thus, factors associated with symptom burden may influence perceived quality of life. Objectives: To determine whether there is 1) an association between medical morbidity and symptom burden or 2) an association between medication use and symptom burden. Methods: This cross-sectional study included 159 community-dwelling male patients who were 65 years of age or older. Correlations were drawn using linear regression analysis. Results: On average, the participants in this study had 2.56 +/- 1.36 medical morbidities, were prescribed 7.91+/- 2.83 medications, and reported 3.17 symptoms at any severity level. We found a direct correlation between the number of medical morbidities and symptom burden (R2 = 0.94) but did not find a significant correlation between medication use and symptom burden (R2 = 0.20). Conclusions: Our results suggest that the number of medical morbidities has a stronger negative impact on symptom burden than the number of medications used. Efforts to improve quality of life for older patients may prove more successful if increased attention is paid to the treatment and alleviations of symptoms associated with medical morbidity.

### SUBOPTIMAL LABORATORY MONITORING OF CHRONIC MEDICATIONS IN OLDER VETERANS ADMINISTRATION NURSING HOME PATIENTS

S.M. Handler[1,2], X. Wang[2], S.L. Aspinall[2], R.A. Stone[2], M. Pugh[3], T. Semla[4], J.T. Hanlon[2], *1. Biomedical Informatics, University of Pittsburgh, Pittsburgh, Pennsylvania, 2. VA Healthcare System, Pittsburgh, Pennsylvania, 3. VA VERDICT, San Antonio, Texas, 4. VA PBM, Hines, Illinois*

Objective: To estimate the prevalence and identify factors associated with suboptimal laboratory monitoring of certain chronic medications prescribed to older Veterans Administration (VA) Nursing Home Care Unit (NHCU) patients. Design: Longitudinal study. Setting: 133 VA NHCUs. Participants: Cohort of 1,059 patients ≥ 65 years old, admitted between January 1, 2004 and June 30, 2005, who were prescribed ≥ 1 of the 9 chronic oral medications of interest for a period of ≥ 90 days. Main Outcomes Measure: Frequency of suboptimal laboratory monitoring of these chronic medications defined as less than that recommended by consensus guidelines developed by a national panel of nursing home clinicians. Results: Overall, 19.0% (201/1,059) of patients had suboptimal laboratory monitoring for chronic medications of interest. Few (26/201) had problems with ≥ 2 medications. Narrow therapeutic index medications commonly had suboptimal laboratory monitoring (i.e., 53.6% for theophylline, 26.5% for warfarin, 20.0% for lithium, 17.5% for phenytoin, and 14.3% for valproate). Suboptimal laboratory monitoring was also common for NSAIDs (39.1%) and corticosteroids (16.2%). Fewer laboratory monitoring problems were seen with diuretics (10.0%) or ticlopidine (0%). Only patients ≥ 85 years old (Adj. OR 0.52; 95%CI 0.31-0.88), and those who were prescribed ≥ 13 medications (Adj. OR 0.49; 95%CI 0.31-0.78) were less likely to have suboptimal laboratory monitoring. Conclusions: Suboptimal laboratory monitoring of medications is common in VA NHCU patients and frequently involves narrow therapeutic index medications. Future research is needed to estimate the association between suboptimal laboratory monitoring on health outcomes.

### EFFECTS OF BMI ON QUALITY OF LIFE AMONG RACIAL SUBGROUPS WITH CHRONIC MEDICAL CONDITIONS

M.J. Huisingh-Scheetz, S. Bilir, W. Dale, *University of Chicago, Chicago, Illinois*

Background: Obesity decreases health-related quality of life (HRQOL) independent of age and associated chronic medical conditions. It is unclear how race/ethnicity affects this relationship. We analyzed how race/ethnicity impacts the impact of Body Mass Index (BMI) on HRQOL, accounting for chronic medical conditions (CMC). Methods: The Chicago-based Improving Community Health Survey (2002-2003) collected self-reported health information and over-sampled for minorities. BMI was calculated for each participant. HRQOL was measured using scores from the validated SF-12 questionnaire. We used multivariate linear regression to assess the relationship of BMI to HRQOL. After stratifying by race/ethnicity, models were adjusted for age, gender, income, and education, and then were compared to models further adjusted for CMC (arthritis, asthma, diabetes, hypertension, heart problems) and smoking status. Results: Data from 324 non-Hispanic whites, 742 non-Hispanic blacks, and 546 Hispanics were included. Increasing BMI was associated with poorer physical HRQOL similarly among subgroups (B= -0.36, H= -0.38, W=-0.31, $p \le 0.05$). After adjusting for CMC and smoking, this relationship remained significant only among blacks and Hispanics (B= -0.20 and H= -0.31, $p \le 0.05$; W=-0.13, $p > 0.05$). Increasing BMI was significantly associated with poorer mental HRQOL only among whites. After adjusting for CMC and smoking, this relationship was no longer significant (B= -0.04, H= -0.0001, W=-0.16, $p > 0.05$). Discussion: Controlling for age and CMC, overweight/obese minorities have worse physical HRQOL than whites, but no worse mental HRQOL. Future studies investigating this disparity are needed to better understand the impact of obesity on minority HRQOL.

### THE ASSOCIATION BETWEEN HEALTHY EATING INDEX-2005 AND GAIT SPEED AMONG OLDER AMERICANS

B. Xu, C. Zizza, *Auburn University, Auburn, Alabama*

Although nutritional status is one of the major determinants of successful aging, the relationship between overall diet quality and physical functioning among older adults has not been previously examined. Using data from the 1999-2002 National Health and Nutrition Examination Survey, we examined the association between overall diet quality, measured by USDA's Healthy Eating Index-2005 (HEI-2005), and gait speed over 20 feet, a performance-based measure of physical functioning, in 3,380 adults (≥ 50 years old). The HEI-2005 assesses compliance with dietary recommendations over a range of food- and nutrient-based components including total fruit; whole fruit; total vegetables; dark green and orange vegetables and legumes; total grains; whole grains; milk; meat and beans; oils; saturated fat; sodium; and calories from solid fats, alcoholic beverages, and added sugars (SoFAAS). The 12 individual components are summed to yield the HEI-2005 scores ranging from 0 to 100, with a higher score indicative of a more health promoting diet. A multiple linear regression model controlling for age, gender, race/ethnicity, education, smoking status and marital status was used. Compared to those older adults with HEI-2005 scores in quartile 1, there was a 0.03 meters/second increase ($P = 0.035$) for those with HEI-2005 scores in quartile 3 and a 0.04 meters/second increase ($P = 0.009$) for those with HEI-2005 scores in quartile 4. The clear association between overall diet quality and physical functioning suggests adherence to dietary recommendations among older adults should be endorsed.

### AN HERBAL LOLLIPOP FOR ORAL CARE IN NURSING HOME RESIDENTS

J. Mentes[1], S. Kang[1], S. Spackman[2], J. Bauer[2], *1. UCLA Center for the Advancement of Gerontological Nursing Science, Los Angeles, California, 2. UCLA School of Dentistry, Los Angeles, California*

Oral bacteria can cause dental caries and systemic infections in older adults. The purpose of this pilot study was to examine whether an herbal lollipop containing licorice root decreases streptococcus mutans bacteria that cause cavities and respiratory infections in older adults. Two nursing homes in the greater Los Angeles area were utilized as the setting for this study. A total of 9 participants, 3 men and 6 women, with a mean age of 85 years consented to participate in this pilot study. The participants were given two lollipops a day for 21 days. Saliva samples were collected at baseline and days 1, 3, 7, 14 and 21 then analyzed for the numbers of streptococcus mutans. Participant's teeth, gums and mucus membranes were examined for overall condition at baseline and follow up. Using linear mixed models analysis with difference in numbers of strep mutans from baseline to any time point as the dependent variable, and number of lollipops consumed with the effect of time controlled as the predictor variable, participants who consumed more lollipops over the 21 day time period were more likely to have fewer numbers of strep mutans ($\beta = -8.703$, $p=0.067$). There was a trend toward reduction of Streptococcus mutans with consumption of more lollipops over the 21-day period and an improvement in the condition of the participant's teeth and gums on examination. Recruiting a larger sample may demonstrate significant reductions in bacteria and further improvement in dental status.

### ORAL HEALTH AND AGING: COMMUNITY-UNIVERSITY PARTNERSHIPS FOR HEALTH, EDUCATION, AND RESEARCH

L. Tepper, *1. Columbia University, New York, New York, 2. Mercy College, Dobbs Ferry, New York*

Project Elder Smile is a university-community partnership sponsored by grants from private foundations which seeks to promote improved health care services for the medically underserved members of urban communities. The College of Dental Medicine at Columbia University is engaged in an innovative outreach program in northern Manhattan, which seeks to improve the oral health care status of older minority elders within these communities. ElderSmile has provided a series of interative educational presentations about aging and oral health, and free dental screenings by dental school faculty and students in each of their four years of dental school to over 600 older residents of public housing units and senior centers within these neighborhoods. These screenings are followed by free treatment in four community dental clinics including the College of Dental Medicine. This presentation will discuss the rationale, development, protocol, and evaluation of this three-year program, an analysis of the oral health needs of this population, and suggestions and recommendations for the establishment of similar university-community partnerships that promote improved oral health for medically and dentally underserved minority elders.

## SESSION 550 (SYMPOSIUM)

### BIOMARKERS OF PRESERVED NEUROLOGICAL FUNCTION

Chair: *C. Rosano, University of Pittsburgh, Pittsburgh, Pennsylvania*
Discussant: *L. Lipsitz, Institute for Aging Research, Boston, Massachusetts*

Preserved neurological function is a key factor to maintain independence late in life. There is preliminary evidence that inflammatory and cardiometabolic factors are associated with neurological changes in the elderly. Exposure to these factors may cause subclinical structural changes in the central and peripheral nervous systems, which in turn impair function and lead to disability. The goal of this symposium is to identify the factors related to preserved neurological function in older adults. The discussants will utilize integrated neuroepidemiological approaches to characterize protective and at-risk factors in the context of multiple neurological domains. Data from four large longitudinal cohort studies will be presented: Cardiovascular Health Study, Health, Aging and Body Composition Study, Rush Memory and Aging Project and Mobilize Boston. Understanding the determinants of preserved neurological function may help identifying new targets for intervention and preventive strategies and thus reduce the burden of disability in older adults.

### RESILIENCE TO BRAIN AGING: A SECOND LOOK

C. Rosano, L.H. Kuller, A.B. Newman, *University of Pittsburgh, Pittsburgh, Pennsylvania*

One hypothesis to explain why older people remain high functioning late in life is that they have a greater "brain reserve". However, brain reserve has not been objectively quantified, as it has mostly relied on gross measures of whole-brain abnormalities that are largely non specific manifestation of brain aging. Additionally, the determinants of brain reserve have not been characterized systematically, in relationship to objective measures of brain integrity. We propose to identify the main biomarkers of brain reserve by using longitudinal extensive data on risk factors in a sub-cohort of older adults participants of the Cardiovascular Health Study at the Pittsburgh field site, followed from 1994 through 2004-05. We define brain reserve using objective quantitative measures based on repeated brain magnetic resonance imaging.

### DO TRADITIONAL OR NON-TRADITIONAL RISK FACTORS FOR NEUROPATHY PREDICT NERVE FUNCTION DECLINE IN OLDER ADULTS?

E.S. Strotmeyer[1], R. Boudreau[1], S. Zivkovic[1], A.I. Vinik[2], A.V. Schwartz[3], S. Satterfield[4], T.B. Harris[5], A.B. Newman[1,6], *1. Epidemiology, University of Pittsburgh, Graduate School of Public Health, Pittsburgh, Pennsylvania, 2. Eastern Virginia Medical School, Norfolk, Virginia, 3. University of California, San Francisco, San Francisco, California, 4. University of Tennessee Health Science Center, Memphis, Memphis, Tennessee, 5. National Institute on Aging, Bethesda, Maryland, 6. University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania*

Peripheral nerve impairments occur with aging. Diabetes is a major risk factor but does not entirely explain age-related impairments. We evaluated the association of traditional (age, diabetes, height, alcohol use, smoking) and non-traditional (IFG, subclinical vascular disease, high lipids, renal function) factors to greater sensory and motor nerve declines in Health ABC (N=3075 well-functioning persons, 70-79 years in 1997-98). Vibration threshold (sensory) and peroneal nerve conduction velocity and amplitude (motor) were assessed in 2000-01 and 2007-08 (N=1017; 52.9% women, 32.5% black; 76.0±2.7 years; 18.5% diabetes). With adjustments including baseline nerve function, baseline diabetes, taller height and high cystatin-C predicted greater motor nerve decline. Older age and taller height predicted greater sensory nerve decline. Subclinical vascular disease or incident diabetes/IFG was not related to decline. Largely traditional risk factors predicted peripheral nerve decline. Older age remained important for sensory nerve decline but the relationship with motor nerve decline was attenuated.

### HYPERTENSION AND COGNITIVE FUNCTION: ROLE OF THE RENIN ANGIOTENSIN SYSTEM

I. Hajjar[1], V. Novak[2], L. Lipsitz[1], *1. Institute for Aging research, Hebrew SeniorLife, Boston, Massachusetts, 2. Beth Israel Deaconess Medical Center, Boston, Massachusetts*

We present findings, suggesting that the renin angiotensin system (RAS) presents a potential biomarker for the impact of hypertension on cognitive function. We demonstrated using arterial spin labeling MRI that hypertension was associated with low perfusion and impaired ability to respond to CO2, a measure of cerebral vasomotor reserve. Both linked to cognitive impairment. We reported that a polymorphism (M235T) in the gene that code angiotensinogen was associated with CO2 vasoreactivity and that M235T is also related to decline in executive function. Higher levels of RAS biomarkers were also associated with worse executive function. Treatment with angiotensin converting enzyme inhibitors (ACEI) was associated with slower cognitive decline and Alzheimer's disease progression and improved cerebral blood flow. Finally, the M235T polymorphism modified the cognitive outcome of treatment with ACEI. Evidence is accumulating that RAS activity, through its cerebrovascular role, maybe a biomarker for the risk of cognitive impairment in hypertension.

### ASSOCIATION OF HEMOGLOBIN AND NEUROPATHOLOGY: A COMMUNITY COHORT, CLINICAL-PATHOLOGY STUDY OF AGING

R.C. Shah, J.A. Schneider, S. Leurgans, D. Bennett, *Rush University Medical Center, Chicago, Illinois*

Background: How hemoglobin links to neuropathology associated with cognitive function in older persons is uncertain. Methods: Hemoglobin and neuropathology measures were available for 113 deceased Rush Memory and Aging Project participants. Neuropathology assessment included an Alzheimer's disease (AD) pathology summary score of amyloid plaque and neurofibrillary tangle counts along with presence of gross infarcts, microscopic infarcts, or Lewy Bodies. Results: Mean AD pathology score was 0.56 unit (SD=0.56; range=0, 2.34). Thirty-five, twenty-nine, and eleven participants had gross infarcts, microscopic infarcts, or Lewy Bodies. Mean hemoglobin level was 13.0 g/dL (SD=1.4). In a multiple regression model, hemoglobin was not associated with AD pathology (parameter estimate=-0.02, SE=0.03, p=0.55). Using logistic regression models, each g/dL decrease in hemoglobin increased odds for having gross infarcts by 39% (95% CI=1.03-1.87) but not microscopic infarcts (OR=1.15, 95% CI=0.85-1.55) or Lewy Bodies (OR=1.09, 95% CI=0.70-1.70). Conclusion: Lower hemoglobin is associated with gross infarcts but not other neuropathology.

## SESSION 555 (PAPER)

## DIRECT CARE WORKER PRACTICE IN RESIDENTIAL CARE FACILITIES

### SUPPORTING MEMORY AND COMMUNICATION IN PEOPLE WITH DEMENTIA: AN EDUCATIONAL PROGRAM FOR CAREGIVERS

M. Broughton, E.R. Smith, R. Baker, N.A. Pachana, A.J. Angwin, G. Byrne, M.S. Humphreys, H.J. Chenery, *University of Queensland, Brisbane, Queensland, Australia*

Background: Strategies to support memory and communication function in people with dementia are important. However, cognitive rehabilitation approaches are often overlooked within the framework of a largely medical approach to dementia, particularly in residential care. We designed DVD-based educational programs entitled RECAPS and MESSAGE, encapsulating sets of straightforward, evidence-based strategies to assist caregivers in maximising everyday memory and communication abilities, respectively, in people with dementia. Method: 60 caregivers from residential aged care facilities participated in a trial of RECAPS and MESSAGE. Of these caregivers, 38 also completed questionnaires assessing knowledge of strategies for supporting memory and communication in dementia at baseline, and immediately after training. Results: Results from an evaluation survey of the utility of the programs were positive. Specifically, 97% considered the information useful; 92% thought the strategies would not be difficult to apply in everyday life; 94% would definitely recommend the training to a colleague or friend; and 74% reported that they had learned a lot from the program. Caregivers demonstrated a significant increase in their knowledge of strategies to support memory and communication post-training (p = .001). Discussion: Initial results indicate that professional caregivers find the RECAPS and MESSAGE strategies clear, practical and easily applied in the residential aged care environment. Furthermore, the program significantly enhanced caregiver knowledge. Future development of the materials, incorporating consumer feedback, will focus on web-based dissemination to allow wider access to the program. This has the potential to lead to sustainable changes in practice in these important aspects of dementia care.

### WORK STRESS AND INTENTION TO QUIT THE JOB AMONG DIRECT CARE WORKERS: DO WORK SOCIAL SUPPORT AND LOCUS OF CONTROL MAKE A DIFFERENCE?

J. Gray-Stanley[1], N. Muramatsu[2], *1. Public Health & Health Education, Northern Illinois University, Dekalb, Illinois, 2. University of Illinois at Chicago, Chicago, Illinois*

Direct care workers (DCWs) provide substantial services for adults with intellectual and developmental disabilities (ID) by assisting with basic needs and facilitating independent living. Though work stress has been shown to limit these capacities and contribute to turnover, the external resources of work social support and the internal resources of an internal locus of control can help DCWs work more actively. We examined if work stress affects intentions to quit the job, and whether these resources can lessen the effects of work stress on plans to exit the workplace. DCWs (n = 323) serving adults with ID from 5 community-based organizations which provide residential, vocational, and personal/respite/foster care services completed a cross-sectional, self-administered survey. Multiple regression analyses then examined the main and moderating effects of work support and locus of control on intent to turnover. Work stress was positively associated and work social support was negatively associated with intentions to quit. Interestingly, the effects of an internal locus of control depended on how DCWs perceived their participation in work-related decision making. Among those perceiving limited participation, an internal locus of control had a negative association with intention to quit; however, among those perceiving more participation, locus of control had no effect. While work support may deter some workers from quitting, internal control beliefs may help DCWs who perceive limited participation in decision-making. Such findings suggest the importance of work support and teamwork development for all DCWs, as well as their participation in decision-making processes.

### INTEGRATING EXERCISE INTO HEALTH CARE AIDES' PRACTICE: MOBILITY OF VULNERABLE ELDERS (MOVE)

S. Slaughter, C. Estabrooks, *University of Alberta, Edmonton, Alberta, Canada*

Introduction: Several rehabilitative approaches involving dedicated research assistants or highly trained health care aides have been tested in long-term care (LTC) settings. Such approaches are unlikely to be adopted or sustained in the resource constrained environments of LTC facilities. Objective: The purpose of this study was to evaluate a knowledge translation intervention (reminder system) to integrate a simple mobility activity (repeating sit-to-stands) into the routines of health care aides. Methods: This ethnographic study was conducted in two LTC facilities. We gathered data through non-participant observation data before and after the introduction of the sit-to-stands, semi-structured interviews, adherence questionnaires, and health record documentation. We compared data from the various sources to understand the process factors associated with the uptake of the sit-to-stands. Results: The documentation flowsheet reminded everyone, 66% benefited from visual reminders in residents' rooms, and few benefited from posting resident participant names. Everyone agreed that the activity was a good idea but identified barriers to completing the sit-to-stand activity both for themselves and the residents. Factors influencing performance included time availability, knowing residents well enough to elicit their cooperation, and residents' willingness to participate. Health care aides described strategies to persuade the residents to exercise: explaining, making it a game, using music, encouraging competition, avoiding distracting locations, and providing one-step instructions. Conclusions: It is possible to integrate sit-to-stand repetitions into the daily practice of health care aides and residents. We plan to assess other methods (interactive education, and audit and feedback) to facilitate the adoption of this mobility innovation.

### DEVELOPMENT OF A MENTAL HEALTH-RELATED TRAINING FOR ASSISTED LIVING FACILITY DIRECT CARE STAFF

E.K. Dakin, *School of Social Work, Colorado State University, Fort Collins, Colorado*

In addition to already high rates of depression, a Medicaid Mental Illness waiver in Colorado has led to a rising number of persons with mental illness as a primary diagnosis residing within assisted living facilities (ALFs). Reflective of changes such as Medicaid waivers providing for non-nursing home placements, it is believed that ALFs will increasingly be serving a resident population contending with complex mental health diagnoses such as depression, dementia complications, various anxiety disorders, and schizophrenia (Bartels, 2001). The growing level of mental health concerns and the co-housing of frail elders and persons with severe mental illness create many challenges for ALF staff. A mental health-related training module and associated knowledge test for direct care staff was developed and pilot-tested based on results of a needs assessment that examined the education and training histories and perceptions of mental health training needs among ALF administrators and direct care staff in Larimer County, CO . This module focuses on the development of specific skills related to difficult behaviors, the development of empathy for causes of difficult behavior, exploration of myths related to mental illness, and stresses the importance of self-care and self-awareness of triggering people and behaviors. The training and knowledge test were pilot-tested and further refined based on feedback from focus groups and a community advisory board. The knowledge test was also refined based on frequency analysis of its questions. Further testing of the training and knowledge test using an experimental design are the next phase for this project.

## SESSION 560 (PAPER)

## INTERNATIONAL PERSPECTIVES ON DISABILITY & MOBILITY

### SENSORY-MOTOR AND PSYCHOSOCIAL DETERMINANTS OF ADAPTIVE LOCOMOTOR PERFORMANCE: THE INCHIANTI STUDY

N. Deshpande[1], E. Metter[2], L. Ferrucci[2], *1. Queen's University, Kingston, Ontario, Canada, 2. National Institute on Aging, NIH, Baltimore, Maryland*

The ability to adapt basic locomotor pattern to suit environmental challenges is critical for mobility. However, factors associated with efficacy of adaptive locomotor performance (ALP) are not known. This study identified sensorymotor and psychosocial determinants of ALP under different challenges and examined differences in ALP between older persons with and without self-reported mobility disability. Cognitively intact 1060 InCHIANTI participants (age:21-98 years) who could walk 7 mt were included. Four challenging conditions were administered: 1.walking on a narrow path, 2.crossing an obstacle while walking, 3.walking while performing a cognitive verbal task and 4.walking as fast as possible. Walking speed represented global ALP. The sensorymotor and psychosocial parameters included vision and lower limb somatosensory impairment, knee extensor strength, lower limb coordination, depression, cognition, personal mastery, social support and education. Backward linear regression models revealed two primary determinants ($P<0.05$) with highest relative weighting as follows: condition 1:vision and knee strength, condition 2:vision and somatosensory impairment, condition 3:knee strength and cognition and condition 4: knee strength and coordination. The walking speed of the elderly with mobility disability was significantly slower ($p<0.05$) in all 4 conditions even after adjusting for normal walking speed and age, however, the effect size was highest for fast walking followed by walking on a narrow path that increased demands on medio-lateral stability. In conclusion, determinants of adaptive locomotor performance are specific to the challenge induced. Elderly with self-reported mobility disability possibly have more difficulty for increasing walking speed on demand and when demands on medio-lateral body stability are increased.

### ACTIVITIES OF DAILY LIVING AND HEALTH STATUS OF THE ELDERLY IN KOREA

M. Park, J. Ha, *College of Nursing, Keimyung University, Daegu, Republic of Korea*

This study analyzed data from the 2008 national study of Korean elderly to investigate health status according to activities of daily living of the elderly in Korea. The 2008 national study of Korean elderly surveyed 15,146 elderly people (Male: 6,452, Female: 8,694) over 60 years who were living in community and investigated their health and economic condition, and welfare status. This study focused on their chronic disease, perceived health status, depression, fall, and physical function according to ADL and IADL status. About 23% of the Korean elderly had disabilities on one or more ADL and IADL items and the disability rate significantly grows higher according to age. The number of chronic disease was positively correlated with the disability on ADL and IADL. Increased number of disability on the ADL & IADL appeared to be associated with negative perceived health status. The elderly who met the depression criteria had higher disability rate on ADL and IADL. The number of fall was more frequent and the fear of falling was higher among the elderly who had disability on one or more ADL and IADL items. There are also a definite correlation between physical function and activities of daily living: the upper, lower, and total physical functions were significantly different according to the degree of disability on ADL and IADL. This study supports that evaluation on the elderly people's ADL and IADL is very important to estimate their physical and emotional health status.

### EDUCATIONAL GAP IN LIFE EXPECTANCY AND DISABILITY-FREE LIFE EXPECTANCY AMONG OLDER ADULTS IN SãO PAULO, BRAZIL

F. Andrade[1], P.E. Guevara[1], M.L. Lebrão[2], J.L. Santos[3], *1. Kinesiology and Community Health, University of Illinois at Urbana-Champaign, Champaign, Illinois, 2. Universidade de Sao Paulo, Sao Paulo, Sao Paulo, Brazil, 3. Universidade de Sao Paulo, Ribeirao Preto, Sao Paulo, Brazil*

Objectives: The aim of the present study is to investigate the relationship between socioeconomic (SES) status, measured by education, and total life expectancy (TLE), disability-free life expectancy (DFLE), disabled life expectancy (DLE). Methods: The sample was drawn from two waves of the Survey on Health and Well-being of the Elderly (SABE), which followed 2,143 older adults from 2000 to 2006 in São Paulo, Brazil. Disability was assessed through Activities of Daily Living (ADL) measure. Education was assessed based on literacy status. The Interpolation of Markov Chains method was used to estimate the impact of education on TLE and DFLE. Results: Among individuals aged 60 and over in São Paulo, 25.5% were illiterate in year 2000. Illiteracy rates are higher among women than among men (29.6% and 19.6%, respectively) ($p<0.0001$). Illiteracy was associated with higher disability prevalence (32.1% versus 20.7% among those who are literate) ($p<0.0001$). TLE at age 60 reached 19.8 years (95% CI: 18.0-21.6) among those who are literate and 17.2 years (95% CI: 16.1-18.2) among those who are illiterate. There are significant SES differentials in DFLE, but small differences are found in DLE. At age 60, DFLE is estimated in 15.3 years (95% CI: 13.7-16.8) among those who are literate and 12.5 years (95% CI: 11.6-13.4) among those illiterate. Discussion: Among older adults in Brazil, higher education is associated with longer TLE and DFLE. A positive SES gradient in TLE and DFLE was found for both males and females in São Paulo, Brazil.

### ADL AND IADL DISABILITY TRENDS IN SHANGHAI OLDER ADULTS, 1998 TO 2008

Q. Feng[1], D. Gu[2], Z. Zhen[3], Z. Xiong[3], P.W. Duncan[1], J. Purser[1], *1. Medicine-Geriatrics, Duke University Medical Center, Durham, North Carolina, 2. United Nations - Population Division, New York, New York, 3. Shanghai University for Finance and Economics, Shanghai, China*

Background: Few studies document disability trends of older adults in developing societies. Objectives: This study estimated ADL and IADL disability trends for older adults in Shanghai (the most aged city of China) from 1998 to 2008, and how this time trend was influenced by selected risk factors. Methods: We used panel data from four waves of Shanghai's Longitudinal Survey of Elderly Life and Opinion (1998, 2003, 2005, and 2008). Respondents included 9,680 registered residents in Shanghai aged 65 or older. ADL was measured as a dichotomous variable based on any reported difficulties in eating, dressing, moving on/off bed, indoor transferring, cleaning face and teeth, toileting, bathing, and moving up/downstairs; likewise, any IADL difficulty with cooking, washing, cleaning house, taking medicine, nailing, managing money, making phone calls, getting out in raining, shopping, or going to the doctor were also recorded. Years were categorical indicators referenced to the baseline wave. Covariates included age, gender, rural/urban residence, marital status, social support, social welfare entitlement, comorbidity, symptoms, depression and cognition impairment. Nested random-effect models were applied for estimation. Results: When covariates were controlled progressively, in comparison with elders in 1998, elders in 2008 had 28-39% lower odds of being ADL disabled ($P<0.01$); elders in 2003, 2005, and 2008 were 20-26%, 27-38%, and 59-64% less likely to be IADL disabled respectively ($P<0.001$ for all). Conclusions: The functional health of Shanghai elders has significantly and consistently improved over the recent decade. ADL and IADL results will be discussed in light of recent trends in developed countries.

## SESSION 565 (PAPER)

## ORGANIZATIONAL STRUCTURE AND POLICY

### EFFECT OF NURSING UNIT MANAGER'S TRANSFORMATIONAL LEADERSHIP STYLE ON WORK ENGAGEMENT THROUGH CORE WORK ENVIRONMENT RESOURCES

M. Simpson, *College of Nursing, University of Wisconsin-Milwaukee, Milwaukee, Wisconsin*

Understanding what factors of the nursing work environment best predict nurses' performance has practical implications for improving nursing home resident quality outcomes. The purpose of this study was to test a model (derived from the Models of Job Demands-Resources, Work engagement, and Transformational Leadership) linking nursing unit manager transformational leadership style to work engagement through core work environment resources. A cross-sectional survey study design was employed. The study sample included 147 nursing staff (RNs, LPNs, CNAs) working in 24 nursing homes in one Midwestern state. Structural equation modeling techniques were used to test the hypothesized model using AMOS 7.0 and model fit indices were used to evaluate the fit of the model. The hypothesized model revealed a good fit. Nursing unit manager's transformational leadership style was shown to influence work engagement in two ways: 1) Direct effect on work engagement (.293) and, 2) Indirect effect on core nurse resources (.121). Total model effects demonstrate 41% of the variance in work engagement is explained transformational leadership style and core work environment resources. The effect of nursing unit manager transformational leadership practices on work engagement is further understood through core work environment resources. This finding has important implications for the development of an innovative approach to improving nursing home residents' quality of care outcomes.

### CLASSIFICATION AND DISTRIBUTION OF SERVICES FOR OLDER ADULTS IN US HOSPITALS OVER TIME

A.I. Arbaje[1], Q. Yu[1], B. Leff[1,2], *1. Medicine, Division of Geriatric Medicine and Gerontology, Johns Hopkins School of Medicine, Baltimore, Maryland, 2. Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland*

Background: Older adults admitted to acute care hospitals often require specialized services. The patterns of these services nationwide are not well understood. Objective: Describe trends in the classification and distribution of services in US hospitals relevant to the care of older adults. Data and Methods: Retrospective cohort study, 1999 and 2006 rounds of American Hospital Association Annual Survey of Hospitals, a national database of self-reported hospital characteristics (n= 4,998 and 4,831 hospitals, respectively). Services identified as relevant to older adults: adult day care, assisted living, case management, geriatric medicine, geriatric psychiatry, home health, hospice, intermediate care, long-term care, pain management, palliative care, rehabilitation, retirement housing, and social work. Analysis: exploratory and confirmatory factor analysis. Results: Two factors emerged as important categories of services for older adults: inpatient specialty care (pain management, palliative care, geriatric medicine, hospice, social work, geriatric psychiatry, case management, home health, rehabilitation) and post-acute community care (assisted living, retirement housing, intermediate care, adult day care, long-term care). Conclusion: As the population of older adults increases, it is important to understand patterns of services in US hospitals. This study begins to develop a classification scheme clustered into two factors. An important factor related to post-acute community care, a type of service not traditionally viewed as offered by hospitals. This information may be useful to hospital administrators evaluating new service lines, third-party payers configuring benefits, and policymakers restructuring reimbursement, all with the goal of preparing the US healthcare system to adequately care for an increasing number of older adults.

### A USER-CENTERED DESIGN APPROACH TO THE DEVELOPMENT OF A CLINICAL INFORMATICS SYMPTOM ASSESSMENT TOOL

S. Ahluwalia, R. Leos, J.R. Goebel, K. Lorenz, *Veterans Administration Greater Los Angeles, Los Angeles, California*

Background: Although clinical informatics (CI) solutions in healthcare can facilitate quality improvement, there remain considerable challenges to the development of CI tools for palliative care (PC). Effectively embedding the process of symptom assessment within a CI tool is particularly difficult, due to the subjective nature of both the patient experience and provider response. In order to adequately assess end-user needs, we undertook an effort to understand the clinical context within which the tool would be used from the PC provider perspective. We sought to characterize PC provider perspectives on, and approaches to, the assessment and management of dyspnea, as an exemplar symptom, using the qualitative framework of grounded theory. Methods: Semi-structured in-depth interviews of PC physicians and nurses Results: Three themes emerged: 1) The clinical tradeoff between having a simple symptom tool that reflected actual assessment practices and did not contribute to workload, and using an existing, comprehensive tool validated by research; 2) the reliance on qualitative visual observations to assess the presence and intensity of symptoms, rather than a quantitative standardized rating scale; and 3) the considerable variability among providers in their approaches to documentation of symptom assessment. Conclusions: We have illustrated a qualitative approach to developing a user-centered, CI symptom assessment tool for PC practice that considers both the clinical flow and context in which the tool is used. Such a tool may need to incorporate research-validated symptom assessment instruments modified for use in clinical practice to improve ease of use and simplicity, and to allow for both categorical and free text responses in order to be effective and maximize end-user adoption.

## SESSION 570 (PAPER)

## PATIENT AND FAMILY EDUCATION FOR THE END OF LIFE

### PRACTITIONERS' PERCEIVED USEFULNESS AND ACCEPTABILITY OF A FAMILY BOOKLET ON COMFORT CARE IN DEMENTIA

J.T. van der Steen[1], F. Toscani[2], T. de Graas[1], S. Finetti[2], C.M. Hertogh[1], M. Nakanishi[3], T. Nakashima[3], M. Arcand[4], *1. Department of Nursing home Medicine, and Department of Public and Occupational Health, VU University Medical Center, EMGO Institute for Health and Care Research, Amsterdam, Netherlands, 2. Lino Maestroni Foundation-Palliative Medicine Research Institute, Cremona, Italy, 3. Institute for Health Economics and Policy, Tokyo, Japan, 4. University of Sherbrooke, Sherbrooke, Quebec, Canada*

Families of dementia patients may know little about the course of the dementia and comfort care. Conditional for health care providers educating families is them feeling comfortable with doing so. We evaluated a Canadian family booklet explaining comfort care in dementia in physicians and nurses caring for dementia patients in a Southern and Northern European country. Perceived usefulness and acceptability of the booklet was evaluated in 14 nursing homes in Lombardy, Italy, and 21 in the Netherlands, in 2009. Physicians and nurses received a questionnaire and a translated version adapted to local practice. In 10 Dutch homes, physicians evaluated the original Canadian version in English. Acceptability was assessed as a 15-item scale summing rating of agreement with statements regarding, for example, decision-making support and nurses education. Perceived usefulness was defined as usefulness to proportion of families of dementia patients. A total of 168 evaluations were available for multivariable regression analyses. Evaluations of the translated and English version were similar. The booklet was found useful for the majority of families. Profession (nurses) and country (Netherlands) were independently associated with better acceptability. Usefulness was associated with these characteristics in unadjusted analyses only, explained in part by higher educational needs among Italian respondents. Overall, the booklet was welcomed by practitioners of European countries differing in attitudes towards end-of-life care. The booklet may help empower nurses in providing palliative care for dementia patients and their families. Further work will focus on acceptability to families and integration into a training program to also educate practitioners.

### END-OF-LIFE CARE: AN EDUCATIONAL INITIATIVE IN A CONTINUING CARE COMMUNITY

K. Ondus[1,2], E. O'Toole[1,2], *1. Case Western Reserve University - Western Reserve Geriatric Education Center, Cleveland, Ohio, 2. Metrohealth Medical Center, Cleveland, Ohio*

Objective: In the United States, residential care and assisted living communities have increasingly become sites of death for older adults. Yet, several barriers impede the delivery of optimal end-of-life care in theses settings including: variable education, discomfort with delivering end-of-life care and symptom management, communication difficulties, conflicts with families and providers, time constraints and emotional attachment to residents. Method: A multi-educational intervention consisting of: a four-part series of monthly sessions was presented to all employees regardless of department and position, a 6-hour seminar was held for 25 employees respresentative of all disciplines, and ongoing point-of-care education. Evaluation: Evaluation measures consisted of pre-and post measurements at the time of the intervention and follow-up at 18 months. Measures include knowledge, attitude and change in practice related to end-of-life care. Statistical analyses for the initial educational intervention including a paired samples t-test showed significance ($p<.05$)in increased knowledge by participants at all monthly sessions and the all day seminar. Pre- and post-attitudinal survey indicated a significant change (p<.05)in attitudes related to treatments and decision making at end-of-life. The 18-month follow-up is currently being completed. Conclusion: Curricula such as this one with ongoing education can equip staff with knowledge to relieve suffering and improve the quality of life for the residents and their families who are living or dying with life-threatening illnesses in residential care.

### YOU'RE PART OF THE COMMUNITY : OLDER RURAL CANADIAN PALLIATIVE PATIENTS' TRANSITION EXPERIENCES

W.D. Duggleby[1], K. Penz[2], D. Goodridge[3], B. Leipert[4], P.H. Berry[5], *1. Nursing, University of Alberta, Edmonton, Alberta, Canada, 2. SIAST, Regina, Saskatchewan, Canada, 3. University of Saskatchewan, Saskatoon, Saskatchewan, Canada, 4. University of Western Ontario, London, Ontario, Canada, 5. University of Utah, Salt Lake City, Utah*

Background: Older rural persons who are receiving palliative care experience multiple co-existing transitions that can be distressing such as changes in: a) environment, b) roles and relationships, and c) physical and mental health. These transitions do not occur in a vacuum, but occur in a context that reflects the complexities of end of life care and the nature of rural Canadian life. Purpose: The purpose of this study was to explore the context or conditions under which rural palliative care patients experience transitions. Following a study of the transition experiences of older rural palliative patients, an in-depth thematic analysis was conducted of the context in which transitions occurred. Sample/Setting: Six persons with advanced cancer, 10 family caregivers and 12 rural health care professions from three rural health regions in a western Canadian province were interviewed. Design /Method: Interpretive Description qualitative approach was used. Twenty-seven open-ended individual audio-taped qualitative interviews and four focus group interviews were conducted. All interviews were transcribed verbatim, coded, and analyzed. Results: Emerging themes of the context were: a) isolation, b) fatigue and stress, c) lack of information, d) poor communication with health care providers, and e) lack of accessibility to services. At the same time participants described valuing individuality and community connectedness. The findings provide insight into the lives and values of rural older adults who are receiving palliative care services. They also provide the foundation for strategies to support older rural palliative patients as they experience multiple transitions.

### THE EVALUATION OF THE PREPARED (PREPARING RESIDENTS FOR END-OF-LIFE PLANS AND RESPECTING END-OF-LIFE DECISIONS) STUDY

D. Dosa[1,2], P. Gozalo[1], C. Russell-McGregor[3,4], J. Citko[4], J.M. Teno[1], *1. Medicine, Brown University, Providence, Rhode Island, 2. Providence VA Medical Center, Providence, Rhode Island, 3. California Coalition for Compassionate Care, Sacramento, California, 4. Sutter Health-Sacramento, Sacramento, California*

Background: Hospitalization of nursing home (NH) residents during the last months of life is associated with significant risk to the patient, and increased overall cost to the health care system. The PREPARED project was a 2-year collaboration of four hospital systems and 18 NHs in the Sacramento region designed to increase advance care planning and reduce hospitalizations. Methodology: A member of the PREPARED team (a registered nurse or social worker) was detailed to participating NHs for 6 months to provide a weekly half-day educational curriculum related to improving advance care planning. Both process measures and the rate of hospitalizations were examined prior to and after the intervention by independent auditors. Focus groups and indepth interviews were conducted to identify aids and barriers to the intervention. Results: Overall, there was a trend towards reduced hospitalizations (10.7 per facility per month prior versus 9.3 per facility per month) that did not reach statistical significance (p=0.094; CI=-2.03 to 0.16). Pre-post chart review identified no changes in orders to restrict hospitalization (p=0.55), resuscitation (p=0.188), or hospice use (p=0.55). A total of 189 telephone interviews were conducted with decedent family members revealing no statistically significant changes in perceptions of care. Barriers to the intervention included high NH staff turnover, lack of front office and physician buy in, and significant fear of state regulations. Discussion: An educational intervention to improve advance care planning was not sufficient to overcome the considerable barriers in NHs.

## SESSION 575 (SYMPOSIUM)

### PRACTICE CHANGE FELLOWS: FOSTERING LEADERSHIP TO IMPROVE CARE TO OLDER ADULTS

Chair: *E. Coleman, University of Colorado at Denver, Aurora, Colorado*

The Practice Change Fellows program was established to address the critical shortage of effective leaders or "champions" from medicine, nursing, and social work who have the capacity to develop and implement innovative geriatric programs and service lines that meet the unique needs of older adults. Through participation in this program, Fellows enhance their leadership skills and complete projects aimed at improving care for older adults. The program further recognizes its potential to play a strategic role at the interface between health policy and healthcare practice, given that delivery system reform cannot be successful without the experience, expertise and voice of practice leaders. Opinion leader interviews and longitudinal study of Fellows show positive outcomes on leadership skills and organizational impact. Additionally, Fellows are achieving national recognition for their contributions to the field and their projects have demonstrated meaningful impact on improving the lives of older adults.

### THE COACHING APPROACH FOR PERSON-DIRECTED CARE IN HOME CARE AND NURSING HOMES

S. Dawson, *PHI National, Bronx, New York*

Person-directed care is increasingly part of health reform rhetoric, but lacks specifics. The health care workforce has received modest attention, yet—despite accounting for 70% of the eldercare workforce—direct-care workers are rarely embraced as central to reform. The Coaching Approach model builds upon evidence of change management, adult learner-centered education and leadership development to drive person-directed change throughout an entire home care/long-term care organization. This model creates "cross functional leadership teams" and includes a suite of interventions to change the core organizational operating system— communications, decision-making and leadership. This model is currently being tested by PHI, a national nonprofit, in a range of home care agencies and nursing homes. Quantitative and qualitative assessments suggest improvements in efficiency, satisfaction and retention among staff, and in client satisfaction. PHI is working with foundations, researchers, practice leaders and policy makers to support adoption and to study its impact on care systems.

### SUSTAINABLE SYSTEMS FOR EVIDENCE-BASED COMMUNITY HEALTH PROGRAMMING

N. Whitelaw, *NCOA, Washington, District of Columbia*

Community-based prevention and self-management support are part of health reform rhetoric but there is no organized delivery model for this type of health "care." The Sustainable Systems model engages state/regional aging and public health organizations from eight states to establish permanent systems for efficient diffusion of evidence-based health programs to reach diverse vulnerable elders through community organizations. Under this model, strong partnerships with health care providers, health plans, and diverse public/private organizations build statewide systems for participant engagement, training, implementation fidelity, quality assurance and financing. RE-AIM provides an organizing framework for highly interactive shared learning and tailored onsite consultation. Findings include engaging over 20,000 participants;

emerging regional coordinating /management organizations; statewide diffusion with progress on long-term financing. Outcome studies indicate improvements in health status, communication with providers and reductions in utilization. Success of this model contributed to federal and state policy initiatives, including Communities Putting Prevention to Work.

# SESSION 580 (PAPER)

## CIVIC ENGAGEMENT

### ASSESSING BENEFITS OF VOLUNTEERING AND EDUCATIONAL ACTIVITIES AMONG CAREGIVERS OVER 50

J.C. Greenfield, N. Morrow-Howell, *Brown School of Social Work, Washington University in St. Louis, St. Louis, Missouri*

Outcomes associated with participation in educational activities and volunteering were assessed to increase understanding about the effects of social engagement on older adults. The subpopulation of participants who were caregivers are of particular interest, given the challenges that caregiving poses to social activities outside of the home. Study participants were active in the OASIS Institute, a national organization dedicated to enriching the lives of older adults through education and service. The 5,500 respondents represented OASIS participants across 22 cities; they had a mean age of 71 years, were 80% female, 15% non-White, 13% low-income, and 41% living alone. Approximately 21% (n=975) self-identified as caregivers, with 37% of those providing daily care, and 31% providing care at least once each week. Using OLS and logistic regression, and controlling for demographic differences and clustering by location, caregivers were found to report higher perceived benefits from the educational and volunteer engagement than non-caregivers. Benefits included participants' perceived health improvement, increased social engagement, increased desire to continue learning, and attainment of useful skills and knowledge. Higher benefit scores were found among both class takers and volunteers. Findings suggest that while most older adult participants reported some benefit from volunteer and educational activities, caregivers benefited more. However, among respondents who said they had not participated in the last 6 months, nearly 10% cited caregiving responsibilities as the primary reason for non-participation. Further study is needed to understand how caregiver engagement can be supported and benefits maximized for this vulnerable population.

### DOES VOLUNTEERING HELP PROTECT MENTAL HEALTH WHEN IT REALLY COUNTS?

K.J. Johnson, *Gerontology, University of Massachusetts Boston, Boston, Massachusetts*

The purpose of this study was to investigate whether formal volunteering moderates the negative stress-related outcome of increased depressive symptoms associated with the death of a spouse. Previous studies indicate that volunteering reduces depression among older adults. Volunteering was conceptualized as an activity that helps to maintain social support, and it was expected that volunteering would decrease depressive symptoms among the bereaved. Data from four waves of the Health and Retirement Study (HRS) were used for this research. A sample of 8,203 respondents age 60 and older was observed over three transitional periods: 1998-2000, 2000-2002, and 2002-2004. Analyses were based on 21,369 participant observations of respondents who either remained married or became widowed over the three time periods. Ordinary least squares (OLS) regression was used to estimate the effect of transitioning to widowhood and volunteering on the number of depressive symptoms with additional covariates held constant. Generalized estimated equations (GEE) were used to adjust the standard errors for the parameter estimates to account for the non-independence of observations. The results indicate that participating in community-based volunteer work significantly reduces depressive symptoms (-0.16, $p < .01$). However, the positive impact of volunteering among widows is found only among females. Volunteering moderates the negative effect of the death of a husband on the number of depressive symptoms (-.29, $p < .05$) with additional covariates held constant. These findings add to our understanding of the positive effects of volunteering and suggest that volunteering assists some older adults in maintaining social support during stressful transitions.

### SPILLOVER EFFECTS OF VOLUNTEERING ON FAMILY, FRIENDS AND COMMUNITY

E. Gonzales, N. Morrow-Howell, A.M. McBride, S. McCrary, *George Warren Brown School of Social Work, Washington University in St. Louis, St. Louis, Missouri*

AIM. Research has examined the effects of volunteering on the recipient or the volunteer. However, there may be "spillover effects." The purpose of this study is to examine the perceived effects of older adults volunteering in a high intensity program on their family, friends, and greater community. METHODS. Experience Corps (EC) participants consisted of new volunteers from 18 cities in two waves. Wave one respondents (n=227) were queried in an open-ended item as to perceived effects of their EC participation on their family, friends and greater community. Qualitative categories informed closed-ended item development for wave two respondents (n=208), which are reported here. FINDINGS. Positive effects included bringing additional resources, information and new skills back to the family (86%); reducing concern about the older adult because of their involvement with EC (91%); improving relationships or communication with family and friends (83%); increasing family awareness of social issues (90%); and involving family and friends in volunteering (57%). Perceived negative effects on family included interfering with family plans (5%) or having less time with family (29%).Volunteers also reported that they were more likely to vote in favor of public education (95%), more interested in public education (98%), and more likely to advocate for public education (95%). IMPLICATIONS. Positive spillover effects, and few negative effects, are evidenced among the family, friends, and larger community from older adults volunteering, suggesting this is a productive direction for future inquiry. Creating or enhancing certain program features may influence these outcomes directly.

# SESSION 585 (PAPER)

## FINANCIAL ASPECTS OF ELDER ABUSE

### POLICIES AND GUIDELINES ON DEALING WITH SUSPECTED FINANCIAL ELDER ABUSE IN ENGLAND: A POLICY ANALYSIS PERSPECTIVE

D. Stanley[1], A. Gilbert[2], B.L. Penhale[3], D. Cairns[4], M. Davies[4], E. Notley[4], M.L. Gilhooly[4], *1. School of Health, Community & Education Studies, Northumbria University, Newcastle upon Tyne, United Kingdom, 2. School of Applied Psycho Social Sciences, University of Plymouth, Plymouth, United Kingdom, 3. Centre for Health and Social Care Studies & Service Development, University of Sheffield, Sheffield, United Kingdom, 4. School of Health Sciences & Social Care, Brunel University, London, United Kingdom*

This Presentation Will Report on the Method, Content and Findings of an Analysis of Social Policy Documentation as One of Three Phases of an English Study Examining Decisions Made by Managers and Professionals in Health, Social Care and Banking Relating to Detecting and Preventing Financial Elder Abuse. UK Government Policy Places Lead Responsibility for Co-ordinating Local Multi-Agency Responses to Protect Vulnerable Adults From Abuse With Local Social Services Authorities. Despite a Government Commitment to Introduce Legislation, Currently Safeguarding Adults Boards in England Do Not Enjoy Statutory Status. Origins and Definitions of the Terms 'Vulnerable

Adults' and 'Significant Harm' Will Be Discussed in the Context of Developing Legal Instruments and Practice Guidance. Generally, There Is Limited Adult Safeguarding Material in Existence Which Specifically Relates to Financial Abuse and How It Should Be Dealt With or Prevented, to the Extent that Sometimes Even National Reports Are Silent on the Subject, whilst Much of the Financial Sector's Documentation is Subject to Restricted Insider Access. Commonalities and Differences of Views Amongst Stakeholder Communities (Local Authorities, Health, Financial Sector and Law Enforcement) Will Be Explored, Together with Some Implications of the Role of the Office of the Public Guardian and the Potential Contribution of the Recently Introduced Independent Safeguarding Authority. Whilst the Presentation Will Focus on English Systems, Brief Contextual Reference Will Be Made Where Necessary to the Other Three Jurisdictions Within the UK. The Presentation Will Provide Opportunities for Transnational Debate, Comparison and Learning.

### ELDER FINANCIAL ABUSE: OUTCOMES USING A MULTIDISCIPLINARY TEAM

A.E. Navarro[1], K. Wilber[1], D. Schneider[2], *1. Davis School of Gerontology, University of Southern California, Los Angeles, California, 2. Keck School of Medicine, University of Southern California, Los Angeles, California*

Arriving at a remedy for a victim of financial abuse can be time-consuming and complex, requiring interagency cooperation from a diverse array of professionals. Multidisciplinary teams (MDT) offer a critical approach, yet are lacking empirical evidence. This presentation focuses on several outcomes made possible by a specific type of MDT, referred to as an elder abuse forensic center (the Center). This model is defined as a diverse group of professionals that meet weekly to address difficult elder abuse cases through highly focused, problem-solving collaboration, and referrals to appropriate remedies. These efforts are possible in California due to the MDT legal provisions in place, allowing disciplines to share case information across agencies without violating HIPAA, or other privacy statutes. This was an observational study, using administrative data from the elder abuse forensic center and Adult Protective Services (APS). Our anonymous sample consists of community-dwelling victims, age 65 years or greater, residing in Los Angeles County, California. Subjects are those reported to APS from January 2007 to December 2008. The APS clients referred to the Center during this study period (n=171, "enhanced care") are compared, using propensity score calculations to determine APS case matches ("usual care") not involved with the Center with which to compare outcomes. Covariates included socio-demographic data from APS, the Center; and outcome data from several sources, including APS, Public Guardian, and the District Attorney. Empirical evidence has implications for both policy and practice, related to national replication of elder abuse forensic centers designed to protect older adults.

### FINANCIAL EXPLOITATION OF CARE FACILITY RESIDENTS: MODEL PROTOCOL FOR IDENTIFICATION AND INTERVENTION

I.C. Freeman, A. Helgason, *William Mitchell College of Law, Minneapolis, Minnesota*

This paper introduces a model protocol for care facility staff to recognize and intervene when a resident in their facility may be a victim of financial exploitation. Care providers and advocates have long recognized the effects of this type of exploitation, often perpetrated by family members or trusted others. The resident loses a life's savings; the facility is unpaid for months on end; the resident risks discharge for nonpayment; and public assistance is pressed to pick up the pieces. The model protocol, geared to nursing facilities and assisted living, begins with definitions and strategies for preventing financial exploitation of these vulnerable adults. The core includes: Signs of possible financial exploitation of a resident; Action steps for facility staff…emphasizing early intervention; Communication and documentation; Working with families; and the roles and limitations of public agencies. From 2007-09, the Center coordinated a statewide collaborative of more than 50 organizations and agencies to amend Minnesota's Vulnerable Adult law and data practices laws affecting financial institutions to improve investigations and outcomes. This broad interdisciplinary group known as the Vulnerable Adult Justice Project (VAJP) continues to meet on a monthly basis and provided expert advice throughout the process to develop a protocol that is practical from the perspectives of health care workers, social services, and law enforcement.

## SESSION 590 (SYMPOSIUM)

### LIVING ARRANGEMENT, CARE NEEDS, AND WELL-BEING OF OLDER ADULTS IN CHINA

Chair: *T. Lum, University of Minnesota, St. Paul, Minnesota*
Co-Chair: *B. Wu, University of North Carolina at Greensboro, Greensboro, North Carolina*

China is facing a formidable and growing challenge of population aging. By 2050, China will have the largest elderly population in the world with more than 400 million older people. This symposium will focus on living arrangement, care needs, and well-being of older adults in China. The first paper entitled "Co-residence with aging parents in contemporary China: Attitudes and behaviours." Using matched data from the 2002 Chinese Longitudinal Healthy Longevity Survey and the 2002 Dynamic Family Social Survey, the authors examined factors associated with co-residence between adult children and their aging parents. The second paper entitled "Social care needs and life satisfaction among Chinese childless elderly." Using data from the 2005 Chinese Longitudinal Healthy Longevity Survey, the author examined the association between social care needs and life satisfaction of older adults in China. The last paper entitled "Economic development, social support, and well-being of older people in urban China." Using data from the 2004 Urban Household Survey in China, the authors examined how levels of economic development were associated with living arrangement, social support, health and mental health, and life satisfaction of older adults in urban China. Bei Wu, our discussant, will discuss the implications of these findings on the transitions of care of older adults across the aging continuum in China.

### ECONOMIC DEVELOPMENT, SOCIAL SUPPORT, AND WELL-BEING OF OLDER PEOPLE IN URBAN CHINA

T. Lum[1], Y. Xu[2], X. Zhang[2], *1. University of Minnesota, St. Paul, Minnesota, 2. Beijing Normal University, Beijing, China*

China has achieved a spectacular success in its economic development since it started to reform its centrally-planned economy in 1978. However, economic reform also led to large scale population migration as younger adults left less developed areas to seek jobs in more developed coastal cities, leaving older people behind and weaken their social support system. Using data from the 2004 Urban Household Survey, we studied how economic development affected the living arrangement, social support, and well-being of elderly in urban China. Multivariate analyses, including OLS regression and ordered logit regression, were used. We found that lower levels of economic development were associated with lower social support and poor well-being, but the relationship was not linear: More developed cities had significantly better social support and well-being than less developed cities. However, older people in mid-level developed cities have the lowest well-being.

### CORESIDENCE WITH AGING PARENTS IN CONTEMPORARY CHINA: ATTITUDES AND BEHAVIORS

Z. Zhang[1], D. Gu[2], *1. Michigan State University, East Lansing, Michigan, 2. Portland State University, Portland, Oregon*

Coresidence has been the primary means through which aging parents' material, physical, and emotional needs are met in China. Using the 2002 Chinese Longitudinal Healthy Longevity Survey (parents' questionnaire) and its companion data set- the 2002 Dynamic Family Social Survey (adult children's questionnaire), we created 4,003 matched parent-child pairs to examine the follow questions: 1. How does adult children's SES influence their attitude toward coresidence? 2. How are children's characteristics and parental characteristics associated with coresidence? Our preliminary results show that adult children who are more educated and who own their apartments are less likely to agree with patrilocal residence. Those who own their apartments are also significantly less likely to coreside with their parents. Married sons and those who do not have brothers are more likely to coreside. Adult children are also more likely to coreside with parents who are widowed, older, and who have good relationship with the adult child.

### SOCIAL CARE NEEDS AND LIFE SATISFACTION AMONG CHINESE CHILDLESS ELDERLY

J. Sun*, School of Sociology and Population Studies, Renmin University of China, Beijing, China*

Based on the 2005 wave data from the Chinese Longitudinal Healthy Longevity Survey(CLHLS) conducted in 22 provinces in China(n=16093), The study examines the demographic characteristics, social care needs of the childless elderly aged 65 and above, and explores the effective factors of their life satisfaction. Findings suggest that male, the oldest-old, never married are more easily to be the childless elderly. 30.5% of the childless elderly living alone, 18.5% of them living in institutions. The study also finds the social care will be more necessary for childless elderly because of their poor health and shortage of family care. Multiple regression analyses indicated that the childless elderly are less satisfied with their lives and feel more anxious and lonely than do parents. Gender, marriage, individual education, place of residence, living arrangements, economic security and access to medical services are consistently related to life satisfaction among the childless elderly in China. The study indicates that institutional care should be paid attention and economic security and medical insurance for the old persons without child or with only one child should be strengthened.

## SESSION 595 (SYMPOSIUM)

### NURSING HOME QUALITY INITIATIVES – MEASUREMENT AND EVALUATION

Chair: *A. Muma, Abt Associates Inc., Durham, North Carolina*
Discussant: *T. Moore, Abt Associates Inc., Cambridge, Massachusetts*

The Centers for Medicare & Medicaid Services (CMS) oversees the quality of care in our nation's nursing homes. This session will provide background on some current CMS initiatives in evaluating nursing home quality. These initiatives cover a broad range of topics. The Nursing Home Compare Five-Star Rating System: With over a year of data since its introduction in 2008, we present results on the stability and trends in the ratings and underlying components. Additionally, we provide an analysis on whether the methodology used to generate the five-star ratings for quality measures should account for facilities that serve special populations, such as mental illness and pediatric residents. The Quality Indicator Survey (QIS): CMS designed this survey to improve consistency and accuracy by using a more structured process and focusing on areas within facilities with greater quality concerns. We discuss how survey findings differ between the QIS and the traditional survey process in 15 states where the QIS has been introduced. Nursing Home Residents' Satisfaction With Care: This is an important dimension of quality and we report on our recent environmental scan to describe State initiatives that measure and report nursing home satisfaction. We also discuss implications for federal reporting of these data. Use of Therapists and Physician Extenders in Nursing Homes: We present results from an analysis that examines issues for publicly reporting use of these staff and assesses their relationship to nursing home quality and possible inclusion in the Five-Star Rating system.

### NURSING HOME COMPARE FIVE-STAR QUALITY RATING SYSTEM: THE FIRST 12 MONTHS

C. Williams[1], T. Moore[2], A. Muma[1], M.R. Plotzke[2], A.J. White[1]*, 1. Abt Associates Inc., Durham, North Carolina, 2. Abt Associates Inc., Cambridge, Massachusetts*

In December 2008, the Centers for Medicare & Medicaid Services enhanced its Nursing Home Compare website to include "star" ratings for each US nursing home, measuring multiple dimensions of quality. Now that the ratings have been published for one year, we examined rating stability and longitudinal changes in the underlying components. Nationwide, 81% of facilities had their overall rating change by at most one star during 2009. Stability was high in all rating domains: health inspections (91%), MDS quality measures (79%), and staffing (85%). More facilities improved in their ratings than declined. Facilities with extreme initial ratings (1 or 5 stars) had the most stable ratings. Trends toward higher ratings are due primarily to lower reported prevalence of post-acute pressure ulcers, physical restraints and pain in long-stay residents, as well as slight upward trends in adjusted staffing levels. Further scrutiny is needed to evaluate whether changes reflect true quality improvements.

### QUALITY MEASURES FOR SPECIAL POPULATIONS

M.R. Plotzke[2], A.J. White[1], C. Williams[1], T. Moore[2]*, 1. Abt Associates Inc., Durham, North Carolina, 2. Abt Associates Inc., Cambridge, Massachusetts*

We analyze whether the Nursing Home Compare Five-Star ratings for quality measures (QMs) needs to be adjusted to account for nursing facilities that serve special populations. Specifically, we analyze two subsets of specialized facilities, those focusing on: (1) mental illness and (2) pediatric residents. We identify mental illness from diagnoses such as Alzheimer's/dementia, depression, and schizophrenia found on the Minimum Data Set (MDS) and information on residents' mental status from CMS Form 672. We also use the MDS to measure resident age. We examine the number and characteristics of facilities serving these special populations and analyze how these facilities compare to others on the QMs reported on Nursing Home Compare and their QM rating on the Five-Star Rating. Since the QM rating is based on a facility's performance relative to other facilities, we are particularly interested in the impact of specialized facilities on the overall distribution of ratings.

### USE OF THERAPISTS AND MEDICAL SERVICES STAFF IN NURSING HOMES

A.J. White[1], C. Williams[1], M.R. Plotzke[2], R.M. Bertrand[2]*, 1. Abt Associates Inc., Durham, North Carolina, 2. Abt Associates Inc., Cambridge, Massachusetts*

We investigated the use of therapists and physician extenders in nursing homes. The goals of this research were to develop a methodology for publicly reporting information on use of these staff and to assess whether they should be considered in the Five-Star rating system. CMS OSCAR data were used for these analyses. We analyzed staffing levels for therapists and medical services staff (physicians, physician extenders) and the extent to which these individuals are nursing home employees vs. agency staff. Relatively few nursing homes reported the use of physician extenders and fewer than 5% reported having physicians or physician extenders as regular nursing home employees. The majority of nursing homes also reported that therapists worked as contract staff rather than nursing home employees. Findings have implications for the feasibility of including these staff in a payroll-data based public reporting system, as contract hours are not typically included in payroll data.

### THE QUALITY INDICATOR SURVEY – HOW DO FINDINGS COMPARE TO TRADITIONAL NURSING HOME SURVEYS?

C. Williams, A.J. White*, Abt Associates Inc., Durham, North Carolina*

CMS designed the Quality Indicator Survey (QIS) with several goals in mind, including improving survey consistency and accuracy by using a more structured process and focusing survey resources on areas within facilities with greater quality concerns. This new survey strategy has now been implemented to varying extents in fifteen states. We used survey results (cited deficiencies) from more than 3,000 QIS and 16,000 traditional surveys to examine whether survey findings differ between the two processes. Our primary analyses focused on paired analyses for providers that have had both types of surveys. There is no overall trend towards more or fewer deficiencies being cited by the two types of surveys, but substantial state-to-state variation is observed. For example, in Florida, QIS surveys tend to find fewer deficiencies, while in Kansas, QIS surveys cite more deficiencies. It is clear that these trends are evolving as states gain more experience with the QIS.

### NURSING HOME SATISFACTION: EFFORTS AT PUBLIC REPORTING

T. Moore[2], D.T. Hurd[2], A. Edwards[1], *1. Abt Associates Inc., Durham, North Carolina, 2. Abt Associates Inc., Cambridge, Massachusetts*

The nursing home (NH) resident's satisfaction with, or experience with, care, is recognized as an important dimension of quality, and of quality of life, in particular. Though several states have mandated the collection of nursing home resident and/or family satisfaction surveys and publicly report the results of those surveys (e.g., Maryland, Ohio, Rhode Island), CMS's Nursing Home Compare website does not present nursing home satisfaction data or other information about satisfaction. Results of an environmental scan will be presented that describe various federal, state and other initiatives to measure and to publicly report nursing home consumer satisfaction information. Implications for federal reporting of consumer satisfaction will be discussed.

## SESSION 600 (SYMPOSIUM)

### PHILOSOPHY AND AGING: THE PAST, PRESENT AND FUTURE CONSIDERED

Chair: *S. Wright, Gerontology Program, University of Utah, Salt Lake City, Utah*
Discussant: *A. Achenbaum, University of Houston, Houston, Texas*

The symposium will address a variety of topics through a philosophical lens to examine the human condition in the context of an aging body, aging mind, and aging society. It is proposed that the essence of philosophy – the love of wisdom – and its plethora of archetypes and primary areas (e.g., metaphysics, epistemology, ethics, and social and political philosophy) is still relevant today in as it has been for centuries by seeking understanding and meaning of the aging experience through rational discourse in both the existential and scientific domains. This symposium will illustrate, but not exhaust, the robust properties of a philosophical approach to 1) understanding intergenerational obligations and the importance of "legacy" in the context of an aging society; 2) the dimensions and characteristics for a wisdom of aging in an aging society; 3) the process and effects of the temporal dimension on life course processes and the various concepts of time that influence the aging experience; and 4) to examine the potentiality and consequences of a post aging in the near future which may alter the aging experience entirely and have us consider the prospect of existence beyond the limits we assume construct human "being."

### AGING AS LIVING THROUGH DIFFERENT TIMES

J. Baars, *University for Humanistics, Utrecht, Netherlands*

In a culture where chronological time is over-emphasized because of its instrumental value in the planning and acceleration of activities, it comes as no surprise that aging is mainly measured in terms of chronological time. Its result, chronological age, figures in all kinds of tables and overviews concerning 'the aged' although it is unreliable and rudimentary. Moreover, the focus on 'age' tends to occlude the processes that are decisive in determining the characteristics that are statistically related to 'age'. Against this background of an under-reflected overemphasis of chronological time this paper will explore other ways to experience and understand time. The guiding assumption is that aging is, basically, living over a relatively long time but may gain in meaning and content when it is approached as living in or through different times, instead of reducing the understanding of this process to measuring the length of life since birth.

### EARLY-LATE JUDGMENT CONFLICTS: AN EPISTEMOLOGICAL DILEMMA

P.L. McKee, *philosophy, colorado state university, Fort Collins, Colorado*

Old age retrospective judgments present an epistemological challenge. If at the time of choosing a behavior, I judge it to be morally permissible, and then, in old age retrospect, reverse that judgment, which of these conflicting judgments has stronger epistemological credentials? Such early-late judgment pairs present a dilemma, because each has epistemological merits and demerits that seem to offset those of the other. Drawing on passages in Plato and Aristotle, and on the theory of delayed choice in physics, I articulate a feature of our ordinary conception of the past – its "openness" - that resolves the dilemma. After attending this presentation, participants will be better able to observe early-late conflict pairs in judgment, and better able to coherently describe the epistemological basis of old age reversals of judgment.

### POPULATION AGING AND INTERGENERATIONAL JUSTICE

H. Moody, *AARP, Washington, District of Columbia*

There is considerable anxiety among policy-makers about the consequences of population aging, chiefly because of fears that an aging society costs too much in terms of health and pension expenditures. Such fears about the costs and benefits of public programs have for some time fueled debates around the ethical issues of justice between generations. Environmentalists have approached the topic of justice between generations from a different point of view: for example, emphasizing risks to future generations created by problems such as global warming. Here, it is argued that these two discrete domains of intergenerational justice need to be treated together. A major reason for this unified view is the prospect that population aging, and outright population shrinkage, would help to shrink the "ecological footprint" of humanity, permitting high levels of economic productivity enjoyed by a smaller global population. An aging society, in sum, is indispensable for living within the carrying capacity of planet earth. Contrary arguments about intergenerational justice that lead to pro-natalist policies are rejected in favor of an approach emphasizing population aging as a positive strategy for environmental justice.

### POST-AGING: A PROLEGOMENA TO ANY FUTURE TECHNOLOGIES

S. Wright, K. Felsted, *Gerontology, University of Utah, Salt Lake City, Utah*

This presentation will offer a philosophical examination and critique for understanding the emergent and expanding role of technologies that hold both promise and peril for transforming the aging process in this century. This presentation is for participants who wish consider how a new inflection point in our field - post aging – is emergent and has the potential to affect the epistemology and ethics, the expectations and educational practices for the aging experience in our lifetime. We will review five inflection points leading toward post-aging and discuss the continuum of varied intersects and constructs of technologies, that range from purporting to enhance the "activities of daily living" in older adults to those that propose to extend longevity and make senescence negligible, and ultimately claim to transcend "aging" itself - moving toward a transhumanist domain. It is proposed that we have reached critical mass in both the literature and in technological outcomes, and therefore, we can begin to address the actual and speculative impacts on the aging experience.

## SESSION 605 (POSTER)

## POLICY AND EDUCATIONAL PROGRAM

### THE SIGNIFICANCE OF POLICY AND HISTORICAL TIME IN CREATING POSSIBILITIES AND LIMITATIONS FOR DISABLED PEOPLE TO AGE AS A COUPLE

C. Guerrero*, 1. National Institute for the Study of Ageing and Later Life, Norrköping, Sweden, 2. Linköping University, Linköping, Sweden*

This poster looks at life course and aging from the perspective of aging disabled couples, where both partners have lived a long life with disability. Accounting for the experiences of aging disabled people is one of the new emerging topics in gerontology, since disabled people are now living longer lives and it has become possible to observe the aging experiences of this cohort. Little is known about disabled people's family relations outside the original nuclear family, especially when it comes to couplehood, a chosen relation. The aim of this poster is to elaborate on the significance of historical time – of policies, ideologies and social change, mostly in the context of Sweden – in the ability of disabled people to pursue a "normal life course" and "normal aging" which may include building partner relationships, or aging with a partner disabled like oneself. A life course perspective that acknowledges the limits and possibilities of human agency over time and within the individual's historical context is used as a theoretical frame. A country's policies can make certain relationships possible, and some policies may act as hinders. By shedding light on the aging experiences of a subgroup of the aging population (aging disabled people), the study supports the view that the aging population is far from a homogenous group. Historical changes, which in this case are related to disability politics, can affect the experience of individual aging and the life possibilities of aging disabled couples in living a life like others.

### CUTTING MEDICAID HCBW PROGRAMS TO BALANCE STATE BUDGETS: LOW HANGING FRUIT OR POISON APPLE?

T. Jankowski[1], Y. Li[2]*, 1. Institute of Gerontology, Wayne State University, Detroit, Michigan, 2. Indiana University-Purdue University Indianapolis, Indianapolis, Indiana*

The State of Michigan has been struggling with annual budget deficits for several years, and each year the Governor and Legislature review the budget to identify areas in which expenditures can be cut easily and with the least amount of harm to the state and its people. Medicaid is the largest single category in Michigan's budget, and although large portions of the Medicaid budget support mandatory entitlements, a number of programs under Medicaid are optional, making them recurrent candidates for cuts. One such program is Michigan's Medicaid Long Term Care Home and Community Based Waver program, known as the MI Choice program. This study assesses the total direct and indirect cost of proposed cuts to MI Choice expenditures, taking into account not only the Federal matching dollars that would be lost but also the economic multiplier effect of MI Choice expenditures using the RIMS II model, the tax revenue lost from the workers who provide in-home services, and the additional costs that would result from potential MI Choice clients instead seeking institutional long term care under conventional mandatory Medicaid. We find that direct cuts to MI Choice would result in an indirect net loss of jobs and revenue and an increase in other Medicaid expenditures that negate the justification for such cuts.

### AN EVALUATION OF STATE-INITIATED NURSING HOME TECHNICAL ASSISTANCE PROGRAMS

R.M. Bertrand[1], J.S. Gerteis[1], T. Moore[1], Y. Li[3], D.B. Mukamel[2], W. Spector[4]*, 1. Domestic Health, Abt Associates, Cambridge, Massachusetts, 2. University of California, Irvine, Irvine, California, 3. University of Iowa, Iowa City, Iowa, 4. Agency for Healthcare Reserach and Quality, Rockville, Maryland*

Nursing home (NH) quality is a major concern for patients, their families, and health care regulators and policy makers. Federal and state governments have addressed this concern through initiatives including standardization of resident assessment tools, reforms of the regulatory process, publication of NH quality measures, and Quality Improvement Organizations' national quality improvement (QI) activities. However, a paucity of research exists linking QI programs to resident outcomes. The QI state-initiated technical assistance (TA) programs, providing collaborative consultation and training to NH staff, present a unique opportunity to study this relationship given the natural variation in between-state program implementation. The primary objective of this two-phase study was to explore the structural and process variation across TA programs and to evaluate the impact of key components on resident health outcomes. Fifty states and the District of Columbia were contacted and screened; 17 programs met study criteria and representatives were invited to participate in the Phase I web-based survey. Of the 14 programs in the final sample, six provided only telephone or on-site feedback; eight provided telephone, on-site, and mail-based feedback. In all programs, 100% of NHs requesting TA received it; three programs provided assistance without a specific request. Over fifty percent of programs provided formal on-site training (n=9); conducted medical record reviews (n=8); and/or reviewed facility practices (n=9). One state mandated participation. These and other findings confirm the wide variability in TA program implementation. Implications for the variation in the scope and intensity on health outcomes and policy will be examined and discussed.

### A MODEL PROGRAM FOR EDUCATING MIDDLE SCHOOL SCIENCE EDUCATORS IN AGING

C.R. Green, J. Evans, M. Morden, M. Wells, D. Stinson, L.A. Chadiha*, University of Michigan, Ann Arbor, Michigan*

Purpose: Few middle school science educators are trained to teach aging content in their curriculum. As the population of ethnic and racial elderly persons grows, science educators may be a valuable resource for training younger generations of students in minority aging. This presentation's purpose is to describe the recruitment, development, and implementation of an innovative program, African American Aging Summer Immersion for Science Teachers (AASIST), designed to offer middle school science educators a unique opportunity to learn about minority aging and health disparities. Methods: Science educators from greater Detroit were recruited for a 1-year professional development experience focused on minority aging. Program curriculum provided participants with aging knowledge, with a specific focus on African American aging. Fellows attend two GSA annual meetings, participate in an 8-week training module where they learn special topics in aging (bio-medical, behavioral, and social) and design a curriculum module on minority aging for their students. Results: Four inaugural science educators were recruited and participated in the AASIST orientation program and attended the 2009 GSA. Program evaluations revealed the fellows have significantly increased their knowledge about minority aging research, outreach, and policy. Implications: A cadre of science educators who recognize the centrality of minority aging to high quality science is essential. Introducing a cohort of science educators to cutting-edge knowledge about minority aging, research, and practice through the novel AASIST program has significant policy and practice implications by creating additional pipelines for disseminating minority aging to students, science educators, and the community.

### REQUIREMENTS IMPOSED BY IRBS TO RESEARCH INVOLVING DECISIONALLY INCAPACITATED OLDER ADULTS

G. Bravo[1], M. Dubois[1], S. Wildeman[2], J.E. Graham[2], C. Cohen[3], K. Painter[1], S. Bellemare[1], *1. Research Centre on Aging, University Of Sherbrooke, Sherbrooke, Quebec, Canada, 2. Dalhousie University, Halifax, Nova Scotia, Canada, 3. University Of Toronto, Toronto, Ontario, Canada*

Older adults who are solicited for dementia research but who are unable to give direct consent to participation are vulnerable. Existing regulations and guidelines provide little directions to Institutional Review Boards (IRBs) about how best to protect this population. Objectives: To investigate the practices of IRBs regarding research protocols that may involve such individuals and explore the opinions of IRB Chairs on related issues, including longitudinal studies and research advance directives. Methods: Semi-structured telephone interviews with 46 Chairs from 4 Canadian provinces. Results: All IRBs that had reviewed protocols involving decisionally incapacitated older adults allowed these subjects to be enrolled, under certain conditions. Requirements imposed on researchers included seeking subjects' assent where possible, in addition to third-party consent (80%), identifying those responsible for assessing subjects' decisional capacity (60%), and describing the criteria on which determination of capacity would be based (60%). Among the 21 IRBs that had reviewed protocols for longitudinal studies involving older adults at risk of losing capacity, 15 reported requiring researchers to revisit consent at least annually and obtain consent from a legally authorized representative for subjects found to be incapacitated. Most Chairs supported a role for research advance directives in enrolling a person who is incapable of consenting or in retaining a participant who has become incapacitated. Conclusion: We observed significant variability in the oversight activities of IRBs that review protocols involving decisionally incapacitated older adults. We conclude that clearer and more comprehensive regulatory criteria are required for involving this population in research.

## SESSION 610 (SYMPOSIUM)

### PROMOTING HEALTHY URBAN AGING: IDENTIFYING HEALTH RISKS AND INTERVENTION OPPORTUNITIES IN NEIGHBORHOOD SENIOR CENTERS

Chair: *N. Giunta, Brookdale Center for Healthy Aging & Longevity, New York, New York, Hunter College School of Social Work, New York, New York*
Co-Chair: *W. Gallo, Brookdale Center for Healthy Aging & Longevity, New York, New York*
Discussant: *J. Berman, New York City Department for the Aging, New York, New York*

Innovative community-based models are urgently needed to target effective risk prevention and health promotion among urban older adults. The Brookdale Demonstration Initiative in Healthy Urban Aging is a three-year project to contribute to evidence-based program and policy development led by in New York City's Department for the Aging. In Years One and Two, a comprehensive survey was developed and conducted with a representative sample of older adults (n = 1,870) from a stratified sample of 56 senior centers citywide. In-person interviews were conducted in five languages using standardized individual and neighborhood-level instruments. Descriptive data identify targeted areas for program implementation to reduce health disparities. In addition, using an ecological public health approach, determinants of health risks are predicted using multilevel models. In Year Three, the project introduced and assessed targeted evidence-based interventions addressing diabetes and depression among ethnically and racially diverse senior center participants. This symposium will demonstrate The Brookdale Center for Healthy Aging & Longevity's translational approach to inform research, practice, and policy. A multidisciplinary panel will (a) discuss empirical findings from the survey identifying structural and individual predictors of depression and diabetes, and (b) describe the process of implementing two evidence-based programs in senior centers: the IMPACT model of depression care and the DSMP. We incorporate a "research to practice to policy" framework, and encourage discussion from the audience. This pioneering public private partnership provides a rigorous methodological approach to designing and implementing evidence-based interventions for healthy urban aging and risk prevention.

### RESEARCH TO PRACTICE TO POLICY: ECONOMIC BENEFITS OF BRIDGING AGING SERVICES WITH PUBLIC HEALTH

M.C. Fahs[1,2], W. Gallo[1,2], N. Parikh[1], D. Friedman[1], L. Evans[1], M. Ruiz[1], M. Caron[1], *1. Brookdale Center for Healthy Aging & Longevity, New York, New York, 2. Hunter College School of Public Health, New York, New York*

In this presentation, we analyze prevalence rates for the NYC senior center population by ethnicity, for the CDC top seven preventable chronic conditions among older adults. Estimates of large economic benefits of evidence-based interventions are derived. For instance, the NYC senior center population experiences 6,000 falls per year, with 50% requiring medical attention. Using published results from the Medical Expenditures Panel Survey and effect sizes for fall prevention interventions from a comprehensive analysis of literature, we predict a decrease in the fall rate by 30-44% (outcomes established in the literature) will increase quality of life and save $18-26 million in fall-related health expenditures. In addition to public health impact analyses, we developed a Brookdale evidence-based toolkit, as a practical guide for innovative practice development in senior centers. These translational activities, following original research, can help inform decisions by policy makers and program managers facing severe economic constraints.

### EXPLORING A PREDICTIVE MODEL FOR ELDERLY DEPRESSION

W.D. Cabin[1], M.C. Fahs[1,2], W. Gallo[1,2], N. Parikh[1], *1. Brookdale Center for Healthy Aging & Longevity, New York, New York, 2. Hunter College City University of New York, New York, New York*

This paper presents the results of an initial exploration into the interrelationship between neighborhood and individual-level variables and elderly depression. Using data from the Brookdale Demonstration Initiative, a stepwise linear regression was conducted to determine predictors of depression (measured by the PHQ-9). The following eight variables emerged as significant (r-square = .18): low neighborhood satisfaction; little leisure-time physical activity; lower income; visual impairment; hearing impairment; frequent falling; arthritis/rheumatoid arthritis; and presence of a physical disability. These potential predictors of depression require more attention in designing interventions to reduce the risk of depression and improve quality of life among the growing older adult population. The findings suggest the need to design evidence-based models of community-based care to cost-effectively provide early identification, treatment, and management of depression or other chronic conditions which increase the risk of depression among older adults. Limitations and implications for policy, practice, and research will be discussed.

### IDENTIFYING AND ADDRESSING HEALTH RISKS IN SENIOR CENTERS: THE BROOKDALE DEMONSTRATION INITIATIVE (BDI)

C. Morano[1,2], N. Giunta[1,2], N. Parikh[1], D. Friedman[1], M. Caron[1], A. Valencia[1], M.C. Fahs[1,3], *1. Brookdale Center for Healthy Aging & Longevity, New York, New York, 2. School of Social Work, Hunter College, New York, New York, 3. Hunter College School of Public Health, New York, New York*

The purpose of this paper is twofold: (a) describe how BDI survey data were used to identify health risks, specifically depression, to inform a targeted implementation of evidence-based intervention among a diverse population of urban elders; and (b) describe the process of adapting and implementing an evidence-based depression intervention (IMPACT) with Latino and white elders (N=30). The BDI study found that approximately one in four of all BDI respondents (24.9%) exhibited mild to moderate depression symptoms and the prevalence of mild to moderate depression in Latino elders was greater than 30% (32%). This session will focus on the implementation strategy that required a parallel process of training center staff to identify those who might benefit from early intervention and training mental health providers trained in traditional long-term therapeutic approaches. The session concludes with a discussion of the challenges and opportunities associated with implementing evidence-based models of care in community-based settings.

### LINKING AGING AND MEDICAL SERVICE PROVIDERS: UNDERSTANDING BARRIERS IN DIABETES MANAGEMENT AMONG OLDER LATINOS

N. Parikh[2,1], A. Valencia[2], M. Ruiz[2], D. Friedman[2], M. Caron[2,1], M.C. Fahs[2,1], *1. Hunter College City University of New York, New York, New York, 2. Brookdale Center for Healthy Aging & Longevity, New York, New York*

Diabetes is the sixth leading cause of death by disease in the U.S., contributing to increased rates of morbidity, including heart disease, blindness, kidney failure, and other chronic conditions. Results from the Brookdale Demonstration Initiative found that about one in five senior center attendees (21.7%) had diabetes with significant racial/ethnic differences. For example, Latinos compared with non-Latino whites were more likely to report having diabetes (26.5% vs. 14.2%; $p < 0.001$). An evidence-based diabetes intervention, the Diabetes Self-Management Program (DSMP) was implemented to improve self-management activities and behaviors among Latino participants living with diabetes. This paper describes a mixed method approach to better understand linkages between the aging network and the health care delivery system. Cultural (language), social (friends and family networks) and personal (self-efficacy) factors were identified as either facilitating or impeding diabetes self-management strategies. Implications for future research and practice will be discussed.

## SESSION 615 (SYMPOSIUM)

### THE FISCAL CRISIS OF THE STATE AND THE POLITICS OF AGING

Chair: *L. Polivka, The Claude Pepper Foundation, Inc., Tallahassee, Florida*

Politics in the U.S. have become increasingly fractured since the 2008 elections with the emergence of a hyper conservative movement on the right and disillusioned liberals on the left. This fracturing has made it difficult for President Obama and party leaders to generate majorities needed to pass a range of important policy issues from health care to climate change and management of the economy. Support for legislation has been further eroded by the spreading perception that large budget deficits caused by tax cuts, rising military expenditures, and the 2008-10 recession are potentially greater threats to the nation's economic future than low consumer spending, the housing crisis and a greatly weakened financial sector. These perceived threats have fueled renewed efforts to contain federal spending and raised questions about whether or not the politics of policies on aging and the federal budget deficit will lead to a dismantling of the U.S. old age welfare state that was constructed in the 20th century. The panel will address these perceived threats through an analysis of voting and public opinion polling results and a critique of the neoliberal economic model that continues to limit political choices and economic policy options.

### THE POLITICS OF AGING : PRE- AND POST- THE 2010 ELECTION

R. Binstock, *Case Western Reserve University, Cleveland, Ohio*

During the health reform saga of 2009 an overarching message of President Obama from the outset was that the costs of health reform would be offset through savings and cutbacks in Medicare, such as reducing the subsidies to Medicare Advantage plans. During the summer, fears among seniors about Medicare cuts were amplified at town meetings where the specters of "death panels" and "pulling the plug on granny" were added to the mix. Early in 2010, the Senate, the Chairman of the Federal Reserve, and President Obama zeroed in on controlling spending on entitlements (read Social Security and Medicare) as the pathway to reduced and responsible federal deficits. Did all this have an observable impact on older voters in the 2010 election? Will the politics of policies on aging in 2011 lead to a dismantling of the U.S. old-age welfare state that was constructed in the 20th century?

### PUBLIC SUPPORT FOR PROGRAMS FOR OLDER AMERICANS IN DIFFICULT TIMES: CONTINUITY AND CHANGE

F.L. Cook, *Institute for Policy Research, Northwestern University, Evanston, Illinois*

Although support for programs for older Americans has traditionally been high, the debate in 2009-10 over the Obama Administration's health care reform proposals revealed deep fractures in views about the role of government in protecting citizens. Partisan politics reached new highs of fractiousness. The purpose of this paper is to step back and assess what the public's views of Medicare and Social Security are and the level of confidence that the public has in the future viability of these programs. We find that support continues to be strong but that the public is very concerned about the future of these programs. We conclude by discussing the importance of the public's lack of confidence in the financial strength of Social Security and Medicare and what it might mean for the public's support for the programs.

### THE POLITICAL ECONOMY OF GROWTH AND THE POLITICS OF AGING AND SECURITY

L. Polivka, *The Claude Pepper Foundation, Inc., Tallahassee, Florida*

Retirement benefits for the elderly depend on the kind of equitable economic growth that characterized the U.S. economy from the end of World War III until the late 1970's. With the election of Ronald Reagan in 1980 the equitable growth model of managed capitalism rapidly gave way to a conservative model of the political economy (neoliberalism) designed to reduce the role of government in the economy and curtail the welfare state through deregulation of finance and other facets of the economy, tax cuts on higher income earners, privatization of public sector services, and reductions in funding for social programs. The neoliberal model has generated relatively slow economic growth and the deepest recession since the Depression. This presentation will include a description of the kind of alternative economic model the U.S. needs to restore equitable growth and security for future retirees.

## SESSION 620 (SYMPOSIUM)

### THINKING CRITICALLY ABOUT INTERDISCIPLINARY TEAMWORK IN GERIATRICS: PAST, PRESENT, AND FUTURE

Chair: *P. Clark, Gerontology, University of Rhode Island, Kingston, Rhode Island*
Discussant: *C. Langston, The John A. Hartford Foundation, New York, New York*

Recent reports from the Institute of Medicine, as well as professional association recommendations, have highlighted the increasing importance of training current and future health care professionals in interdisciplinary geriatric teamwork. How do we understand the challenge of designing educational programs to address this need? How can lessons of past attempts to develop and continue such efforts be applied to the future? What unique issues confront higher education in addressing this challenge? What types of teamwork models will be needed to meet future needs? These questions, and potential answers to them, are the focus of this symposium. The first paper discusses the history of interdisciplinary teamwork, examines the contributions made by team initiatives, and reviews lessons learned from a variety of programs in the public and private sectors. The second paper develops a typology of potential barriers to designing effective programs in higher educational settings and integrates these into a conceptual framework suggesting potential ways of addressing them. The third paper develops an analytical framework based on teamwork structures and processes to analyze different types of geriatric teams in differing settings. The final paper summarizes lessons from a recent initiative in Canada to build capacity in frailty-focused care within primary care teams. These include the use of network theory and analysis to inform team development, and the application of team constructs to diverse types of health care organizations. Implications and recommendations for developing, implementing, and sustaining interdisciplinary geriatric teamwork education and practice to meet future health care needs will be developed.

### INTERDISCIPLINARY TEAMWORK: LESSONS HISTORY CAN TEACH US FOR THE FUTURE

R. Tsukuda, *Portland VA Medical Center, Portland, Oregon*

With over 40 years of effort devoted to promoting interdisciplinary teamwork in health care settings, why do we continue to ask the same questions? There is a rich body of literature discussing health care teams. Despite this, issues of team productivity, effectiveness, outcomes, process, and barriers remain focal points for inquiry. At the same time, we continue to advocate for teams to exist and promote them as the “best” way to deliver care. This paper will discuss the history of interdisciplinary teams, examine the contributions made by team initiatives, and review lessons learned from a variety of programs in the public and private sectors. Learning from the past, implications for the future of interdisciplinary practice and education in a volatile health care environment will be discussed.

### PERILS, PITFALLS, AND PROBLEMS OF INTERDISCIPLINARY TEAM TRAINING PROGRAMS IN HIGHER EDUCATION

P. Clark, *Gerontology, University of Rhode Island, Kingston, Rhode Island*

Higher education presents unique challenges for the development, implementation, and continuation of interdisciplinary geriatrics team training programs. In spite of recent calls for the expansion of such programs, significant barriers remain to their long-term success. This paper develops a typology of such factors and integrates them into a conceptual framework suggesting some potential solutions. Barriers and facilitators are conceptualized within the following categories: (1) high-level administrative support without appreciation of resources necessary for success, (2) low-level administrative support with high faculty involvement, (3) external pressures created by training grants, and (4) external forces such as certification, licensure, and accreditation. Implications for the successful continuation of programs include: (1) the importance of a strong administrative, faculty, and resource foundation, (2) the presence of champions or advocates for interdisciplinary training, (3) pressures applied by accrediting and licensure bodies, and (4) the need for a strong theoretical and research base for the field.

### TEAM STRUCTURES AND PROCESSES AS TEAMWORK DOMAINS: IMPLICATIONS FOR EDUCATION AND PRACTICE

K. Hyer, *University of South Florida, Tampa, Florida*

Interdisciplinary care models evolved from VA geriatric inpatient assessment teams that began in the 1970s to review multiple domains for comprehensive assessment. While “interdisciplinary team care” is espoused as the standard for geriatric patients, teamwork structures and processes vary by setting. Hartford’s Geriatric Interdisciplinary Team Training (GITT) program identified team structure and process as key elements of team training. Using structure (purpose of team, physical proximity of members, size and composition of team, and role of patient) and team process (communication processes, frequency and regularity of team meeting, establishment of meeting goals and objectives, and audit of team outcomes) as teamwork domains, this presentation compares and contrasts: (1) geriatric assessment teams, (2) primary care teams in managed care, and (3) Program for All-Inclusive Care for Elderly teams caring for complex, long-term care patients in different settings. Implications for developing models and methods of interdisciplinary education and teamwork practice are explored.

### GERIATRICS, INTERPROFESSIONAL PRACTICE AND INTERORGANIZATIONAL COLLABORATION: LESSONS FROM PRIMARY CARE TEAMS

D.P. Ryan[1,2], B. Liu[1,2], W. Dalziel[7], C. Cott[2], D. Jewel[3], M. Kelley[6], J. Puxty[5], I. Gutmanis[4], *1. Regional Geriatric Program of Toronto, Toronto, Ontario, Canada, 2. University of Toronto, Toronto, Ontario, Canada, 3. McMaster University, Hamilton, Ontario, Canada, 4. University of Western Ontario, London, Ontario, Canada, 5. Queens University, Kingston, Ontario, Canada, 6. Lakehead University, Thunder Bay, Ontario, Canada, 7. Regional Geriatric Program of Eastern Ontario, Ottawa, Ontario, Canada*

Compelled by population aging and chronic disease, federal and provincial governments in Canada have designed strategies to develop interprofessional training and practice. In Ontario, family health teams are part of these strategies, and a province-wide initiative to build capacity for geriatric care within these teams reveals important teamwork issues. Health professionals continue to have scant preparation in geriatrics, and while interprofessional education is growing, transfer into practice remains challenging. Training continues to be largely hospital-based, while the structure of community teamwork may be unique and dependent on skills—inter-organizational teamwork—not presently in curricula. Team metrics blended with network theory and analysis add value in the community context, and edumetric approaches to measurement informs both research and practice. Finally, the team construct continues to be applied to diverse health care organizations and the idea of teams as emergent individualized practice networks is an important new theme to inform team theory.

## SESSION 625 (SYMPOSIUM)

### AGE TRANSITIONS IN SOCIAL RELATIONS: AN INTERNATIONAL PERSPECTIVE

Chair: *K.J. Ajrouch, Eastern Michigan University, Ypsilanti, Michigan*
Co-Chair: *M. Broese Van Groenou, VU University, Amsterdam, Netherlands*

This symposium capitalizes on detailed social relations measures available in five diverse parts of the world: The Netherlands, Eastern Europe, China, Mexico, and the U.S. We investigate whether socio-demographic and health factors influence social relations across the life course similarly or differently within each country. Broese van Groenou and colleagues address the issue in The Netherlands. Using multilevel models, they find that cognitive functioning was most strongly associated with network changes, but health indicators did not fully explain the effects of age and time. de Jong Gierveld disentangles cultural, socio-economic, and health predictors of co-residence in Eastern Europe to find that cultural values explain co-residence to a certain extent, but socio-economic norms and needs of the younger and middle generation also influence the likelihood of co-residence. Cong and Silverstein address changes in support networks of grandparents who care for grandchildren in rural China. They find that changes in support exchanges are most aptly detected within spousal relations, not parent-adult child relations. Fuller-Iglesias examines age differences in social relations using data from Mexico. Multi-level regression analyses demonstrate that age differences in social relations are mediated by education level and health status. Finally, Webster and Antonucci examine transitions in social relations among adults 50+ in the U.S. Findings suggest changes in health status predict changes in the frequency with which adults have contact with key network members. In sum, a systematic examination of age transitions in social relations across various national contexts provides an international perspective and distinctive insights into growing older.

### CO-RESIDENCE IN GEORGIA: OLDER AND YOUNGER ADULTS' PERSPECTIVES

J. Gierveld, *NIDI, Den Haag, Netherlands*

Support relationships between older and younger generations differ between countries. In some regions support is predominantly organised via co-residence of older people and their adult children, based on a cultural context of interdependent family lives. In this paper the theoretical ideas of Reher, of Adams c.s. and others are investigated, to disentangle cultural, socio-demographic, socio-economic and health predictors of co-residence. Data come from the Generations and Gender Survey of Georgia (N=10.000; age 18-79 years).Taking the perspective of the older and the younger generations, respectively, a nuanced outcome is shown. Cultural values do explain co-residence to a certain extent, but additionally socio-economic norms and needs of the younger and middle generation were associated with the prevalence of supportive relationships; resulting in decreasing risks of co- residence situations.

### LOSING AND GAINING PERSONAL RELATIONSHIPS IN LATER LIFE: THE EFFECTS OF HEALTH

M. Broese Van Groenou, E. Hoogendijk, T. Van Tilburg, *Sociology, VU University, Amsterdam, Netherlands*

The study examined changes in network size by distinguishing between continued and new relationships and studying the effects of physical and mental health. The Longitudinal Aging Study Amsterdam interviewed older adults up to seven times over a time period of 17 years (N = 2819). The number of continued and new relationships were calculated between the waves. Results from multilevel analyses showed significant effects of age, time, age * time and health. Continued relationships decreased and new relationships increased over time, but less so at higher age. Cognitive functioning was most strongly associated with network changes, but the health indicators did not fully explain the effects of age and time. It is concluded that a decrease in network size in old age is the result of reduced replacement of lost network members. Health plays an important role, but other explanations must also be investigated.

### AGE DIFFERENCES IN SOCIAL RELATIONS IN MEXICO: GENERATIONAL OR TRANSITIONAL EFFECTS?

H. Fuller-Iglesias[1], T. Antonucci[2], *1. Human Development and Family Science, North Dakota State University, Fargo, North Dakota, 2. University of Michigan, Ann Arbor, Michigan*

Cross-cultural studies have identified differences in how social relations change over the life course; however, little is known about trends in Mexico. Though age differences in social relations have been documented in Mexican samples, it is unclear whether these differences reflect age transitions or generational differences. Using data from the Survey of Social Relations and Well-being in Mexico (Fuller-Iglesias & Antonucci, 2009), this study examines whether education and health have a mediating effect on age differences in social network structure and support quality in Mexican adults aged 30-99 (N=933). Multi-level regression analyses indicate that age differences in network size and family makeup of network were mediated by education level. Age differences in frequency of contact were mediated by health status. Moreover, further analyses suggest mediating effects of education level for age differences in support quality. Findings and implications will be discussed within the context of generational and transitional effects.

### CHANGES IN THE SUPPORT NETWORKS OF GRANDPARENTS WHO CARE FOR THEIR GRANDCHILDREN IN RURAL CHINA

Z. Cong[1], M. Silverstein[2], *1. Human Development and Family Studies, Texas Tech University, Lubbock, Texas, 2. University of Southern California, Los Angeles, California*

Elders in rural China often take custody of their grandchildren when their adult children migrate to urban areas for employment. This study examined how elders' support network size (number of people) and volume (frequency) changed when grandchild-care was initiated. Using data from 1,640 elders from a four-wave longitudinal study (2001-2009) in Anhui Province, China, we used robust regression on 4,000 person-intervals and found that caring for grandchildren reduced the number of people from whom they received instrumental support, reduced the volume of support received from children, but increased support from spouses. Caring for grandchildren increased the number of people to whom elders offered help. In terms of volume, elders provided less support to children and more to their spouses. Providing and receiving support from siblings, friends and neighbors were not influenced. Our findings suggest that realignment in support networks initiated by the care for grandchildren remains primarily in the stem-family.

### WHO'S THERE TO CARE? SOCIAL NETWORKS, AGING AND HEALTH TRANSITIONS IN THE U.S

N.J. Webster, T. Antonucci, *Life Course Development Program, Institute for Social Research, University of Michigan, Ann Arbor, Michigan*

This study examines how longitudinal changes in the number of chronic illnesses are related to later life structure and composition of social networks. Data come from two waves (1992; 2005) of the Social Relations, Aging and Health Study, a regionally representative sample of the Detroit Metropolitan area. Respondents age 50 and older at wave 2 were selected (N=543) for analysis. Regression analyses reveal that respondents who reported an increase in the number chronic illnesses had networks comprised of a greater proportion of family and had less frequent contact with network members at wave 2. Findings highlight the distinction in the U.S. between family and friends. Family relationships are often considered obligatory and include expectations to meet demands (i.e., caregiving), an aspect evermore apparent in the context of later life health transitions. Sick older adults' less frequent contact with networks suggests more needs to be done to help them stay connected.

## SESSION 630 (SYMPOSIUM)

### AGING AND THE LIFESPAN: THE ROLE OF HEALTH IN TIME AND CONTEXT

Chair: *N. Ram, Department of Human Development and Family Studies, The Pennsylvania State University, University Park, Pennsylvania*
Co-Chair: *D. Gerstorf, Department of Human Development and Family Studies, The Pennsylvania State University, University Park, Pennsylvania*
Discussant: *M. Sliwinski, Department of Human Development and Family Studies, The Pennsylvania State University, University Park, Pennsylvania*

Health holds a prominent role in how individuals' lives progress – day-to-day and decade-to-decade. In this symposium, we highlight work that targets health at multiple time scales and in multiple contexts and consider explicitly the interplay between theory and methods. D. Gerstorf and N. Ram illustrate the potential and limits of long-term panel data in their examination of mortality-related health processes in late-life development, and how between-person disparities in those processes are shaped by individual and macro-contextual factors, including disability, living environment, and historical time. S. Zarit and colleagues illustrate the utility of controlled interventions and intensive observation in their study of the immediate and discrete effects of treatment on health-related effects of exposure to and appraisals of stress among caregivers. Almeida and colleagues demonstrate the usefulness of diary methods in their evaluation of the dynamic interplay between day-to-day psychological stress and hormonal reactivity and how such chronic stress processes may contribute to an increased risk of illness and mortality. L. Martire and colleagues illustrate how micro-longitudinal assessments can be used to understand the associations among health behaviors (daily physical activity) and well-being measures (pain, negative mood, and positive mood), and how those associations progress along different time intervals. M. Sliwinski integrates the four empirical papers and discusses how the various types of longitudinal research contribute to further understanding of the role of health for adult development and aging.

### THE MULTIDIMENSIONAL NATURE OF LATE-LIFE DECLINE: INSIGHTS OBTAINED THROUGH THE INTERPLAY OF THEORY AND METHODS

D. Gerstorf, N. Ram, *Department of Human Development and Family Studies, The Pennsylvania State University, University Park, Pennsylvania*

Lifespan research focuses on how and why individuals, as multidimensional entities, grow and decline. We illustrate how the alignment between longitudinal methods and research hypotheses is targeting and prompting further refinement of long-standing questions about late-life physical and mental health. Specifically, using data from multiple longitudinal studies we highlight how (1) alternative time metrics are being used to test whether late-life development is primarily driven by age-related or mortality-related processes; (2) explicit modeling of multiple phases of development provide for more refined evaluation of between-person differences in onset and progression of physical and mental health declines; and (3) incorporation of individual and macro-contextual factors, including disability, living environment, and historical time allows for identification of the possible antecedents and correlates of between-person disparities in late-life change. We conclude by outlining how integrated multivariate inquiries may provide for an additional set of insights into the complex dynamics of late-life health.

### REPEATED DAILY ASSESSMENTS AS AN EVALUATION STRATEGY: THE CASE OF ADULT DAY CARE

S.H. Zarit, K. Kim, E. Femia, L.C. Klein, D. Almeida, *Human Development & Family Studies, Penn State University, University Park, Pennsylvania*

Clinical interventions have long used repeated daily observations for guiding and evaluating treatment. Daily observations provide immediate evidence of the effectiveness of treatment components and can be integrated into a within person, A-B-A-B design, in which treatment is alternately administered and withdrawn. This approach is particularly promising for evaluation of adult day care and similar services for family caregivers, where randomized trials are not usually feasible. We present findings from two studies of adult day care that compare exposure to stressors for caregivers of people with dementia across multiple days on which their relative either uses or does not use day care. Exposure to care-related stressors and stress appraisals are greatly reduced without commensurate increases in non-care related stressors, with implications for immediate and longer-term outcomes. These results suggest that daily observations may be useful for identifying the effects of intermittent interventions such as adult day care.

### DAILY STRESSORS AND DIURNAL CORTISOL: TOWARD A DYNAMIC VIEW OF ALLOSTATIC LOAD

D. Almeida[1], R.S. Stawski[1], J.R. Piazza[1], K.E. Cichy[2], *1. Penn State University, Univeristy Park, Pennsylvania, 2. Kent State Univerisity, Kent, Ohio*

Current stress theories suggest that chronic exposure to hormones elicited by stressors leads to accumulated wear and tear on the body, referred to as allostatic load. In this paper we use diary methods that obtain repeated measurements from individuals during their daily lives to assess associations between real-life stressors and salivary cortisol in the National Study of Daily Experiences. Respondents completed nightly interviews about daily stressors at two time points across a 10 year period. The analyses differentiated between individuals who were high at both occasions versus low at both occasions in stressor exposure and reactivity. The results showed that individuals who were high in their stressor exposure at both time points had dysregulated cortisol rhythms. Compared to their younger counterparts, chronically stressed older adults showed the greatest amount of cortisol dysregulation. Discussion will focus on how daily stress processes may contribute to an increased risk of illness and mortality.

### DAILY PHYSICAL ACTIVITY AND CHANGE IN PAIN AND MOOD OVER DIFFERENT TIME INTERVALS

L. Martire[1], M.P. Stephens[2], J. Brach[3], F. Keefe[4], R. Schulz[3], *1. Penn State University, State College, Pennsylvania, 2. Kent State University, Kent, Ohio, 3. University of Pittsburgh, Pittsburgh, Pennsylvania, 4. Duke University, Raleigh, North Carolina*

Exercise programs for older adults are successful in reducing joint pain, enhancing function, and maintaining weight over the long term. However, the short-term effects of daily physical activity are likely to be more complex. More activity may exacerbate pain on the same day but lead to decreased pain on the next day or across several days. In addition, daily physical activity may benefit mood but little is known about the time frame for this effect. We will use data from a dyadic study of older adults with knee osteoarthritis and their spouses to explore these research questions. In this study. participants used an electronic diary to provide daily data for 21 days regarding mood and patient pain, and wore an accelerometer to measure daytime physical activity over the same 21 days. Presented findings will focus on associations among daily activity, pain, negative mood, and positive mood across different time intervals.

## SESSION 635 (POSTER)

## ATTITUDES TOWARD AGING AND OLDER ADULTS

### ADOLESCENTS' ATTITUDES TOWARD WORKING WITH OLDER ADULTS: STUDENTS WHO STUDIED THE HELPING PROFESSION COURSES IN TEXAS HIGH SCHOOLS

S. Lin[1], J. Scott[2], K.L. Alexander[2], *1. Applied Science of Living, Chinese Culture University, Taipei, Taiwan, 2. Texas Tech University, Lubbock, Texas*

By year 2040, the older population in Texas will reach 8.1 million, comprising 23% of the total population in the United States (Texas Department of Aging, 2003). Services for older adults, such as home health care and community care for elderly, have been identified as having the highest projected employment growth rates among other occupations in Texas by year 2014 (Texas Workforce Commission, 2008). The purpose of the study was to identify adolescents' attitudes toward working with older adults upon completion of high school. The sample included adolescents between 8th and 12th grade (N = 715) from 20 school districts in Texas who had studied the helping profession courses, including courses from Family and Consumer Sciences and Health Science Career Clusters. They were asked to complete a 69-item questionnaire and the data were analyzed with structural equation modeling (SEM). The results showed that the adolescents' attitudes toward working with older adults were positively influenced by their prior experiences with older adults ($\beta = .22$, $p < .001$) and by their course experiences that included gerontology content ($\beta = .82$, $p < .01$). However, they showed little interest in considering seeking a job specifically focused on older individuals/clients. The findings support continued need for career based curriculum at the high school level which provides experiences with older adults and knowledge of jobs that serve older adults. Future research should focus on identifying the reasons students lack an interest in jobs exclusively focused on older adults.

### HOW DIFFERENT INDICATORS PREDICT GENERAL ATTITUDES TOWARDS AGING AND SELF-PERCEIVED AGING

C.M. Strickland, D. Kotter-Gruehn, *Psychology, North Carolina State University, Raleigh, North Carolina*

Positive attitudes toward aging and optimistic self-perceptions of aging can help individuals adapt to age-related changes throughout the life span and add to longevity and quality of life. This study examined (a) whether one's general attitude towards aging and one's self-perceived aging are predicted by different indicators and (b) whether the predictive pattern differs as a function of age group. A total of 180 young, middle-aged and older adults responded to questionnaires assessing, among others, our predictor variables life satisfaction, future-orientation and age anxiety as well as our outcome variables attitudes towards aging and self-perceived aging. Preliminary results support the notion of concept- and age-group-specific predictors. High anxiety about aging was related to more negative attitudes towards aging in all age groups whereas it predicted self-perceptions of aging only in old age. Positive future-orientation predicted positive self-perceptions of aging in all age groups but was only relevant for general attitudes towards aging in middle-aged adults. Life satisfaction was positively correlated with self-perceptions of aging for middle-aged adults, but for older adults it better predicted general attitudes toward aging. These findings suggest that individuals perceive their own aging differently than aging in general. Furthermore, the identification of age-group specific factors explaining interindividual differences in perceptions of aging can help guide future research.

### BARRIERS TO SYMPTOM MANAGEMENT IN OLDER ADULTS: AGEIST BELIEFS, ATTITUDES, AND COMMUNICATION DIFFICULTIES

H. Yeom, S.M. Heidrich, *School of Nursing, University of Wisconsin-Madison, Madison, Wisconsin*

According to the Common Sense Model, beliefs about a health threat guide health behaviors and these behaviors influence health outcomes. This study investigated three types of belief about symptom management that may act as barriers to better health outcomes in older adults: negative symptom management beliefs (SMBQ), perceived ageism from health care providers (CommA), and difficulties in communicating about symptoms (CommD). They reflect negative aging stereotypes on the part of both older adults and health care providers. The specific aims of this study were to investigate the direct and indirect effects of barriers on quality of life (QOL) and whether communication difficulties mediate the influence of SMBQ and CommA on QOL. A secondary data analysis was conducted using baseline data from a randomized clinical trial testing the effects of an Individualized Representational Intervention (IRIS) in reducing symptom distress and improving QOL in 190 older breast cancer survivors (M age=70.4 yrs). QOL measures included the SF-36 physical and mental scales, purpose in life (PIL), and positive relations with others (PR). Results of path analyses indicated significant direct effects of SMBQ and CommA on CommD (path $\gamma$=.86, p <.01; $\gamma$=.16, p=.011, respectively), after adjusting for age, comorbidities, and number of symptoms. Significant indirect paths from CommA to QOL supported the mediating effects of CommD for SF36-mental ($\gamma\beta$= -.035, p=.05), PIL ($\gamma\beta$ = -.042, p=.041), and PR ($\gamma\beta$= -.044, p=.039). The findings suggest the importance of effective communication with health care providers about symptoms to enhance quality of life in older cancer survivors.

### FOLLOW UP "OLD TALK" FINDINGS: FURTHER EXPLORATION OF THE MOTIVATION OF INTERNALIZED AGEIST SPEECH

A. Stripling, M.(. Heesacker, *Psychology, University of Florida, Gainesville, Florida*

The goal of this investigation was to identify people's motivations for engaging in "old talk," defined as ageist, self-referential statements, regardless of one's chronological age. Flanagan's Critical Incident Technique was employed to examine the old talk of 293 individuals ages 18-80, 58% of whom identified at least one old talk incident, and thus were included in the analysis of motivations. Analysis of participants' self-reported motivations for engaging in old talk revealed seven motivation categories (1) Ipsative (32.4% of the events; e.g., "Because it didn't happen when I was younger."), (2) Instrumental (27.8%; e.g., "As justification for not remembering names"), (3) To Describe Personal Experience (14.1%; e.g., "I was forgetful."), (4) To Compare with Others (7.9%; e.g., "I felt old in comparison to the others"), (5) Self Stereotyping (6.9%; e.g., "'cause old people have back pain"), (6) To State Facts, (3.2%; e.g., "Because it's true!") and (7) To Minimize Aging (0.9%; e.g., "I never refer to being old, just older"). The mean age of participants citing Instrumental motives (M = 47.06, SE = 2.11) was significantly older than the mean age of those reporting other motives (M = 39.97, SE = 1.27; t (205) = 3.024, p = .003). No other age differences in motivations were discovered. Ipsative and instrumental motives together accounted for over 60% of the total motivations provided. These results begin to uncover potential motivations that drive individuals' internalized self-directed ageism and pave the way for experimental and other studies.

### PARTICIPANTS' AND MEDICAL PROFESSIONALS' ATTITUDE TOWARD AND PREFERENCES FOR DISCUSSING AND MAKING DECISIONS ABOUT PHYSICAL FUNCTIONING

R. Beeco[1], J.O. Brooks[1,2], W.C. Logan[3], M. Cress[4], J. Gomer[1],
A.K. DeArment[1], *1. Clemson University, Clemson, South Carolina, 2. Greenville Hospital System University Medical Center, Greenville, South Carolina, 3. Palmetto Health, Columbia, South Carolina, 4. University of Georgia, Athens, Georgia*

Evaluation of older adult's functional status is an essential component of assessing functional independence and decision making for therapeutic modalities. A critical evaluation of seniors' acceptance of performance based testing is lacking. The Continuous-Scale Physical Functioning Performance Test (CS-PFP 10) was administered to 67 seniors (M=69.4, SD=8.0 yrs) with a broad range of functioning. A survey assessing the attitudes and preferences for discussing physical functional performance was also completed by the participants and medical professionals (N=32) familiar with the CS-PFP 10. When asked with whom they preferred to speak regarding their physical functioning, the majority of participants indicated that they would most prefer speaking with and would be most likely to listen to their spouse or doctor, but would also speak with a member of their family (e.g., child), a close friend, or other healthcare professional. The medical professionals reported that the tasks in the CS-PFP 10 provided a useful measure of physical function and were clearly connected to independent living. Of the medical professionals who had spoken with someone about their physical function, nearly all felt having the results of the CS-PFP 10 would have changed the conversation to allow the discussion to revolve around more specific and objective information.

### WHEN I GROW UP: EXAMINING PROJECTED GAINS, MAINTENANCE, AND LOSSES IN AGING ADULTS

G.P. Freeman[1], S.K. Whitbourne[1], G. Westerhof[2], *1. University of Massachusetts Amherst, Amherst, Massachusetts, 2. University of Twente, Enschede, Overijssel, Netherlands*

There has not been much research on the future perspective of aging adults. We therefore used six open-ended sentence completion stems, derived from the SELE questionnaire (Dittmann-Kohli, 1995; Dittman-Kohli & Westerhof, 1999), to examine respondents' projections of possible gains, maintenance, and losses regarding aging and the future. A gain was defined as an event or circumstance the participant characterized as an improvement, a loss defined as deterioration, and maintenance defined as a continuation of the status quo. Respondents were 133 adults (54 male) with ages ranging from 40 to 84 years of age (M = 60.2). With 133 respondents and 6 stems, 798 responses were coded for future perspective. Three-hundred thirty-three responses were coded as a gain (i.e., In the next few years... "I will spend more time on me"), 104 indicated maintenance (i.e., Later when I'm older... "life will be just as enjoyable"), 227 were coded as anticipated losses (I am afraid that I... "will not be there to see my grandchildren grow"), and 134 did not fit into these categories. Further coding separated projections into specific content areas. Examining gains, statements concerning increased enjoyment of life were most common (N = 97, 29.1%). Examining losses, statements of physical decline were most frequent (N = 59, 26.0%). Additionally, other psychological variables were assessed—identity processes, self-esteem, and aging experience. Systematic relations with these variables were found, e.g., self-esteem and projected gains (r = .185, p < .05). This research underscores the benefit of utilizing open-ended and traditional inventories in tandem.

### HUMAN SERVICE PROFESSIONALS INTERACTION WITH THE AGING POPULATION: IMPLICATIONS FOR PRACTICE

M. Horn Mallers, J. Ruby, *Human Services, CSU Fullerton, Fullerton, California*

Research indicates that the growing population of older adults currently outnumbers the amount of trained persons who can provide assistance. Population growth trends are resulting in a demand for professionals with knowledge and expertise in aging. Unfortunately, many direct workers, or those who already work with or on behalf of older adults, have limited knowledge about gerontology and related practices. Additionally, given other demographic shifts among the aging population, many people are working indirectly with older adults (such as childcare providers given the increase of grandparents rearing grandchildren), or in non-traditional ways (such as therapists treating older adults with addictions, a growing occurrence). Little is known, however, regarding the training and experience of such workers. A baseline understanding of aging-related attitudes and knowledge is therefore critical. The present research is based upon data collected from over 100 professionals, including academic faculty, non-profit personnel psychologists, social workers, day care workers, and graduate students whose work intersects with older adults. Using the Palmore Facts on Aging, Attitudes Toward Older Adults survey (based on Rosencranz & McNevin, 1969), and open-ended questions of previous gerontological experience, preliminary data indicates that many of those surveyed have limited and incorrect factual information about aging or lack motivation and knowledge regarding how to improve aging outcomes. Implications for recruiting and training more professionals in aging-related fields are discussed, as well as mechanisms for educating service providers are provided.

### GENDER, AGE, AND PERSONAL LONGEVITY: HOPES AND FEARS ABOUT LIVING A VERY LONG LIFE

C. Adams-Price[1], L. Morse[3], R. Smith[2], *1. Psychology, Mississippi State University, Mississippi State, Mississippi, 2. University of Georgia, Athens, Georgia, 3. Mississippi State University, Mississippi State, Mississippi*

In previous research, it has been discovered that individuals differ in attitudes about living to advanced old age. The Personal Longevity Scale (e.g., Smith, Adams-Price, Morse, & Giesen, 2006) contains two primary factors, Hopes and Fears. In this study, gender and other predictors of "Hopes" and "Fears" were examined in adults aged 18-92. Results indicated that younger adults were significantly more hopeful about later life than older adults, and women were more hopeful than men. Similarly, men, and especially older men, had significantly more fears about extreme old age. However, there were no gender differences on a separate question about the desire to live to age 100. Older adults were less likely to report that they wanted to live to be 100. The role of health, education, and depression on attitudes toward living a very long life will also be explored.

### AGE DIFFERENCES IN COMPOUND STEREOTYPES ACROSS THE LIFESPAN

C. Andreoletti[1], A. Bruno[1], J.P. Leszczynski[2], *1. Psychology, Central Connecticut State University, New Britain, Connecticut, 2. Eastern Connecticut State University, Willimantic, Connecticut*

Although stereotypes about gender, race, and age have been studied independently, few researchers have examined the content of compound stereotypes, which consider these characteristics together (e.g., White, 25-year-old females). Further, most research on age stereotypes has been limited to old age. To consider gender, race, and age irrespective of one another does little to capture the complexities inherent in social groups. This study examined age differences in the content of compound stereotypes involving gender, race, and age across the lifespan. Using bipolar scales, 70 young (M age = 19.3 years) and 44 older adults (M age = 75.3 years) rated target groups (Black/White, male/female, 15-, 25-, 45-, 65- and 85-year-olds) on 10 characteristics, representative of either an agentic orientation (aggressive, ambitious, skilled at business, competitive, dominant) or a communal orientation (aware of others feelings, considerate, devoted to others, home-oriented, understanding). Preliminary results revealed many interesting main effects and interactions. For example, consistent with traditional gender role stereotypes, young adults perceived male targets as more dominant than female targets, whereas older adults' perceptions of dominance did not vary by target gender. Furthermore, in comparison to young adults, older adults were more likely to perceive White targets as more dominant than Black targets, especially during middle-age (45, 65). By contrast, young adults perceived young (15) and old (85) Black targets as more dominant than White targets.

### ATTITUDES OF NURSING STUDENTS TO OLDER ADULTS

R.M. Phillips, *Nursing, Towson University, Towson, Maryland*

Nurses, and nursing students, can expect to work with older adults during their nursing careers. Nursing students' attitudes to older adults affects overall quality of patient care. Nursing students working with older adults often identify misconceptions and misunderstanding about the older adult population. In addition, many come to nursing with experiences, both positive and negative, that potentially impact this attitude and knowledge. The purpose of this project is to describe the knowledge and attitudes of a group of first year nursing students. Using Kogan's Attitudes toward Aging Scale and an adapted version of the Palmore's Facts on Aging quiz, entry level nursing students were evaluated for attitudes and knowledge of aging prior to their first clinical experience with the older adult and at the conclusion of this experience. Previous interactions with older adults were assessed. Ultimately, this information can be used to revise existing nursing courses or for the development of new nursing courses or clinical experiences.

## MEASURING ATTITUDES TOWARD AGING WITH THE AGING SEMANTIC DIFFERENTIAL: A SAMPLE OF YOUNGER AND OLDER ADULT AFRICAN AMERICANS

B. Brookover[1], A. O'Hanlon[2], *1. Xavier University of Louisiana, New Orleans, Louisiana, 2. University of New Orleans, New Orleans, Louisiana*

Studies on attitudes toward aging have not often examined whether racial differences exist in the attitudes of younger and older adults. Research suggests aging attitudes may differ as studies have reported that African Americans (AA) viewed old age less positively than Caucasian Americans (CA). The present study focused on measuring attitudes of younger and older AA using the Aging Semantic Differential (ASD). Results were also compared to studies employing this scale with predominantly CA samples. The ASD was completed by a sample of 188 AA classified into two groups: 131 younger adult college students (M age = 21) and 57 community-dwelling older adults (M age = 68). Both three factor (Instrumental, Autonomy, Acceptability) and four factor (Instrumental, Autonomy, Acceptability, Integrity) scores were computed for both age groups. Significant age group differences were found on all ASD scores with older adults reporting more favorable attitudes than younger adults, a finding supported in other research. Comparison of three factor scores of the young AA to a sample of young CA revealed no significant racial differences. However, comparison of young AA four factor scores to published research with samples of beginning medical and dental students revealed significant differences for all scores. Medical students reported more positive attitudes than the AA, but dental students reported more negative attitudes. Thus, age group differences in the current study are similar to other research, but additional research should include younger and older groups across race to better examine this issue and explore possible race by age differences.

## ATTITUDE TOWARD AGING IN TWO CULTURES: KOREAN AND AMERICAN VIEWS ON AGING

M. Seo[1], I. Lee[2], B.F. Streets[3], *1. SUNY at Oswego, Oswego, NY, 2. Han-Seo University, Seo-San, Republic of Korea, 3. SUNY Oswego, Oswego, New York*

The purpose of this study was to examine whether attitude toward aging vary by culture and to identify relationships between psychological factors (depression, anxiety, and stress) and attitude toward aging. The participants in this study were a total of 610 American (N = 310, mean age = 20.9, SD = 3.51) and Korean (N = 303, mean age =20.8, SD =3.06 ) college students from a university in central New York and universities in a mid-sized city, Korea respectively. Questionnaires included the Depression, Anxiety and Stress (DASS), the Reaction to Aging (RAQ), and a general questionnaire. Data were analyzed using Pearson correlations, one-way analysis of variance, and multiple regression analyses. Results showed that education was correlated with total attitude toward aging. Compared to Koreans, American young adults showed significantly higher in overall positive attitude toward aging [F (1, 603) = 17.51, P < .000] and a positive aspect of aging [F (1, 603) = 50.74, P < .000]. In addition, Korean young adult showed significantly higher depression [F (1, 609) = .025, P < .000] and anxiety [F (1, 609) = 9.06, P < .003] than American counterparts. Pearson correlations showed that depression, anxiety, and stress were correlated with the total and the three subscale of RAQ. Multiple regression showed that depression is negatively associated with positive attitude toward aging [(F (1, 591) = 1.49, P < .05]. These findings suggest that more intervention programs targeting Korean young adults that facilitate more positive attitude on aging need to be implemented.

## AWARENESS OF AGE-RELATED CHANGE (AARC): DEVELOPMENT OF A SELF-REPORT QUESTIONNAIRE

M.K. Diehl[1], H. Wahl[2], C. Konieczny[2], *1. Human Development & Family Studies, Colorado State University, Fort Collins, Colorado, 2. University of Heidelberg, Heidelberg, Germany*

The experience that one is growing older is a natural part of adult development. The assessment of adults' Awareness of Age-Related Change (AARC), however, has received limited systematic attention. This presentation reports findings from a German study on the development of a self-report questionnaire for the assessment of AARC. The study included 166 adults (58 men, 108 women) with an average age of 53 years (SD = 19 years). Based on semi-structured interviews a total of 60 items were generated to capture positive and negative facets of AARC in 5 behavioral domains: Health and physical functioning, cognitive functioning, interpersonal relations, social-cognitive and social-emotional functioning, and lifestyle and engagement. Analyses showed that the subscales had satisfactory internal consistencies (Cronbach's alphas ranged from .51 to .82). Scores on the positive AARC subscales were mostly uncorrelated with age and personality traits, but were positively associated with several indicators of attitudes towards and satisfaction with one's own aging. Scores on the negative AARC subscales were positively associated with age and neuroticism and negatively associated with extraversion; negative facets were negatively associated with several indicators of attitudes towards one's own aging and the future. Regression analyses, controlling for the effects of age, education and subjective health, showed that positive and negative AARC were significant predictors of aging attitudes and attitude toward one's own future.

## WHAT MAY BE DEPENDS ON WHO I AM: ETHNICITY DIFFERENCES IN ATTITUDES TOWARD AGING

P.W. Foos[1], C. Clark[2], *1. Psychology, University of North Carolina at Charlotte, Charlotte, North Carolina, 2. Queens University of Charlotte, Charlotte, North Carolina*

Given recent research on the importance of positive self perceptions of aging predicting mortality, understanding attitudes toward aging is important. While attitudes have improved, they are not universally positive. This report on gender and ethnic group difference is part of a large scale examination of attitudes toward aging. The sample includes 275 African American (70% female), 122 Asian (56%), 574 White (62%), 86 Hispanic (72%) and 16 Native (75%). The data reported here are from responses made to several questions using a 5-point scale of agreement. Few gender or ethnicity by gender interactions were found, but several ethnic differences emerged. Among differences found were that White Americans believe they will be able to still do most things themselves when they are old F (4, 1041) = 5.72, p < .001 and that they will have plenty to do, F (4, 1041) = 3.68, p < .01. African Americans also believe they will be able to do most things but that they will have little to do. Asian, Hispanic, and Native Americans are most likely to believe that older adults are confused or disoriented while White respondents are the least likely to believe this, F (4, 1043) = 8.23, p < .001. These and other differences to be reported suggest a more positive attitude toward aging on the part of White Americans and more complex, and often more negative views on the part of other ethnic groups. An exploration of why and the implications of these results will be discussed.

## SESSION 640 (POSTER)

## COGNITION I

### MELANCHOLIC DEPRESSION SUBTYPE AND THE RELATIONSHIP TO COGNITIVE FUNCTIONING IN LATE LIFE

E. Corsentino[1], N. Sachs-Ericsson[1], D.C. Steffens[2], *1. Florida State University, Tallahassee, Florida, 2. Duke University, Durham, North Carolina*

Whereas some studies have found prior depressive symptoms to predict cognitive decline (CD) later in life, not all studies have found this association. Methodological differences between these studies may be one important reason for these inconsistent results. Specifically, depression is a heterogeneous disorder, and thus, depression subtype may play an important role in whether or not this relationship is observed. Indeed, melancholic depression has a distinct symptom presentation from other forms of depression, and evidence suggests that melancholic depression has unique effects on the brain and HPA axis. The purpose of the present study was to determine whether participants meeting criteria for melancholic depression would experience greater CD over 5 years compared to individuals with non-melancholic depression and normal healthy controls. Participants consisted of 248 older outpatients at a university medical center with major depression (155 melancholic; 93 non-melancholic) and 147 healthy control participants, and we used latent growth curve analysis to examine differential change in cognitive functioning over time. Comparing the effects of melancholic and non-melancholic depression on CD over time may help us better understand the critical features of depression that confer risk for CD.

### AGE DIFFERENCES IN COGNITIVE WORKLOAD DURING A SIMULATED DRIVING ASSESSMENT COURSE

A. Stinchcombe, S. Gagnon, J. Zhang, P. Montembeault, *University of Ottawa, Ottawa, Ontario, Canada*

Older adults are at a high risk of being implicated in motor vehicle collisions once distance driven is considered. It has been proposed that driving difficulties among this population occur when the driving environment becomes complex, which, in turn, strain attentional resources and increase the opportunity for error. One method of capturing the difficulty associated with driving is through the cognitive workload approach. In this method participants complete a secondary task, known as peripheral detection task (PDT), while driving. The purpose of this study was to explore age-related differences in cognitive workload in response to driving situations of varying complexity within the context of a simulated driving assessment protocol. Consistent with the literature, it was hypothesized that older drivers would demonstrate significantly greater workload in complex situations within the simulated assessment course. Moreover, it was anticipated that older adults would exhibit longer response times in comparison to young and mid-aged drivers. A total of 112 participants belonging to three age groups (young, mid-aged, and older) completed a simulated assessment protocol. While participants drove, they responded to a series of 27 PDT, occurring at a variety of driving situations (e.g., left-turns, right-turns, driving straight, changing lanes, etc). Preliminary analyses indicated that older drivers exhibited significantly greater workload in comparison to the other age cohorts and that workload varied according to complexity for all age groups.

### RELATIONSHIP BETWEEN REASONING ABILITY AND LIST RECALL OVER A 9 YEAR SPAN

S. Hindin, E. Zelinski, *University of Southern California, Los Angeles, California*

Cognitive training studies have suggested that training to increase working memory, which is closely correlated with reasoning, improves recall. Nine-year data from the Long Beach Longitudinal Study were used to test the leading-lagging relationship between reasoning and list recall. Participants tested for the first time in 1994 were included. The sample (N=679) ranged in age from 30-98 (mean=69), 52% female, 75% reported as Caucasian, and 13.8(sd=2.8) mean years of education. Maximum likelihood estimation used all available data. Both reasoning and recall were Rasch-calibrated to a scale of 0-100. We employed cross-lag regression with latent difference scores (LDS) to test the hypothesis that reasoning led recall change. The sample was split into age groups: those over 60 in 1994 (N=504) and those under (N=146). The 60+ group declined from 1994-2003 in letter series (LDS intercept=8.1) and list recall (LDS intercept=14.3). The under-60 group did not experience significant change so their data were not evaluated. Reasoning combined with time one list recall accounted for 18 percent of the variance in the latent list recall difference with good model fit (RMSEA=.03). Model fit was worse for list recall as a predictor of latent reasoning difference (RMSEA=.08). Reasoning leads nine-year latent list recall difference for those 60+.

### AGE DIFFERENCES IN RISK PREFERENCE

T. Queen, T.M. Hess, *Psychology, North Carolina State University, Raleigh, North Carolina*

Young, middle-age, and older adults' preference for risky versus sure outcomes were examined. Participants were presented with 28 gambling situations, half of which were presented in a gain frame and the remaining in a loss frame. The outcomes varied in magnitude, with 7 of the options being large (e.g. receive $400 dollars for sure, or flip a coin to receive $2000) and 7 being smaller (e.g. receive $20 for sure, or flip a coin to receive $100). A risk preference score was calculated for each set of options by examining at which point participants switched from the gamble to the safe option. The overall pattern of performance replicated previous results: Participants expressed a higher preference for risk in the loss frame and a higher preference for the safe choice in the gain frame. An Age Group X Frame X Numeracy interaction was also obtained. Specifically,younger adults with low numeric ability showed no differentiation in risk preference between the gain and loss frames, whereas numeracy played a lesser role in middle aged and older adults' risk preference. Numeracy scores were significantly correlated with vocabulary (r = 0.6) but not working memory or speed, which may indicate an impact of crystallized ability on the task. Further analyses regarding the impact of these abilities will also be reported.

### APOE ε4 STATUS MODERATES THE EFFECT OF HIPPOCAMPAL VOLUME ON COGNITIVE DECLINE IN DEPRESSED OLDER ADULTS

N. Sachs-Ericsson[1], K. Sawyer[1], E. Corsentino[1], N. Collins[1], D.C. Steffens[2], *1. Florida State University, Tallahassee, Florida, 2. Department of Psychiatry and Behavioral Sciences, Duke University Medical Center, Durham, North Carolina*

This study examines the ApolipoproteinE epsilon-4 (APOE ε4) allele, hippocampal volume, and their interaction as predictors of cognitive decline in a population of depressed older adults. Both the APOE e4 allele and smaller hippocampal volumes are documented risk factors for cognitive decline; this study adds to the literature by examining the interaction of these two risk factors in predicting cognitive decline. The study examined data from 61 older adult outpatients participating in a longitudinal study at Duke University. At baseline, participants underwent assessment of cognitive functioning (by Mini Mental State Examination), left and right hippocampal volume (by structural MRI of the brain), and APOE genotype. At four-year follow-up, cognitive functioning was re-assessed. Regression analyses were performed to examine the influence of baseline hippocampal volume, APOE ε4 allele status, and their interaction on change in

MMSE score over time. The APOE ε4 allele and left hippocampal volume, but not right hippocampal volume, were independently associated with CD. Importantly, the APOE ε4 allele moderated the effects of left hippocampal volume on CD such that the allele had least effect among those with larger left hippocampal volumes at baseline and greatest effect among those with smaller hippocampal volumes at baseline. Thus, we suggest that future studies of cognitive impairment and decline should examine both individual and conjoint effects of putative risk factors.

### THE FEASIBILITY OF COMPUTERIZED MEMORY TRAINING FOR OLDER ADULTS RESIDING IN INDEPENDENT-LIVING RETIREMENT COMMUNITIES

E.M. Hudak, R. Manno, J. Edwards, *School of Aging Studies, University of South Florida, Tampa, Florida*

Objectives: A pilot study was conducted to examine the feasibility of computerized memory training for older adults using the Dakim BrainFitness system in an independent-living retirement community. Methods: Memory performance was measured by the Auditory Verbal Learning Test (AVLT), Hopkins Verbal Learning Test (HVLT), and WMS-III Family Pictures at baseline and 10 weeks later. Inclusion criteria were a score on the MMSE > = 23, a MoCA score > = 26, and Near Visual Acuity of 20/80 or better. Participants were randomized to either the training (n = 6) or control (n = 5) condition. The training protocol consisted of 25 minute sessions, 5 days a week, over a 10 week period for a total of 20.8 hours. Results: Among those randomized to the training condition, all successfully followed protocol and completed training. Participants trained an average of 21.07 hours with a standard deviation of 3.35 hours. Medium training effect sizes for HVLT (d = .64) and AVLT (d = .53) were observed. However, no potential training gains were evident with the WMS-III Family Picture Test. Conclusions: The Dakim BrainFitness system can feasibly be completed by older adults in independent-living retirement communities and has the potential to improve memory as indicated by HVLT and AVLT. Ongoing data collection will further examine the efficacy of this cognitive intervention.

### PREFERENCES FOR PROFESSIONAL AND SOCIAL COLLABORATORS IN DECISION MAKING

C.L. Ortz, J.M. Jacobs-Lawson, C.C. Gayer, *Gerontology, University of Kentucky, Lexington, Kentucky*

Often when making decisions, older adults seek advice from members of their social network and/or professionals. The purpose of this study was to examine how older adults' preferences for collaboration varied based on the type of decision being made and their gender. Participants (N= 202; age: M = 68.10, SD = 8.25, range 55 - 90) completed a questionnaire assessing their preferences for collaboration when making financial, medical, and purchasing decisions. A 2 (age) x 2 (sex) x 2 (collaborator: professional, social group member) x 3 (decision domain) mixed ANOVA with repeated measures on the latter two variables revealed four significant interactions, three of which involved collaborator. The interactions involving collaborator revealed that (a) age was not related to preferences for a social collaborator but that old participants preferred professional collaboration more than young-old participants; (b) men and women did not differ in terms of preferences for collaborating with a professional but men were more likely to prefer collaborating with a member of their social network; and (c) within medical decisions, participants preferred to collaborate with a professional, but within purchasing decisions, they wanted to collaborate with a member of their social group. The fourth significant interaction revealed that men and women did not differ with respect to preferences for collaboration on financial decisions but that men preferred to collaborate more than women when making medical or purchasing decisions. These results suggest that age, sex, and decision domain are important when examining older adults' preferences for professional and social collaborators.

### THE RELATIONSHIP OF EXECUTIVE AND ADAPTIVE FUNCTIONING TO BEHAVIOR PLANS FOR AGGRESSION IN LONG TERM CARE

M. Smith, C.E. Gould, C.M. Ciliberti, M.R. Nadorff, B. Edelstein, *West Virginia University, Morgantown, West Virginia*

Older adults with dementia or psychotic disorders often exhibit deficits in executive functioning, which can be related to increased aggressive or disinhibited behavior. Royall and colleagues (1992) found that patients with greater executive dysfunction exhibited more aggression and emotional volatility. A chart review was conducted to identify residents of a long-term care facility who were administered the Executive Interview (EXIT-25; n = 79) and the Adult Behavior Adaptive Functioning Scale (AFABS). Data on behavior plans were also collected. The EXIT-25 score was related to the AFABS (r = -.55) in all participants. Neither the AFABS nor EXIT-25 score were related to the presence of a behavior plan to address verbally or physically aggressive behavior. The EXIT-25 score had a small relation with the presence of a behavior plan in participants with a dementia diagnosis(r = .22). The disinhibition factor had a relatively modest relation with the presence of a behavior plan in participants with dementia (r = .27). However, the EXIT-25 score and disinhibition were not related to behavior plans in participants with either a psychotic disorder or a mood disorder. The imitation factor had a small negative relation with behavior plans in participants with a psychotic disorder (r = -.16), and a modest negative relation for participants with a mood disorder (r = -.32). Our findings suggest deficits in executive functioning may be related to behavior plans for aggression in long-term care. The relation between specific deficits in executive functioning and aggressive behavior may vary by type of diagnosis.

### MEASURES OF READING SKILL DISSOCIATE ONLINE READING PROCESSES AMONG OLDER ADULTS

B.R. Payne[1,2], X. Gao[1,2], E. Stine-Morrow[1,2], *1. University of Illinois at Urbana Champaign, Urbana, Illinois, 2. Beckman Institute, Urbana, Illinois*

Among older adults, higher levels of literacy and reading skill are associated with preserved cognitive function, knowledge growth, and self-regulation in reading. However, reading skill is not a homogenous construct. This study focuses on two different measures of reading skill, the Nelson-Denny Reading Test (ND), a speeded measure of reading comprehension (process), and the Author Recognition Test (ART), a measure of print exposure (knowledge), and their relationships to encoding processes and recall in sentence memory among older adults. Participants (N=198, Mean age=72) read sentences word-by-word for immediate recall. Reading times were recorded and decomposed into components representing linguistic processes operating at the word/lexical and semantic (textbase) level. Age was negatively associated with the ND, but not the ART. Patterns of resource allocation to word and textbase processes were differentially predicted by ND and ART scores: high print exposure readers were facilitated only in orthographic processing, suggesting that habitual reading engagement fosters efficiency of lexical decoding; readers with high ND scores were not only facilitated in orthographic processing, but also in lexical access and textbase processing, suggesting that effective reading comprehension with aging is underpinned by efficiency of both lexical and semantic analysis. Controlling for age, verbal working memory, and education, ND and print exposure independently predicted sentence memory. These findings suggest that processing efficiency of component reading skills and knowledge contribute independently to maintaining skilled reading among older readers.

### RELATIONSHIP BETWEEN COGNITIVE ABILITIES AND OUT-OF-HOME MOBILITY IN OLD AGE

M. Wettstein[1], H. Wahl[1], E. Voss[1], F. Oswald[2], M.K. Diehl[3], *1. Ruprecht Karls University, Heidelberg, Germany, 2. Goethe University, Frankfurt, Germany, 3. Colorado State University, Fort Collins, Colorado*

Previous studies have rarely addressed the relationship between out-of-home mobility and cognitive performance in old age in an objective and differentiated way. This is particularly true when it comes to a broader understanding of out-of-home mobility and cognitive impairment. The aim of this presentation is to explore specific links between cognitive performance and out-of-home mobility in cognitively impaired and unimpaired community-dwelling elders. In the project "SenTra" (Senior Tracking), highly differentiated data on out-of-home mobility, assessed with advanced GPS tracking technology, as well as diary-based mobility data are collected over a 4–week period. Furthermore, cognitive functioning, including indicators of fluid and crystallized intelligence, memory, and executive control, is assessed. Preliminary results from mobility diaries of 74 study participants without cognitive impairment (mean age = 69.8 years, SD = 3.8 years) and 42 study participants with mild cognitive impairment and first-stage dementia (mean age = 70.7 years, SD = 5.3 years) show differential relationships between mobility indicators and specific cognitive variables. Specifically, in cognitively unimpaired persons, controlling for age and subjective health, cognition indicators did not predict the mean number of trips per day and mean number of trips by foot per day. However, verbal memory performance significantly predicted the frequency of social and physical out-of-home activities. In the group of cognitively impaired participants, relationships between mobility indicators and cognitive variables were more pronounced. These findings suggest the need to consider complex relationships between cognitive measures and of out-of-home mobility in everyday life among community-dwelling elders.

### MEMORY SELF-EFFICACY PREDICTS LONGITUDINAL CHANGES IN RESOURCE ALLOCATION AND TEXT MEMORY IN SENTENCE READING

X. Gao, B. Payne, E. Stine-Morrow, *University of Illinois at Urbana-Champaign, Urbana, Illinois*

Cross-sectional studies examining adult age differences in sentence processing often find that aging is associated with reduced allocation of attentional resources to conceptual processing and semantic integration (i.e., textbase construction). Such data suggest that differences in reading engagement may contribute to text memory deficits (Stine-Morrow et al., 2008). Meanwhile, other studies indicate meta-cognitive control may partly mediate age differences in memory performance (Dunlosky & Connor, 1997). We report data exploring the role of individual differences in memory self-efficacy in changes in online textbase construction and text memory among older adults. In this study, we tracked longitudinal changes (with a six-month interval) in resource allocation and sentence memory among an older population (N=137; 60-89 yrs, M =72.0, SD=7.3). Participants read 24 18-word sentences as word-by-word reading time was measured, and produced immediately recall. Memory self-efficacy was measured using the Metamemory in Adulthood (MIA) questionnaire (Dixon et al., 1988). Resource allocation to textbase processing was derived using regression to isolate the time allocated to conceptual instantiation and integration. Participants showed reduced resource allocation to textbase construction over time, which was related to reduced sentence recall. Although neither of these effects was associated with age or verbal working memory, elders with higher scores on MIA at pretest were more resistant to declines in textbase allocation with time and showed relatively better sentence recall. These results suggested that meta-cognitive control in later adulthood is crucial to effective attentional allocation in sentence reading and memory performance for text.

### INCREASED DAILY PHYSICAL ACTIVITY MAY HAVE SIGNIFICANT COGNITIVE BENEFIT FOR AFRICAN-AMERICANS

T.R. Patterson[1], S.R. Kennedy[2], J.C. Allaire[1], *1. North Carolina State University, Raleigh, North Carolina, 2. innovation Research and Training, Durham, North Carolina*

The purpose of the current investigation was to examine the within-person relationship between daily physical activity and cognitive performance, specifically within African- American older adults. The sample consisted of 189 community-dwelling older adults (32% African-American, 68% European-American) with a mean age of 73 years (range = 60 – 94; SD = 7.00). Participants were tested over a three-week period, across eight occasions, providing a total of 936 observations. Analyses revealed that there was significant within and between-person variability for overall cognitive performance and physical activity. After controlling for age, gender, income, and general health, multilevel modeling analyses revealed a significant ethnicity X physical activity interaction; on days when individuals reported greater than average within-person levels of physical activity, cognitive performance was significantly greater as compared to days characterized by less than average within-person levels of physical activity. This relationship was stronger in African-American participants, who showed an even greater gain in cognitive performance than did European-Americans.

### NEUROPSYCHOLOGICAL AND FUNCTIONAL COMPARISONS OF OLDER AND YOUNGER ADULTS WITH AND WITHOUT HIV

P.L. Fazeli, D. Vance, L.A. Ross, M.L. Ackerman, *Psychology-Graduate School, University of Alabama at Birmingham, Birmingham, Alabama*

Despite the ability of anti-retroviral viral medications to extend life, those aging with HIV may be more vulnerable to cognitive and functional deficits. In this study, we examined the cognitive and functional performance of younger (21 to 49 years) and older (50+ years) adults with and without HIV. Participants (N = 172) were administered a cognitive battery and the Timed Instrumental Activities of Daily Living test. ANCOVA's were used to test the main effects of age and HIV status and the interaction, after controlling for gender and education. For psychomotor speed, there was a significant effect of age, with those who are younger performing better. For speed of processing, there was a significant main effect of both HIV status and age for 3 measures, with those who are older and HIV-positive performing worse. Another speed of processing measure only yielded HIV status as a main effect, and age emerged as a trend (p =. 06). For the memory and executive functioning domains, no statistically significant differences across groups were detected. In the Timed Instrumental Activities of Daily Living test, there was an HIV x age interaction, as well as a main effect of HIV status, with those who are older with HIV performing worse on such everyday tasks (e.g., looking up a phone number). The results of this study indicate that those with HIV may be at risk of poorer cognitive performance compared to their HIV-negative counterparts and this deficit may transfer to performing everyday tasks.

### BRAIN PATHOLOGY AND MENTAL STATUS: FINDINGS FROM THE GEORGIA CENTENARIAN STUDY

J. Cho[1], P. Martin[1], M. Gearing[2], M. MacDonald[3], J. Margrett[1], R. Green[4], J.L. Woodard[5], L. Poon[6], *1. Iowa State University, Ames, Iowa, 2. Emory University, Atlanta, Georgia, 3. Kansas State University, Manhattan, Kansas, 4. Boston University, Boston, Massachusetts, 5. Wayne State University, Detroit, Michigan, 6. University of Georgia, Athens, Georgia*

This study examined the relationship between brain pathology and cognitive functioning for 45 centenarians of the Georgia Centenarian Study. In terms of brain pathology, Braak stages, amyloid plaques, and a consensus-diagnosis (i.e., agreement between pathology and neuropsychological testing) were included in the analysis. The number of errors of the SPMSQ (Short Portable Mental Status Questionnaire) were used to assess mental status functioning of centenarians. Braak stages were categorized into three groups (low, medium, high). Analysis of variance yielded mean differences for number of errors of the SPMSQ scores for Braak stages, $M = 3.36$ for the stage I&II, $M = 4.53$ for stage III&IV, and $M = 8.31$ for stage V&VI, $F(2, 41) = 10.29, p < .001$; amyloid plaques, $M = 6.03$ for having amyloid plaques and $M = 3.11$ for not having amyloid plaques, $F(1, 41) = 5.52, p < .05$; and the consensus-diagnosis, $M = 5.96$ for those who were diagnosed with Alzheimer's disease, $M = .57$ for normal individuals, and $M = 6.40$ for those with disagreement between pathological and neuropsychological findings, $F(2, 44) = 10.28, p < .001$. Centenarians who were in Braak stage III&IV, with diagnosed amyloid plaques, and who had disagreement between pathological and neuropsychological findings had more errors in SPMSQ than those who were low and medium in Braak stages, and were not diagnosed with amyloid plaques. This result suggests that the SPMSQ is a useful tool for the diagnosis of dementia and specially, highlights high levels of positive relationship between the SPMSQ and Braak stages in very old group.

### THE ASSOCIATION BETWEEN MEMORY AND HEALTH TRAJECTORIES IN LATE ADULTHOOD: THE ROLE OF SOCIOECONOMIC AND RACIAL OR ETHNIC STATUS

K. Kwag[1], K. Wickrama[2], P. Martin[2], J. Lempers[2], *1. University of South Florida, Tampa, Florida, 2. Iowa State University, Ames, Iowa*

The objectives of this study were to examine (a) the cumulative influences of socioeconomic status (SES) and racial or ethnic status on the baseline level and change of trajectories in memory and (b) the dynamic associations between memory and health trajectories during the late adult years. The data for this study come from 5 waves of the Health and Retirement Study (N = 5,710 older adults). We estimated latent growth curves of memory and health problems with predictors. The findings from this study demonstrated that (a) SES and racial or ethnic status had cumulative influences on memory decline over time and (b) trajectories of memory and health problems were associated and influenced each other. Our findings elaborated the long-term progression of memory and health processes.

### BEYOND THE COGNITION/PERCEPTION DICHOTOMY: SOURCES OF AGE-RELATED DECLINES IN SPEECH COMPREHENSION

R.M. Stanley, A. Wingfield, *Neuroscience, Brandeis University, Waltham, Massachusetts*

Older adults often witness a decline in speech comprehension that is especially salient during dynamic social conversations. Many researchers in the psychoacoustics and audiology field cite declines in auditory acuity as the cause for this decline. Researchers in the cognitive psychology field, however, cite changes in cognition as the cause for this decline. Recent literature reviews have proposed that the decline in speech comprehension is due to declines in both perception and cognition, and that future research should take into account the interaction between the two. We will extend the conclusions of previous reviews by presenting a comprehensive model of selective listening that explains age-related declines in terms of specific factors at a multitude of levels. This model will identify specific factors nested within cognition and perception, as well as factors in between. The factors described will include spatial hearing sensitivity, stream segregation cues in the time and frequency domain, attentional speed, inhibitory mechanisms, echoic memory, working memory, short term memory, and long term memory. In addition to describing hypothesized loci of declines, this model will also serve to organize previous research and direct future research by identifying specific testable hypotheses that can be used to ascertain the relative contribution of each of these specific factors. It is hoped that the presentation of this model will also serve to facilitate discussions between people from different fields about factors that contribute to the age-related decline in speech comprehension.

## SESSION 645 (SYMPOSIUM)

### CURRENT LIFESPAN PERSPECTIVES ON EMOTIONAL EXPERIENCES AND COMPETENCIES

Chair: *M. Riediger, Max Planck Research Group "Affect Across the Lifespan", Max Planck Institute for Human Development, Berlin, Germany*

Co-Chair: *A. Rauers, Max Planck Research Group "Affect Across the Lifespan", Max Planck Institute for Human Development, Berlin, Germany*

This symposium focuses on current conceptual and methodological perspectives in investigations of the multi-faceted phenomenon of emotional aging. Various aspects of emotional aging will be addressed, such as age-related differences in processing costs of emotions, in fluctuations of emotional experiences, and in emotional competencies of regulating, expressing, or understanding emotions. The symposium will emphasize the contribution of novel research approaches to the understanding of emotional development. Daniel Gruehn will provide evidence on age-differential processing costs of emotions stemming from an emotion-switching memory paradigm. Shevaun Neupert will present evidence from a diary study showing age-differential effects of daily control beliefs on younger and older adults' fluctuations in emotional experiences. Riediger et al. will demonstrate how a mobile-phone based experience-sampling method was used to investigate age differences in everyday affect-regulation effectiveness. Stanley and Isaacowitz will demonstrate that age differences in physiological responding to emotional material are related to emotion recognition, thus showing how psychophysiological paradigms can be used to further our understanding of emotional aging. Rauers and Riediger, finally, will report on age-related differences in younger and older couples' accuracy in communicating emotions in daily life, using a dyadic experience-sampling approach. Presented empirical results will be discussed with regard to their implications for the field of emotional-aging research.

### EMOTION SWITCHING AS A PARADIGM FOR EMOTION RESEARCH

D. Grühn, *Psychology, NC State University, Raleigh, North Carolina*

Do emotions involve "costs"? Does it take time to switch from one emotional state to another emotional state? Does it take processing resources to activate an emotion? If emotions involve costs, these costs should be apparent when emotions are switched. In an emotion switching memory paradigm, we investigated the effect of switching between positive, negative, and neutral material in 48 young (18-30 years) and 48 older adults (60+ years). In the memory paradigm, participants were presented with six different lists with different lengths of valence-homogeneous pictures. The lengths varied from 1 (mixed), 2, 3, 4, 6, to 12 valence-homogeneous pictures in a row. Pictures were better remembered, the longer the valence-homogeneous sequences were. This indicates that memory is impaired when emotions are switched. The emotion switching paradigm is discussed in the broader context of emotion research and its implication for aging-oriented research.

### AGE DIFFERENCES IN DAILY AFFECT FLUCTUATIONS: DAILY CONTROL BELIEFS MATTER

S.D. Neupert, *North Carolina State University, Raleigh, North Carolina*

While we know from previous research that individual differences in control beliefs are related to emotional well-being, less is known about the daily coupling of these constructs across the adult lifespan. An 8-day daily diary study of 43 older adults and 50 younger adults assessed control beliefs, positive affect, and negative affect. Results revealed no age differences in daily fluctuations (within-person standard deviations) for control beliefs or negative affect, but older adults were less variable in positive affect than younger adults. Subsequent multilevel models revealed a benefit of increased daily control on positive affect for both age groups. However, the daily relationship between daily control and negative affect differed by age; increases in daily control were associated with decreases in negative affect for younger adults, but there was no relationship for older adults. It is possible that older adults rely less on daily contextual variation to regulate their negative affect.

### MASTER OF MY EMOTIONS: DOES AFFECT-REGULATION COMPETENCE INCREASE WITH AGE?

M. Riediger[1], C. Wrzus[1], S. Scheibe[2], G.G. Wagner[3,1], U. Lindenberger[1], *1. Max Planck Research Group "Affect Across the Lifespan", Max Planck Institute for Human Development, Berlin, Germany, 2. Stanford University, Palo Alto, California, 3. German Socio-Economic Panel Study, Berlin, Germany*

Emotional competencies have been claimed to improve with age, but empirical evidence is still scarce. We provided 378 participants aged 14 to 86 years with mobile phones that they carried with them in their natural environment and that prompted them 54 times throughout 3 weeks to report their momentary feelings and whether they wanted to influence them. Lagged multilevel analyses showed that the more participants wanted to maintain positive feelings on a given day, the more stable their positive affect was between that day and the next. Conversely, the more participants wanted to dampen negative feelings, the less stable their negative affect was across days. These associations were moderated by age, suggesting highest effectiveness of maintaining positive affect in older, and of dampening negative affect, in middle adulthood. These results provide first evidence of age differences in the realization of affect-regulatory goals in people's natural environments.

### AGE DIFFERENCES IN EMOTION RECOGNITION AS A FUNCTION OF PHYSIOLOGICAL EXPERIENCE?

J.T. Stanley, D. Isaacowitz, *Brandeis University, Waltham, Massachusetts*

The degree to which someone simulates an emotional expression is related to quality of processing. Twenty-six young and 25 older adults completed, 1) an emotional decoding task identifying facial expressions, and 2) an emotion encoding task watching film clips to elicit facial expressions. Consistent with past work, young adults ($M = 5.15$, $SE = .19$) were more accurate than older adults ($M = 4.12$, $SE = .20$) at recognizing sad expressions, $p < .001$. Young adults' skin conductance levels (SCLs) in the two sad-type tasks were related, $r(26) = .86$, $p < .001$, while older adults' were not, $r(25) = .26$, $p > .05$. For most emotions, both age groups' SCLs were correlated in the two tasks. For sadness, however, older adults may not be instantiating the emotion to the same degree as young adults in the decoding task. Possible motivating factors, like familiarity of the target, will be discussed.

### DO YOU KNOW HOW I FEEL? EMOTION COMMUNICATION IN YOUNGER AND OLDER COUPLES' DAILY LIVES

A. Rauers, M. Riediger, *Max Planck Institute for Human Development, Berlin, Germany*

Does communicating emotional experiences become more difficult with age? Experimental studies suggest that the abilities both to unambiguously express ones own emotional states and to accurately understand emotional expressions in others decrease across adulthood. Although this could possibly impair a person's social adjustment, both individual and relationship functioning are typically preserved into late adulthood. To address this ambiguous evidence, we investigated 50 younger (20–30 years of age), and 50 older (70–80 years) couples' emotion communication in their everyday lives, using cell phones as assessment instruments. Both partners simultaneously rated their current own, and their partners' current emotional states six times daily for 15 days. Overall, younger adults were more accurate in judging their partners' emotions. However, emotion-communication accuracy was differentially associated with situational factors in younger and older couples, suggesting that laboratory settings may underestimate older adults' emotion-communication competencies in everyday life.

## SESSION 650 (SYMPOSIUM)

### DUAL PROCESS MODEL OF BEREAVEMENT: MEANINGS, MEASUREMENT, INTERVENTIONS

Chair: *R. Utz, University of Utah, Salt Lake City, Utah*
Co-Chair: *M. Caserta, University of Utah, Salt Lake City, Utah*
Discussant: *D.A. Lund, California State University, san Bernardino, San Bernardino, California*

The Dual Process Model of Coping with Bereavement (DPM - Stroebe & Schut, 1999) suggests that bereaved persons most effectively cope with loss by oscillating between two processes: one that restores the daily activities and routines of life (restoration-orientation [RO]), and loss-orientation (LO), which addresses the emotional-based needs of the bereaved. This symposium focuses on intervention approaches based on the DPM, the challenges associated with how the processes are measured, and cultural variations surrounding the meaning of the model's constructs. The first paper by Caserta and colleagues will look at longitudinal patterns of loss- and restoration-oriented coping processes between those widow(er)s exposed to a DPM-focused intervention or a primarily loss-oriented traditional support group. Bennett & Evans will focus on measurement of LO/RO and oscillation based on preliminary time-diary and interview data. Chow's paper will discuss conceptual differences in the meaning and measurement of LO and RO processes/tasks based on her development of a DPM-based intervention in China. Finally, the paper led by Utz will look at how the process of grief changes over time between those widow(er)s exposed to a traditional emotion-based support group or an intervention derived from the principles of the DPM theory. Together, these papers suggest how the theoretical principles of the DPM theory may be translated into clinical practice in a way that is sensitive to individual and cultural variations in coping. They further demonstrate the need to be flexible and creative in how the model's constructs are measured and applied.

### COPING PROCESSES AMONG RECENTLY BEREAVED SPOUSES/PARTNERS IN TWO GROUP-BASED STUDY CONDITIONS

M. Caserta[1], R. Utz[1], D.A. Lund[2], B. De Vries[3], *1. University of Utah, Salt Lake City, Utah, 2. California State University - San Bernardino, San Bernardino, California, 3. San Francisco State University, San Francisco, California*

Based on experiences of 328 bereaved spouses/partners (61% Female; M Age = 69.6, SD = 10.6) who participated in the Living After Loss study, we investigated loss- and restoration-oriented (LO/RO) coping among those randomly assigned to an intervention based on Stroebe and Schut's (1999) Dual Process Model (DPM) versus those in a traditional support comparison group. LO coping decreased for both groups up to 9 months following the 14-week group sessions, while an increasing emphasis on RO coping occurred up to the 3-month follow-up (both $p < .01$). These changes were largely independent of group condition with the exception of curvilinear trends ($p = .06$) favoring the DPM treatment. While these observations were consistent with model, the DPM intervention might not have addressed some participants' specific RO needs in order to precipitate a more definitive treatment effect, implying that a more individualized, tailored approach is warranted. (NIA R01 AG023090)

### HOW EFFECTIVE ARE INTERVIEWS AND DAILY DIARIES IN IDENTIFYING THE COMPONENTS OF DUAL PROCESS MODEL OF BEREAVEMENT?

K.M. Bennett, E. Evans, *Psychology, University of Liverpool, Liverpool, United Kingdom*

Stroebe and Schut (1999) propose two types of coping, loss-oriented (LO) and restoration-oriented (RO) with oscillation between them, in their Dual Process Model (DPM) of bereavement. We examined the effectiveness of two methods. An interview asked participants about whether they experienced DPM components. A daily diary asked participants what they were doing, how they were feeling, whether they regarded the activity/feeling as LO, RO or Neutral throughout the day. The interview demonstrated that participants experienced both LO and RO components, but was less effective in identifying oscillation. In contrast, the daily diary gave some sense of daily oscillation. Interestingly, there were experiences which participants classed as Neutral which the researchers would have classified as LO, and there was insight into the triggers which prompted participants to switch from LO activities/thoughts to neutral or RO activities/thoughts. This suggests that it might be possible to teach people techniques for self-regulation.

### CULTURAL ADJUSTMENTS IN DUAL PROCESS MODEL-BASED INTERVENTIONS FOR OLDER WIDOWED ADULTS IN HONG KONG

A.Y. Chow[1,2,3], K. Chan[1,2], E. Koo[1], *1. Dept. of Social Work & Social Adm., The University of Hong Kong, Hong Kong, Hong Kong, 2. CADENZA Project, Hong Kong, Hong Kong, 3. Sau Po Centre on Ageing, Hong Kong, Hong Kong*

The DPM-based intervention applied in the US appears to be promising for Chinese bereaved spouses. A focus group was arranged with clinicians working with bereaved persons to examine the feasibility of adopting the intervention model in Hong Kong. Ideas about adjustments in the content and the length and the patterns of oscillation between loss-oriented (LO) and restoration-oriented (RO) components of the intervention were collected. Specifically, some of the proposed restoration-oriented (RO) components of the intervention such as finances, legal issues and vehicle responsibilities are found to be irrelevant among Chinese. Instead, health issues, cooking and handling relationships are identified as major challenges in the RO dimension. An eight-session model is perceived to be more acceptable than the original 14-session one. Moreover, oscillations between RO and LO components within a session are proposed.

### FOR WHOM CAN GRIEF BE MODIFIED? AN EVALUATION OF THE "LIVING AFTER LOSS" INTERVENTION

R. Utz[1], M. Caserta[1], D.A. Lund[2], B. De Vries[3], *1. University of Utah, Salt Lake City, Utah, 2. California State University - San Bernardino, San Bernardino, California, 3. San Francisco State University, San Francisco, California*

Drawing on 328 older bereaved persons who participated in the "Living After Loss" study, this analysis compares the longitudinal grief experiences of those exposed to a traditional emotion-based support group and those participating in a group-based intervention derived from the Dual Process Model (DPM) of bereavement. Particular emphasis was on which contextual variables moderate the grief trajectories of each group, in hopes of identifying which types of persons and under which circumstances a DPM intervention was most successful. Results indicate that grief trajectories (up to 18 months post-loss) are largely similar across the treatment and control groups, thus indicating that grief may be a fairly universal outcome that is not easily modified by intervention. However, additional analyses found that the DPM-based intervention was particularly effective for those with initially poor mental health and low levels of perceived self-competency, suggesting that intervention ought to be targeted to those persons. (NIA R01-AG023090)

## SESSION 655 (SYMPOSIUM)

### FEAR OF FALLING PROGRAMS: RECRUITMENT, PREFERENCES, MEASURING CHANGE, AND LONG-TERM EFFECTS

Chair: *G. Zijlstra, Maastricht University, CAPHRI - School for Public Health and Primary Care, Maastricht, Netherlands*
Co-Chair: *G.I. Kempen, Maastricht University, CAPHRI - School for Public Health and Primary Care, Maastricht, Netherlands*
Discussant: *E. Peterson, University of Illinois, Department of Occupational Therapy, Chicago, Illinois*

Fear of falling is considered a substantial health problem of equal importance to a fall. Prevalence rates in community-dwelling older adults range from 20 to 60%. In more frail populations, e.g. multiple fallers, prevalence rates are even higher. Particularly if this fear results in activity avoidance, it can lead to physical deconditioning, poor quality of life, institutionalization, and, ironically, increased falls risk. These adverse consequences call for prevention strategies. There is growing evidence for the effectiveness of intervention strategies that comprise cognitive and behavioral components. The limited intervention uptake and compliance by older people is, however, still an issue that needs further study as well as the assessment of change in fear of falling and the long-term effects of existing programs. During this symposium researchers from the US, Germany and the Netherlands will present new data on these issues related to recruitment, preferences, measuring change, and long-term effects of fear of falling programs. First, the recruitment of community-dwelling older adults for the "Stay Active" program will be discussed in light of participants' characteristics. Second, older adults' preferences regarding different formats of interventions, e.g. home-based vs. community-based, were determined in over 1,100 older community-dwellers. Third, the sensitivity-of-change of three scales assessing concerns about falling was analyzed in patients with dementia. And lastly, the long-term effects of a multicomponent cognitive behavioral intervention on mortality and fear of falling are presented. Our discussant will reflect on the presentations and facilitate a discussion on-site.

### RECRUITMENT FOR A FEAR OF FALLING EDUCATION AND COACHING INTERVENTION

H. Lach, D.C. Sundara, *Saint Louis University, St. Louis, Missouri*

This paper reports on recruiting for an education and coaching pilot intervention study for fear of falling. Community-dwelling subjects were recruited from 4 sites for a study to help them stay active (N=41, mean age 79.4+5.7, 90.5% female, 14% married, 81% White,). Potential participants had to have either significant concerns about falling (32%), balance problems (34%), or both (34%). Other inclusions were ability to read and speak English and transportation availability. Exclusions were cognitive impairment or depression, or severe visual or mobility problems. 43% of interested participants met criteria. Baseline assessment included measures of fear of falling, falls self efficacy and outcome expectancy, ADL/IADLs, activity levels and performance testing of mobility and balance. Participants recruited through community center sites were easier to recruit, and had higher levels of function and activity than those recruited through senior centers with meal sites and bus service. Supported by NINR-R15NRO10792.

### PREFERENCES REGARDING INTERVENTION FORMATS OF COMMUNITY-DWELLING OLDER ADULTS WITH FEAR OF FALLING

T. Dorresteijn[1], G. Zijlstra[1], Y. Van Eijs[1], J. Vlaeyen[2,3], G.I. Kempen[1], *1. Maastricht University, CAPHRI School for Public Health and Primary Care, Maastricht, Limburg, Netherlands, 2. University of Leuven, Research Group Health Psychology, Leuven, Vlaams Brabant, Belgium, 3. Maastricht University, Department of Clinical Psychological Science, Maastricht, Limburg, Netherlands*

Objective. To determine older adults' preferences regarding different formats of interventions aimed at reducing fear of falling. Methods. A questionnaire was sent to 2,550 community-dwelling people ≥70 years randomly selected from municipal registry offices (response complete questionnaires: 45%). The questionnaire assessed the extent of fear of falling and related activity avoidance, and willingness to take part in an home-based individualized or a local group intervention. Results. Nearly 40% of the people with fear of falling preferred to participate in a home-based intervention while 25% preferred to participate in a group intervention. Compared to people with no fear of falling, those who are sometimes or often afraid of falling are three times more likely to participate in an home-based intervention (OR=2.96; 95%CI=1.57-5.58) and two times more likely to participate in a group intervention (OR=1.98; 95%CI=1.00-3.90). Conclusion. To meet participants' preferences fear of falling programs may put more emphasis on home-based approaches.

### RESPONSIVENESS OF MEASURES ON FEAR OF FALLING IN PATIENTS WITH DEMENTIA

K.A. Hauer[1], G.I. Kempen[2], G. Zijlstra[2], M. Schwenk[1], L. Yardley[3], N. Beyer[4], C. Todd[5], *1. Geriatric Research, Bethanien-Hospital at the University of Heidelberg, Heidelberg, Germany, 2. School for Public Health and Primary Care – CAPHRI, Department of Health Care and Nursing Science, Maastricht University, Maastricht, Netherlands, 3. School of Psychology, University of Southampton, Southampton, United Kingdom, 4. Institute of Sports Medicine, Bispebjerg Hospital University of Copenhagen, Copenhagen, Denmark, 5. School of Nursing, Midwifery and Social Work, University of Manchester, Manchester, United Kingdom*

Research on fall-related psychological consequences has so far been limited by the lack of evaluation tools validated for people with dementia. The aim of this study was to determine the responsiveness of three scales that assess concerns about falling in patients with diagnostically confirmed beginning to moderate dementia who participated in an RCT (N=113). The scales included the 16-item Falls Efficacy Scale International (FES-I), the 7-item Short FES-I, and the 10-item Falls Efficacy Scale (FES). All scales showed moderate to excellent sensitivity-to-change. The overall range for effect sizes (ES) was .14-1.17 (FES-I=.18-.88; Short FES-I=.14-1.17; FES=.15-.91;). The Short FES-I showed the highest peak responsiveness. When only fear-affected patients were included in the analyses, excellent responsiveness was documented (FES-I=.88; Short FES-I=1.17; FES=.91). The results of this study indicate moderate to excellent responsiveness for the FES-I, Short FES-I, and FES in patients with dementia if applying an interview-based administration of the scales.

### LONG-TERM INTERVENTION EFFECTS ON MORTALITY AND FEAR OF FALLING IN OLDER ADULTS: AN RCT

G.I. Kempen, S. Oude Wesselink, J.C. van Haastregt, G. Zijlstra, *School for Public Health and Primary Care, Maastricht University, Maastricht, Netherlands*

A multicomponent cognitive behavioral group intervention to reduce fear of falling and associated activity avoidance was evaluated in a randomized controlled trial in the Netherlands. Community-dwelling people aged 70 or over experiencing at least some fear of falling and associated activity avoidance were eligible for study. Participants (N=540) were randomly allocated to either intervention or control group. The intervention comprised eight weekly sessions of two hours and a booster session after six months. The control group received no intervention. Data was collected at baseline, and at 2, 8 and 14 months. The results showed significant outcomes at 14 months on fear of falling (OR=0.31; p<0.01) perceived control over falling (mean difference=0.90; p<0.01) and recurrent falls (OR=0.38; p=0.02). In this paper particularly the long-term intervention effects on mortality, i.e. survivorship at 6 years, will be presented and discussed.

## SESSION 660 (POSTER)

## HUMAN DEVELOPMENT

### TOWARD A DISCOURSE SHIFT IN GERONTOLOGY: FROM "SUCCESSFUL AGING" TO "HARMONIOUS AGING

J.J. Liang, *MU,Ohio, Oxford, Ohio*

"Successful aging," though controversial, is commonly used as an overarching framework in gerontology. In this conceptual essay, "successful aging" is identified as problematic in three dimensions. First, "successful aging" tends to deny old age by advocating "agelessness"; and it fails to face up to the "shadow side of aging." Second, "successful aging" embodies an unrecognized, problematic component of consumerism which is not explicitly addressed. Third, "successful aging" overlooks the deeper concern of quality in the face of the quantified standardization of what constitutes "successful." Fourth, "successful aging" is based on the "busy ethic" emphasized within American culture and thus, may not be applicable to outside cultures. The proposed discourse of "harmonious aging" is inspired by the Yin-Yang philosophy—Yin and Yang are the two forces of harmony and change; they are opposite yet interdependent. "Harmony" refers to balance based on the acknowledgment of differences instead of insisting on sameness. The discourse of "harmonious aging" aims to provide a more comprehensive framework by incorporating activity theory and disengagement theory, to address the feminist concern of the "double standard of aging," and to recognize the challenges and opportunities of old age itself. This new discourse attempts to promote intellectual exploration of what constitutes a good old age and to capture more cross-cultural diversities in the context of global aging. This theoretical endeavor is important to change the status quo of gerontology, which is often described as "data rich but theory poor." This work will also contribute to cross-cultural gerontological education and communication.

### SPIRITUAL AWAKENING AND EGO-INTEGRATION: AN ERIKSONIAN INTERPRETATION OF EBENEZER SCROOGE

G. Washlow Kaufman, M. Takahashi, *Psychology, Northeastern Illinois University, Chicago, Illinois*

In this paper, Ebenezer Scrooge, the protagonist in Charles Dickens's A Christmas Carol, is examined from an Eriksonian perspective as he goes through a process of spiritual awakening and ego integration. The parallels between Ebenezer Scrooge's path toward enlightenment and the developmental crises that define stage transitions in the Eriksonian model are examined in detail through the literary device of spiritual visitation allowing the reader to understand Scrooge's life history. With the "Ghost of Christmas Past," Scrooge reviews his childhood, young adulthood and early maturity representing Erikson's development stages of trust, autonomy, initiative, industry, and identity at which Scrooge's psychosocial maturity ceased and he became locked in despair causing fear and social isolation that clouded his adult life. The visitation of the "Ghost of Christmas Present" forces Scrooge to confront his past mistakes and limitations, offering him hope of possible resolution to his developmental crises. The arrival of the "Ghost of Christmas Yet to Come," forces Scrooge to either work toward enlightenment or stagnate in despair, to be summarily forgotten or to be fondly remembered. Scrooge's experience with the visiting spirits takes him through Erikson's model through to the seventh stage of

"Generativity." Additional insights and parallel discussion of elements of Horney, Levinson, Frankl and Moody and Carroll are interposed to underscore the remarkably close relationship between Dickens' narrative and Erikson's theory of the potentiality of psychological growth in the older adult.

### THE CHARACTERISTICS OF GEROTRANSCENDENCE IN FRAIL OLDEST-OLD INDIVIDUALS WHO MAINTAIN A HIGH LEVEL OF PSYCHOLOGICAL WELL-BEING

Y. Masui[1], Y. Gondo[2], M. Takayama[3], Y. Kureta[4], T. Nakagawa[2], R. Takahashi[1], H. Imuta[5], *1. Tokyo Metropolitan Institute of Gerontology, Tokyo, Japan, 2. Osaka University, Osaka, Japan, 3. Keio University, Tokyo, Japan, 4. Showa University, Tokyo, Japan, 5. Tokyo Metropolitan University, Tokyo, Japan*

The purpose of this study was to develop a new questionnaire to investigate gerotranscendence in Japanese elderly individuals aged 65 yr and over, and to clarify the characteristics of gerotranscendence in physically frail but emotionally adapted oldest-old aged 85 yr and over. We developed the new questionnaire on the basis of interviews with 10 elderly individuals, and employed the questionnaire on 500 community-dwelling elderly (men 198, women 302). Factor analysis of the questionnaire suggested an eight-factor solution that included "Awareness of arigatasa and okage", which is a concept in Japanese culture that all people and living creatures are inter-dependent, "Introversion", "Transcendence from dualism", "Religious/Spiritual attitude", "Release from the social self", "Basic and innate affirmation", "Altruism", and "Let it go". Using cluster analysis, we classified the 149 community-dwelling oldest old (men 51, women 98) into three groups: a group with high function and high well-being (HF-HWB), a group with low function and high well-being (LF- HWB), and a group with low function and low well-being (LF-LWB). "Introversion", "Release from the social self", and "Let it go" in the LF-HWB group were significantly higher than those in the LF-LWB group, and the score for "Religious/Spiritual attitude" was significantly lower in the former than in the latter. These results suggest that some gerotranscendence factors are important for maintenance of psychological well-being in the frail oldest-old.

### REASONS FOR LIVING AMONG EUROPEAN AMERICAN, AFRICAN AMERICAN, AND LATINO OLDER ADULTS

A. June, D.L. Segal, A. Murphy, F.L. Coolidge, *University of Colorado at Colorado Springs, Colorado Springs, Colorado*

The purpose of the present study was to explore how potential reasons for not completing suicide may differ among several ethnic groups. Community-dwelling older African American adults (n = 35; 66% female; M age = 71.1 years, SD = 7.2 years), Latino adults (n = 26; 52% female; M age = 70.2 years, SD = 7.0 years), and European American adults (n = 37; 51% female; M age = 67.7 years, SD = 6.5 years) anonymously completed the Reasons for Living Inventory (RFL). An ANOVA was performed comparing these ethnic groups on the RFL total and each subscale. Significant differences between groups ($p < .05$) were found on the Child-Related Concerns subscale, $F(2, 94) = 4.45$, the Fear of Suicide subscale, $F(2, 90) = 5.44$, and the Moral Objections subscale, $F(2, 96) = 8.28$. Post-hoc analyses on the Child-Related Concerns subscale revealed that African Americans (M = 4.10, SD = 1.73) scored significantly lower than European Americans (M = 4.76, SD = 1.10) and Latinos (M = 5.12, SD = 1.02). On the Fear of Suicide subscale, European Americans (M = 1.81, SD = 0.84) scored significantly lower than African Americans (M = 2.33, SD = 1.12) and Latinos (M = 2.76, SD = 1.28). Finally, post-hoc comparisons on the Moral Objections subscale indicated that European Americans (M = 3.89, SD = 1.48) scored significantly lower than African Americans (M = 5.08, SD = 1.15) and Latinos (M = 4.82, SD = 1.21). Implications of these findings are discussed.

## SESSION 665 (SYMPOSIUM)

### INTERNATIONAL PERSPECTIVES ON RETIREMENT AND RETIREMENT PLANNING

Chair: *H. Van Solinge, Netherlands Interdisciplinary Demographic Institute, The Hague, Netherlands*
Co-Chair: *D.A. Hershey, Oklahoma State University, Stillwater, Oklahoma*
Discussant: *J. Hendricks, Oregon State University, Corvalis, Oregon*

Since the early 1990s, pension reform has been high on the agenda in almost all developed countries. Governments have either undertaken far-reaching, structural pension reforms or adopted a series of small reforms which, taken together, affect future pension entitlements substantially. These reforms have included, among other things, increases in pension ages, changes in the way benefits are calculated and smaller real pension increases than in the past. However, despite the different approaches, there is a clear underlying trend toward a reduced pension promise for today's workers, relative to past generations. Recent pension reforms mean – directly or indirectly – that in the future private savings and pensions will play a greater role in providing incomes in old age. Although this shift in responsibility for pension saving from the state to the individual can be witnessed throughout the Western world, the impact on individual workers may differ, depending on the architecture of the national 'pension building' strategy, the pace of change in the reforms, and cross-cultural differences in retirement planning and saving behavior. The broad goal of this symposium is to examine the psychological, social and economic factors that influence planning and saving for retirement. These behavioral determinants will be considered from both international and cross-cultural perspectives, by panelists drawn from various disciplines living in different parts of the world.

### FINANCIAL PLANNING FOR RETIREMENT: INTERDISCIPLINARY INFLUENCES VIEWED THROUGH A CROSS-CULTURAL LENS

D.A. Hershey, *Psychology, Oklahoma State University, Stillwater, Oklahoma*

Current theoretical models support the existence of interactions between the individual and socio-environmental forces when it comes to the formation and enactment of life plans (Shanahan & Elder, 2002). In this investigation, we examined the social, psychological and economic dimensions that impact financial planning for retirement. The collective force of these three sets of influences was studied from a cross-cultural perspective, among respondents from two countries with very different retirement financing systems. Participants were 419 American and 556 Dutch working adults, 25-64 years of age. Country-specific path analytic models revealed clear psychological differences in planning orientation across nations, as well as differences in both the social support mechanisms that underlie planning and the impact economic forces have on perceptions of saving adequacy. The discussion will focus on the value of constructing interdisciplinary models of planning, and how such models can inform the development of saving interventions and public policy initiatives.

### INDIVIDUAL AND INSTITUTIONAL RESPONSE TO THE GLOBAL FINANCIAL CRISIS: AUSTRALIAN RETIREMENT INCOME SYSTEM EVIDENCE

P. Gerrans, *1. Edith Cowan University, Joondalup, Western Australia, Australia, 2. Centre for Retirement Incomes and Financial Education Research, Joondalup, Western Australia, Australia*

For much of the 20th century Australia relied on a state-based pension as a central pillar of its retirement income system, supplemented by a second voluntary savings pillar. A third occupation-linked savings pillar, known locally as superannuation, existed but was confined to white collar workers until late in the 20th century. This pillar was strengthened, and widespread superannuation coverage emerged, in the

1980s and was entrenched through legislation in 1992 requiring employers contribute three percent of wages, and since 2002 nine percent, on behalf of employees to a superannuation account. A feature of superannuation is its concentration in defined contribution schemes where investment risk is borne by the individual, not pooled as with defined benefit funds. The global financial crisis represented a substantial challenge as individuals watched their balances drop significantly and rapidly. This paper describes how the system and individuals responded to the crisis and reflects on lessons available.

### WHAT DRIVES PENSION WORRIES IN EUROPE? A MULTILEVEL ANALYSIS

K. Henkens[1,2], H. van Dalen[1,3], *1. NIDI, The Hague, Netherlands, 2. Department of Sociology, Tilburg University, Tilburg, Netherlands, 3. department of Economics, Tilburg University, Tilburg, Netherlands*

This paper studies individuals' worry about their financial future in retirement, and the extent to which they take active steps to save in order to ensure an adequate standard of living. In this study, we analyze data from the third wave of the European Social Survey, which represents 22,609 working adults from 23 countries in Europe. We used multilevel modelling to focus on the explanatory factors that underlie individual and country-level effects in future pension worry and saving behavior. Findings suggest that once individual-level dimensions are taken into account, country-level predictors explain appreciable variance in worry, but not saving practices. Pension worries are more severe in countries with a low retirement age and a strong projected increase in future population aging. This suggests that the drive toward raising the retirement age in a number of EU countries may alleviate some of the worries of its citizens.

### BRAZILIAN RETIREMENT PLANNING PROGRAMS

L.H. Franca, *Graduate Studies in Psychology, UNIVERSO - Salgado de Oliveira University, Niterói, Rio de Janeiro, Brazil*

The Brazilian Social Welfare Reform was implemented in 2003, although the system is still marked by inequalities by life expectancies amongst States (66.2 to 75.6 yrs), the different pensions (public and private sectors) and the large percentage of non-formal workers (49,4%) who do not pay Social Welfare. In spite of these differences, for many workers State Pension is the only means of retirement survival. Economical, cultural and psychosocial aspects influence the Brazilian habit of (not) planning for the future, such as super-inflation (1980-1994). At present, with a stable economy, private financial organizations try to encourage the population to adopt individual financial planning. According to Brazilian Law, in order to guarantee the well-being for retirees, Retirement Planning Programs should be proposed by private organizations. In this presentation I shall discuss retirement planning programs (Retirement Planning seminars) and their key factors as developed by Brazilian organizations.

## SESSION 670 (SYMPOSIUM)

### MY GLASS IS HALF FULL: POSITIVE GRANDPARENT CAREGIVING

Chair: *B. Hayslip, Psychology, University of North Texas, Denton, Texas*
Discussant: *C. Musil, Case Western Reserve University, Cleveland, Ohio*

Work on grandparent caregivers often reflects a negative bias in documenting the difficulties such persons face, focusing upon the negative impact (depression, poor health) of caregiving on them. This symposium takes a positive approach to understanding grandparent caregivers in emphasizing their resilience and resourcefulness, stressing a strengths-based approach to caregiving as well as both benefit finding and positive coping in characterizing many grandparent caregivers. Hayslip, Neumann, and Davis stress the mediating role of resilience in explaining the relationship between both grandchild characteristics and life stressors in predicting grandparent caregiver well-being over a 1-year time frame. Smith examines the relationship between both positive well-being and positive self-appraisals and grandchild well-being, as well as the mediating role of parenting practices (warm and discipline) in explaining this relationship. The work by Bailey, Letiecq, and Erickson stress the understanding and development of coping strategies leading to positive grandparent outcomes based upon interview data of rural grandparent caregivers. Smith and Dannison present findings from the Grandparents Resources Site Project, a 30 month long intervention that capitalizes on grandparent caregivers' inherent strengths in helping them enhance networks of social support. Last, Goodman explicates the roles of personal (resilience) and social (family and friend support, maintaining positive grandchild relationships) influences on grandparent caregiver well-being, after the children they raised have grown. Carol Musil, the discussant, who conducts research emphasizing resourcefulness among grandparent caregivers will integrate findings from these papers in stressing the positive, adaptive qualities grandparents rely upon to cope and prosper in the face of adversity.

### THE ROLE OF RESILIENCE IN MEDIATING LONGITUDINALLY ASSESSED GRANDPARENT OUTCOMES: A 1-YEAR ANALYSIS

B. Hayslip[1], C. Neumann[2], S.R. Davis[2], *1. Psychology, University of North Texas, Denton, Texas, 2. University of North Texas, Denton, Texas*

Based upon previous cross sectional data utilizing OLS regression techniques underscoring the mediating role of resilience in explaining the relationship between child characteristics and life stresses and grandparent parental stress/efficacy and personal well-being, 1-year longitudinal data collected from grandparent caregivers (n = 86) regarding the latter indices of grandparent parental and personal functioning were analyzed utilizing structural equation modeling (EQS). Modeling of longitudinal data suggested that the latent construct of resilience at T1 continued to mediate the relationship between latent constructs reflecting both grandchild strengths and difficulties and a similarly modeled life stress construct at T1, and multiple indices defining the latent constructs of grandparent caregiver parental efficacy/stress and psychological well-being at T2; they were also confirmed utilizing OLS regression analysis. They therefore strengthen previous findings centralizing resilience in enhancing the parental and personal functioning of grandparent caregivers, and suggest that interventions targeting resilience may have long term positive effects.

### PATHWAYS TO RESILIENT GRANDFAMILIES IN RURAL AREAS

S. Bailey, B. Letiecq, M.R. Erickson, *Health & Human Development, Montana State University, Bozeman, Montana*

Drawing from research on grandfamilies, this project examined pathways that grandparent caregivers take in adapting to their new roles and family configuration. Based upon a study of 26 in-depth family life history interviews and constructed genograms of grandfamilies in a rural western state, processes that led to positive outcomes for grandparent caregivers and their families were examined. Guided by the Double ABCX Model of family stress and crisis, we found every family in our study in crisis when they took over care of their grandchildren. In the context of resilient grandfamilies, we found grandparents who began with and maintained a positive attitude about the situation and utilized available resources, coped better than those who did not. Grandparents with better coping were those who shifted roles, identities, relationships, and perceptions of the situation. Such data are key to the development of strategies for practitioners working with grandparent-headed families.

### SECOND TIME AROUND: STRENGTHS-BASED PROGRAMMING FOR GRANDPARENT CAREGIVERS

A.B. Smith, L.L. Dannison, *Teaching, Learning and Educational Studies, Western Michigan University, Kalamazoo, Michigan*

The Grandparent Resource Site Project provided supportive and educational services to relative caregivers in multiple sites over a 2 ½ year period. Services were arranged in a tiered delivery system, allowing sites and Local Advisory Committees to select services based on community needs and existing resources. Grandparent caregivers participated in 8-12 week educational groups, receiving information, support and socialization opportunities. It was found that the benefits of a strengths-based program included: increased perceptions of grandparent caregivers' abilities to cope with stress, increased abilities to meet their grandchildren's needs, increased feelings of pride in raising their grandchildren, increased feelings of positivity about their own lives, increased meaning their lives due to raising their grandchildren, and the perception that it was more rewarding than stressful to raise their grandchildren. These results underscore the importance of stressing family strengths and providing grandparent caregivers with strategies for meeting the challenges of raising a grandchild.

### A TWO FACTOR MODEL OF OUTCOMES FOR CUSTODIAL GRANDMOTHERS AND GRANDCHILDREN

G. Smith, *Lifespan Development & Educational Sciences, kent state university, Kent, Ohio*

No work has been conducted on how positive mental health and parenting practices of grandparent caregivers is related to grandchildren's psychological strengths. Within a two-factor model of caregiver appraisal and psychological well-being, data were collected from a large national sample (n = 733) of custodial grandfamilies. Structural equation modeling findings suggested that 1) the effects of custodial grandmothers' distress and positive well-being on grandchildren's adjustment were both mediated by parenting practices (warmth and discipline), 2) both negative and positive caregiver self-appraisals directly affected caregiver distress and positive-well being; and 3) the impact of a grandmother's negative appraisals of caregiving on her psychological well-being is considerably greater than the corresponding impact of positive appraisals. Thus, the adjustment of custodial grandchildren is linked to both the positive and negative emotional well-being of grandparents. Lessening negative caregiver appraisals is critical to reducing distress and enhancing positive well-being among grandparent caregivers.

### SOCIAL AND PERSONAL RESOURCES OF GRANDMOTHER CAREGIVERS AFTER GRANDCHILDREN ARE GROWN: A PILOT STUDY

C. Goodman[1], D. Scorzo[2], P. Ernandes[3], A. Alvarez-Nunez[4], *1. Department of Social Work, California State University, Long Beach, Long Beach, California, 2. Cambrian Home Care, Long Beach, California, 3. Southern California Permanente Medical Center, Downey, California, 4. Pacific Clinics, Long Beach, California*

Little is known about grandparent caregivers' well-being after their grandchildren have grown. This pilot study addressed the factors related to the well-being of grandmother caregivers who had raised grandchildren in terms of their personal resources (resilience and satisfaction with the grandparent role) and social resources (instrumental and subjective support from family/friends and from their grandchild). Grandmothers' self-assessment of personal resilience and their satisfaction with having raised their grandchildren were related to better mental health and greater life satisfaction, and a close relationship to grandchildren was related to better mental health and less depression. In contrast, instrumental support from grandchildren was negatively related to health. Additionally, subjective social support was related to greater life satisfaction and receiving instrumental support from family and friends was related to lower depression. Results emphasize the importance of personal and social resources for aging grandmother caregivers, especially the ongoing benefit from close relationships with grandchildren.

## SESSION 675 (SYMPOSIUM)

### NIMH UPDATE: CURRENT PRIORITIES AND OPPORTUNITIES IN MENTAL HEALTH AND AGING RESEARCH

Chair: *G. Niederehe, Geriatrics Research Branch, National Institute of Mental Health, Bethesda, Maryland*

Co-Chair: *J. Evans, Geriatrics Research Branch, National Institute of Mental Health, Bethesda, Maryland*

In this session, National Institute of Mental Health (NIMH) staff members will describe current priorities for the Institute, inform the audience of NIMH programs that support research efforts on aging and mental health, and outline particular areas of opportunity for new studies. The initial presentation will discuss the current funding context at the National Institutes of Health and NIMH, including trends, recent developments, and changes in the business practices affecting the review and award process for grant applications, and provide an overview of how funding programs at NIMH are organized. Particular emphasis will be placed on the NIMH Strategic Plan as a central impetus for current priorities, on new assessment approaches that have been advanced for use in clinical research, and on the report of an NIMH Advisory Council workgroup recommending new directions in intervention research. The subsequent presentations will describe the various areas in which the NIMH Geriatrics Research Branch supports studies of mental health and aging, and particular interests and priorities relating to these areas, which include programs on Translational Behavioral Science, Translational Neuroscience, Pharmacologic Intervention Research, and Psychosocial Intervention Research, and Multi-Modality Intervention Research. The final portion of the session will be a question and answer period during which audience members will be encouraged to ask questions and identify issues of particular interest for interactive discussion.

### THE NIH CONTEXT: TRENDS, RECENT DEVELOPMENTS, AND THE GRANTS PROCESS

G. Niederehe, *Geriatrics Research Branch, National Institute of Mental Health, Bethesda, Maryland*

This presentation will describe the current research funding context at NIH and NIMH for proposing projects on mental health and aging, both in terms of long-term trends and recent events. This will include the status of the Congressional appropriations process for the coming year, and other special initiatives or situational elements that may bear upon aging-related research (such as recent NIH Funding Opportunity Announcements, noteworthy recent scientific advances, organizational changes, or the like). Particular emphasis will be placed on the centrality of the NIMH Strategic Plan in prompting current Institute priorities. This presentation will also cover how funding programs are organized at NIMH, typical funding mechanisms, forms of support available for aspiring investigators in early stages of a research career, and the basic steps in applying for an NIH grant, including recent changes in the length and format of applications and in the grants review process.

### OPPORTUNITIES AND NEW DIRECTIONS IN TRANSLATIONAL NEUROSCIENCE AND BEHAVIORAL SCIENCE RESEARCH IN GERIATRIC MENTAL HEALTH

J. Evans, *National Institute of Mental Health, Bethesda, Maryland*

This presentation will discuss NIMH efforts to expand its geriatric translational research programs and highlight areas of particular opportunity for advancing the neuroscience and behavioral science of late-life mental disorders. Themes to be emphasized will include: studies directed at clarifying the neural circuits and biological processes associated with mental disorders in later life; the desirability of integrating genetic, brain imaging, and other technologies (e.g., cognitive and affective neuroscience) to advance a mechanistic understanding of disorder pathophysiology; new approaches to assessing symptomatic or functional domains that cut across traditional diagnoses; the importance of studying how specific aspects of the biological aging process interact with the trajectories of neurobiological changes seen in chronic mental disorders as affected individuals age; and studies aimed at identifying biomarkers indicative of vulnerability to developing mental disorder in late life or useful in tracking the progression of underlying disease processes over time.

### OPPORTUNITIES AND NEW DIRECTIONS IN GERIATRIC MENTAL HEALTH INTERVENTION RESEARCH

G. Niederehe, J. Evans, *Geriatrics Research Branch, National Institute of Mental Health, Bethesda, Maryland*

This presentation will review the priorities for and types of research supported by the Pharmacologic Intervention, Psychosocial Intervention, and Multi-Modality Intervention research programs within the NIMH Geriatrics Research Branch. Areas to be discussed will include the recommendations of an NIMH Advisory Council work group on new directions in intervention research, and the increasing priority placed on intervention studies that examine various avenues to personalizing care for older adults with mental disorders. The latter may include studies of modularized interventions and stepped care approaches, as well as studies of potential predictors of the individual's response to varied treatment options. The presenter will discuss NIMH viewpoints on and priority given to the development of innovative new treatments, and also to research that instead proposes to modify or adapt existing treatment approaches (e.g., to increase their cultural sensitivity, their applicability in typical care settings, and/or their uptake and use by typical providers).

## SESSION 680 (SYMPOSIUM)

### PATTERNS OF ADJUSTMENT IN MIDDLE-AGED AND OLDER ADVANCED CANCER PATIENTS AND CAREGIVERS OVER TIME

Chair: *J.H. Rose, Medicine, Case Western Reserve University, Cleveland, Ohio*
Co-Chair: *K.F. Bowman, Medicine, Case Western Reserve University, Cleveland, Ohio*

A diagnosis of late-stage cancer is highly stressful and newly diagnosed patients have been shown to differ by age in wellbeing and care preferences. However little is known about age-related adjustment in survivors over the first year after diagnosis, described as the early treatment phase for late-stage cancer. Patterns of adjustment may differ over this period for middle-aged (MA) patients in their 40s and 50s versus young-old (YO) patients in their 60s and 70s. This symposium reports exploratory findings of MA and YO patients and their caregivers in a large randomized controlled longitudinal study. The Kypriotakis paper uses multiple group analysis and general growth mixture modeling to evaluate whether depressed mood trajectories of MA and YO advanced cancer patients and their association to patient characteristics and family caregiver depressed mood levels vary by age group. Using similar methods, the Step paper examines trajectories for MA and YO recurrent and non-recurrent patients reporting age group interactions with recurrence status for anxiety, depressed mood and symptom distress. The Phillips-Towe paper uses latent class analysis to explore variation in preference for cardiopulmonary resuscitation in MA and YO advanced lung cancer patients. The Francis paper examines patterns of bereavement in caregivers of deceased MA and YO patients and the association between caregiver and patient factors and bereavement outcomes for caregivers of patients in the two age groups. Overall findings on differences in patterns of wellbeing and care preference for MA versus YO groups are highlighted. Implications and future directions for research will be discussed.

### A COMPARISON OF MIDDLE-AGED AND YOUNG-OLD'S DEPRESSED-MOOD TRAJECTORIES WITH ANTECEDENTS OF CHANGE

G. Kypriotakis, K.F. Bowman, J.H. Rose, *Case Western Reserve University, Rocky River, Ohio*

Multiple group analysis and general growth mixture modeling were used to evaluate whether depressed mood trajectories of advanced cancer patients and their association to patient characteristics and family caregiver depressed mood levels vary by age group. Patients were assessed at baseline, 3, 6 and 12 months. Three trajectories were identified for middle-aged (MA N=290) and young-old (YO =286); high-worsening (16%), high-improving (20%) and low-stable (64%). The MA reported consistently higher levels of depressed mood at baseline for all classes. However, the YO high-improving did not improve as well as the MA high-improving class ($p<.001$), and the high-worsening rate of increase in depressed mood was significantly ($p<.01$) higher for the YO than the MA. The depressed mood level of the family caregiver at baseline was important in predicting class membership ($p<.01$), as well as differentially affecting the trajectories of patients within age group and latent class.

### AGE GROUP DIFFERENCES IN WELL-BEING AT CANCER RECURRENCE AND OVER TIME

M.M. Step, G. Kypriotakis, J.H. Rose, *Case Western Reserve University, Cleveland, Ohio*

Little is known about how patients adjust to a cancer recurrence. The purpose of this research is to assess the emotional adjustment of middle-aged (ages 40-60, n=182) and young-old (ages 61-80, n=138) recurrent and non-recurrent advanced cancer patients. A secondary analysis of newly diagnosed MA and YO patients revealed different adjustment trajectories at baseline, 3 and 6 month intervals. Latent growth curves fit to symptom distress, depression and functional status showed significant interactions between age group and recurrence status. MA recurrent patients reported consistently higher symptom distress (Wald statistic = 4.68, $p <.05$), depression (Wald statistic = 4.92, $p <.05$), and lower functional well being (Wald statistic = 5.11, $p <.05$) across time. Data suggest that recurrent cancer presents a unique challenge that persists for MA patients. To inform targeted interventions for MA patients with recurrent disease it may be beneficial to explore coping strategies among YO patients.

### UNPREDICTABLE RESUSCITATION PREFERENCES IN MIDDLE-AGED AND OLDER PATIENTS WITH ADVANCED LUNG CANCER

T. Phillips Towe[1,2], G. Kypriotakis[2,3], E. O'Toole[2,3], J.H. Rose[2,3], *1. Medicine-Hematology/Oncology, University Hospitals Case Medical Center, Cleveland, Ohio, 2. Case Western University, Cleveland, Ohio, 3. MetroHealth Medical Center, Cleveland, Ohio*

Studies have shown that preferences for life sustaining treatment are inconsistent over time with greater declines in choice for cardiopulmonary resuscitation (CPR) among elders. However, whether changes over time in preference for CPR vary by age is unknown. Latent class analysis was used to determine whether CPR preference trajectory within the first year after diagnosis of advanced lung cancer vary by age. Analysis of middle-aged (MA: ages 41-60 yrs, n=105) and older (ages 61-83, n=88) patients revealed distinct trajectories by age group. Among persons more likely to choose CPR after initial diagnosis, the likelihood of choosing CPR was sustained for MA patients and increased among older patients over time. Among persons less likely to choose CPR after initial diagnosis, the likelihood of choosing CPR declined over time with a lower likelihood of choosing CPR among older patients. Further exploration is needed to identify factors influencing persistent preferences for CPR.

### BEREAVEMENT IN CAREGIVERS OF YOUNG-OLD AND MIDDLE-AGED CANCER PATIENTS: WHOSE PROBLEMS MATTER?

L.E. Francis, K.F. Bowman, J.H. Rose, *Medicine, Case Western Reserve University, Cleveland, Ohio*

There are two models of late-stage cancer caregiver bereavement, that of relief and that of complicated grief. Both models appear to have validity under different conditions. The current study adds to this knowledge by underscoring the importance of patient life stage in predicting the caregiving and bereavement experience of late-stage cancer caregivers. Among MA patient caregivers, their own functional limitations (.034, p<.05), age (-.012, p<.05), depression (.017, p<.05), social support (.013,p<.05) and health burden (.053, p<.05) and family abandonment (.034,p<.05) exacerbated grief. For YO patient caregivers, their poor health (-.110, p<.05) and depression (.036, p<.05) complicated grief; but patients' practical (-.063, p<.05) and emotional (-.063, p<.05) problems decreased grief. We conclude that personal struggles among MA patient caregivers appear to increase their risk of complicated grief at bereavement. For YO patient caregivers, their own problems have little effect, but the personal problems of YO patients result in relief upon bereavement.

## SESSION 685 (POSTER)

## PERSONALITY

### THE TRANSITION INTO ASSISTED LIVING: DOES PERSONALITY PLAY A ROLE?

W.L. Mills[1], V. Molinari[2], C. McEvoy[1], J. Edwards[1], L. Hyer[3], D. Gammonley[4], L.M. Brown[2], *1. School of Aging Studies, University of South Florida, Tampa, Florida, 2. University of South Florida - Department of Aging and Mental Health Disparities, Tampa, Florida, 3. Mercer Medical School - Georgia Neurosurgical Institute, Macon, Georgia, 4. University of Central Florida - School of Social Work, Orlando, Florida*

It is expected that as the population continues to age, the demand for less restrictive long-term care options will increase, resulting in a greater number of older adults transitioning into assisted living (AL) settings. The new living environment may be very different from those previously experienced, thus placing new social and physical demands upon the new resident. This period of adjustment may be marked by psychological distress, stress, insecurity, exacerbated health problems, and a disconnect from the support of the social network. As adjustment into long-term care does not always proceed smoothly, it is imperative to identify factors related to these transition difficulties in order to ease the process. Previous studies of personality and adjustment to significant life events have shown that personality factors, particularly neuroticism and extraversion, play a role in predicting which individuals will adjust successfully and unsuccessfully following transitions. The purpose of this study was to investigate the relationship between personality factors and adjustment following the transition into AL using hierarchical multiple regression. Participants completed a questionnaire regarding their retrospective assessment of the transition experience. Personality was measured by the Big Five Inventory. Other measures included the Geriatric Depression Scale, Life Satisfaction Index Z, relative quality of life, adjustment, and feeling of home. Factor analysis was used to create a composite variable for adjustment. Hierarchical multiple regression analyses examine the relationship between the individual facets of personality (neuroticism, extraversion, openness, agreeableness, and conscientiousness) and adjustment to AL.

### APPLICATION OF THE RESILIENCE SCALE AMONG COMMUNITY-LIVING OLDER ADULTS IN JAPAN

F. Ishihara[1], M. Harigane[2], T. Ikeuchi[1], H. Osada[1], *1. J. F. Oberlin University Graduate School, Tokyo, Japan, 2. The Dia Foundation for Research on Ageing Societies, Tokyo, Japan*

Psychometric evaluation of the Resilience Scale (RS) has been examined in younger adults but not in older adults in Japan. The psychometric properties of the RS among community-living older adults were examined. Participants were 607 older adults over 60 years old (M = 66.4) enrolled in continuing education classes in an urban area. Measures included the RS (25 items), overall life satisfaction, subjective health, sex, and age. Exploratory factor analysis resulted in a 4-factor structure of resilience, named respectively as Perseverance (9 items including "When I'm in a difficult situation, I can usually find my way out of it"), Self-assurance (4 items including "I feel that I can handle many things at a time"), Self-possession (4 items including "I usually take things in stride"), and Purposefulness (3 items including "Keeping interested in things is important to me"). Five items were excluded. The internal reliabilities of the four factors ranged from .84 to .64. There were no sex differences in the RS total score and in the scores of four factors. The RS total score and the score of Self-possession was weakly correlated with age. All of the four factors of the RS were positively correlated with the overall life satisfaction and subjective health. Although the factor structure of the RS differed from the original, positive correlations of resilience with life satisfaction and subjective health found in the present study were consistent with those theoretically expected. Further studies are needed to address relationships between resilience and related factors in various populations.

### THE ROLE OF PERSONALITY IN PREDICTING UNSAFE DRIVER BEHAVIOR: COMPARISONS BETWEEN YOUNG AND OLDER ADULTS

J. Riendeau[1], M. Bedard[1,2,3], *1. Lakehead University, Thunder Bay, Ontario, Canada, 2. St. Joseph's Care Group, Thunder Bay, Ontario, Canada, 3. Northern Ontario School of Medicine, Thunder Bay, Ontario, Canada*

Drivers aged 16 to 19 years and 70 years or older are consistently overrepresented in crash statistics. Personality is consistently linked to dangerous driving among young drivers but little research has examined the role of personality among older drivers. Given the relationship between personality and driver safety among younger populations and the relative stability of personality throughout adulthood, it is important to examine whether personality traits may be related to unsafe driving in older adults. We recruited drivers under 65 years (young; n = 71) and drivers aged 65 years or older (old; n = 8; recruitment ongoing). A series of questionnaires measured personality traits and driving habits. Driving performance was measured during a 30-min simulated drive. Young drivers committed significantly more driving errors than did older drivers ($p < .01$). Among young drivers, some personality traits were related to driving performance (e.g., sensation seeking, $p = .01$). Conversely, among older drivers, driving performance was not related to any personality trait. On the basis of conceptual linkages and prior research, we expect that some personality traits will be more salient predictors of dangerous driving behavior among young drivers (e.g., sensation seeking) than among older drivers. If there are shared personality traits that predispose both young and older adults to risky driving, then appropriate countermeasures could be developed to reduce risks in both age cohorts.

### THE PHOTOGRAPHIC ACTIVITY DIARIES OF OLDER ADULTS: A REFLECTION OF EXTRAVERSION AND OPENNESS

S.L. Parks[1], S. Clancy Dollinger[1], J. Ashley[2], E. Hlaing[1], *1. Southern Illinois University - Carbondale, Carbondale, Illinois, 2. Centre for Neuroskills, Bakersfield, California*

Photographs have been used as a research tool within a variety of methodologies (e.g., autophotography) and populations (e.g., college students, homeless adults, immigrants) to explore areas of identity, self esteem and personality traits. The current study used photographs to examine personality and explore the lives of older adults. Forty-three older adults took photographs of their daily activities to complete a photographic diary over a period of four weeks. The photographs were coded based on a rating system developed specifically for this study to assess Extraversion and Openness. Older adults were administered the NEO Five-Factor Inventory (NEO-FFI), the Rand Health Survey (SF-36), the Geriatric Depression Scale (GDS) and the Mini Mental Status Exam (MMSE). Extraversion as measured by the NEO-FFI and the number of photographs designated as "Openness" (e.g., number of photographs of travel, number of photographs of group meals) were positively related in the overall sample. A positive relation between the Extraversion NEO-FFI score and the number of photos designated as indicators of "Extraversion" (e.g., number of photographs with others, number of photographs displaying positive emotions) was observed only in males. Extraversion was positively related to photos of Travel for females. Future studies should examine the facets of Extraversion (e.g., activity level and excitement seeking) and Openness (e.g., actions) and consider additional activity categories when coding photographs to better understand the relations between daily activities in older adults and personality traits.

## THE ASSOCIATION BETWEEN RESILIENCE AND DEPRESSION IN COMMUNITY-LIVING OLDER ADULTS IN JAPAN

T. Ikeuchi[1], M. Harigane[2], F. Ishihara[1], H. Osada[1], *1. J. F. Oberlin University Graduate School, Tokyo, Japan, 2. The Dia Foundation for Research on Ageing Societies, Tokyo, Japan*

This study examined the association between resilience and depression, as well as differences by sex in older adults enrolled in continuing education classes for seniors located in an urban area of Japan. The sample included 292 men and 264 women over 60 years old (mean age = 66.5, SD = 3.7). Participants completed questionnaires containing the Resilience Scale (RS) and the 15-item Geriatric Depression Scale (GDS). Pearson's correlation tests indicated that the total scores of the RS and the GDS were significantly correlated for men (r = -.54, p <.01) and women (r = -.36, p <.01). We performed a multiple regression analysis for men and women, controlling for four independent variables which were the RS's four factors. The four factors were named as: "Perseverance," "self-assurance," "self-possession," and "purposefulness." Dependent variable was the GDS score. The standardized regression coefficient indicated a significance in the perseverance of men (β = -.32, p <.01) and women (β = -.25, p <.01). There were marginally significant trends in the self-assurance of men (β = -.14, p <.10) and women (β = -.14, p <.10) and in the self-possession of men (β = -.12, p <.10). The self-possession of women and the purposefulness of men and women were not significant. We observed significant correlations between overall resilience and depression. However, the findings suggest that there are no significant associations between purposefulness of resilience and depression. There are sex differences in effect on the association with self-possession of resilience and depression.

## SUBJECTIVE STRESS AS A MEDIATOR OF THE EFFECT OF CONSCIENTIOUSNESS ON CARDIOVASCULAR SYMPTOMS

G.W. Edmonds[1], H. King[2], P.L. Hill[1], B.W. Roberts[1], *1. University of Illinois at Urbana Champaign, Champaign, Illinois, 2. The Pennsylvania State University, University Park, Pennsylvania*

Cardiovascular disease is a primary health concern in the United States. Recent work suggests that conscientiousness might protect against cardiovascular problems (Terracciano, Lockenhoff, Zonderman, Ferrucci & Costa, 2008). The current study investigated the role of conscientiousness on cardiovascular health, and examined whether perceived stress mediates this relationship. Moreover, we tested these relationships using the facets, or lower-order components that comprise conscientiousness. A large community sample (N = 2136) completed a survey of personality and health measures, including assessments of nine different conscientiousness facets (AB5C; Goldberg, 1999), self-reports of cardiovascular symptoms, and a measure of perceived stress (Cohen, Kamarck, & Mermelstein, 1983). We organize the nine facets provided by the AB5C into those associated with industriousness, order, and self-control. All of the nine facets of conscientiousness, with the exception of perfectionism, were negatively related to cardiovascular symptoms (r's ranged between .09 and .13; p's < .05). We tested for mediation using Preacher and Hayes' (2004) non-parametric bootstrapping method. This provided estimates of both direct and indirect effects. Of the eight facets of conscientiousness that were related to cardiovascular symptoms, six showed effects that were fully mediated by perceived stress. These were organization, purposefulness, dutifulness, orderliness, conscientiousness, and cautiousness. For the two remaining facets, efficiency and rationality, perceived stress partially mediated the relationship between conscientiousness and cardiovascular symptoms. These findings demonstrate that perceived stress mediates the relationship between conscientiousness and cardiovascular symptoms, and that facet level analyses provide differential prediction with respect to this important outcome.

## FACETS OF CONSCIENTIOUSNESS MODERATE AGE DIFFERENCES IN COGNITIVE PERFORMANCE

E.K. Graham, M. Lachman, *Psychology, Brandeis University, Waltham, Massachusetts*

The current study examined how facets of personality were related to cognition, and whether these associations varied by age. Literature suggests that while many personality traits are associated with domains of cognition, individual facets of personality may add additional explanation to these relationships. A sample of 115 participants aged 22 to 89 from the Boston area completed the Brief Test of Adult Cognition by Telephone (BTACT) and the NEO-FFI. As expected, there was no correlation between personality and age. Multiple Regression analyses were conducted on all cognitive subtests, using age and personality (traits and facets) as predictors, controlling for health, sex, and education. As expected, older adults showed lower cognitive scores than younger adults. On the trait level older adults high in conscientiousness showed lower verbal fluency than older adults low in conscientiousness. Furthermore, specific facets of conscientiousness are related to cognition, with variations by age. Age by conscientiousness facet interactions showed that older adults high in Deliberation were slowest, while individuals low in deliberation exhibited reaction times similar to young adults. Similarly, older adults high in Order were slower as compared to other older adults low in Order, but this was not the case for younger adults. This suggests that, while older adults are slower than young adults, this is not true for all older adults. Individuals with the characteristics of being ordered and deliberative during a task appear to be slowest in processing speed and reaction time, suggesting personality plays an important role in slowing with age.

## OLDER ADULTS IN COMMUNITY RESIDENCES AND ASSISTED LIVING: WELL-BEING AND PERSONALITY TRAITS

S. Clancy Dollinger, J. Sheffler, E. Hlaing, S.L. Parks, *Psychology, Southern Illinois University, Carbondale, Illinois*

The number of assisted living facilities for older adults has more than doubled over the last twenty years and has presented older adults an additional living option by providing assistance (e.g., health care) in a less restrictive environment than that found in a nursing home facility. The relations between psychological well-being and personality traits in 20 older adults living in their own homes and 20 older adults residing in an assisted living facility were examined. The older adults were administered the NEO-FFI (Costa & McCrae, 1992), the Rand Health

Survey (SF-36), the Geriatric Depression Scale (GDS), the Mini-Mental Status Exam (MMSE) and the Scales of Well-Being (Ryff, 1989). A semi-structured interview was also administered to explore the daily lives of the older adults. This method allowed the older adults to provide specific, detailed information including their preferred activities and hobbies. A positive relation between several of the variables (e.g., health, depression, activities, self-acceptance, autonomy, conscientiousness, and extraversion) was observed. Extraversion was positively related to health, and conscientiousness was positively related to environmental mastery in older adults living in their own home. Independence and having choices were critical factors that contributed to the well-being in the assisted living residents.

# SESSION 690 (PAPER)

## QUALITY OF LIFE INDICATORS

### MEASURING THE WELL-BEING OF OLDER POPULATIONS: A CROSS-NATIONAL ANALYSIS BASED ON A NEW COMPOSITE INDEX

T. Kaneda, M. Lee, K. Pollard, *Population Reference Bureau, Washington, District of Columbia*

Despite the current trend of global aging, there has been no standard set of indicators available to measure the overall well-being of older populations across countries. This lack of such a wellness index hampers efforts to evaluate policies and programs aimed at helping individuals age well. The absence of comparable cross-national indicators also inhibits countries' ability to learn from the experiences of one another. In this paper, we describe the Wellness Index of Older Populations, a summary measure designed to examine the well-being of older people across countries. The index consists of 13 indicators grouped into four domains that are considered to be critical determinants of a person's well-being in old age: material well-being, physical well-being, emotional well-being, and social connectedness and relationships. We created both the overall index and the sub-indices for each domain for three age groups—ages 50-64, ages 65-74, and age 75 and older. Our paper highlights the key findings from our analysis, in which we compare the well-being of older populations in the United States and 11 European countries. Preliminary results show that the United States scores the highest in overall level of well-being in all three age groups, followed by Sweden in the 50-64 age group and Switzerland in both the 65-74 and 75 and older groups. Spain and Austria are tied for the lowest rank in the 50-64 age group, while Spain ranks the lowest followed by Italy in the older age groups. Possible explanations for our findings are discussed in the paper.

### MATERIAL VS. PSYCHOSOCIAL EXPLANATIONS OF EDUCATIONAL DIFFERENCES IN OLD-AGE FUNCTIONING

D.A. Groffen[1,5], H. Bosma[1,5], F. Tan[4,5], M. van den Akker[3,5], G.I. Kempen[2,5], J. Van Eijk[1,5], *1. CAPHRI School for Public Health and Primary Care-Department of Social Medicine, Maastricht, Netherlands, 2. CAPHRI School for Public Health and Primary Care-Department of Health Care and Nursing Science, Maastricht, Netherlands, 3. CAPHRI School for Public Health and Primary Care-Department of General Practice, Maastricht, Netherlands, 4. CAPHRI School for Public Health and Primary Care-Department of Methodology and Statistics, Maastricht, Netherlands, 5. Maastricht University, Maastricht, Netherlands*

Background Taking into account our rapidly aging population, older people are of particular interest in studying health inequalities. The aim of the present study is to examine the relation between socioeconomic status and health-related functioning in older people and to find out how material factors (e.g. the lack of basic goods) and psychosocial factors (e.g. low self-efficacy) compare regarding the explanation of these socioeconomic differences. Methods Data came from 5,061 Dutch men and women aged 55 years and older who participated in the longitudinal SMILE study. Baseline data were collected between November 2002 and May 2004 and respondents were followed until May 2009 (follow-up range: 0 to 5 years). Multilevel analyses were used to study the association between educational level and longitudinal changes in physical and mental functioning (i.e. two subscales of the SF-36) and to study the relative contribution of material and psychosocial factors to this relation. Results Low educational level was associated with poor initial physical and mental functioning. However, no further widening of these gradients was found during follow-up. Material factors reduced the initial educational differences by an average of 29%, while psychosocial factors, mastery and self-efficacy in particular, reduced these differences by an average of 60%. Conclusion More than material factors, psychosocial factors, mastery and self-efficacy in particular, explained a large part of the educational differences in physical and mental functioning in older people. Further research is recommended to explore the amenability to change of characteristics that hamper people from taking control over their lives.

### DIFFERENTIAL INTERRELATIONS OF SUBJECTIVE INDICATORS OF QUALITY OF LIFE AND MEASURES OF LIFE SATISFACTION

M. Holzhausen[1], P. Martus[1], C. Scheidt-Nave[2], *1. Charité - Universitaetsmedizin Berlin, Berlin, Germany, 2. Robert Koch Institute, Berlin, Germany*

Different aspects of quality of life are related differentially to one another in old age. Especially, the relation between self-ratings of functional abilities on one hand and subjective well-being on the other has been a focus of interest. We examined various outcomes related to the overall construct 'quality of life' in a representative sample (N = 299) of women and men above 65 years of age. We looked at the interrelations of objective and subjective indicators of quality of life among each other, investigating the interdependence of subjective functioning and different measures of well-being. Specifically we focused on cross-sectional predictors of global life-satisfaction, derived from three different modes of assessment: a single-item question, the Satisfaction with Life Scale (SWLS; Diener et al., 1985), and the newly developed scale Life-Satisfaction in Old Age Multimorbidity (FLQM; Holzhausen et al., 2010) that takes into account those dimensions that are rated as individually relevant by respondents. Though assessing the same construct and being highly intercorrelated, regression modelling showed differential patterns of prediction across those three measures. In accord with models of subjective well-being and life-satisfaction, emotional components played a more prominent role in predicting overall life-satisfaction in the single-item assessment as compared to the more specific scales. In the latter, indicators of subjective functional impairment were more important predictors. Concluding, we stress a heightened awareness of the dependency of results in the field of life-satisfaction and quality of life research from the mode of assessment.

### EDUCATION, FUNCTIONAL LIMITATIONS, AND QUALITY OF LIFE AMONG OLDER ADULTS IN SOUTH KOREA

J. Lee[1], O. Lee[2], *1. The Sloan Center on Aging and Work, Boston College, Chestnut hill, Massachusetts, 2. Graduate Shool of Social Work, Boston College, Chestnut hill, Massachusetts*

Previous studies have shown a strong positive relationship between educational attainment and health of the elderly. The purpose of this study is to examine the predictors of functional limitations and quality of life based on educational attainment. The nationally representative sample (n=4,152) of adults aged 65 and older was drawn from the Wave I of the Korean Longitudinal Study on Aging (KLoSA) conducted in 2006. Hierarchical multiple regression analysis was undertaken to assess the unique explanatory contribution of socio-demographics, chronic health conditions, social engagement, cognition, and depression on functional limitations and life satisfaction. Two separate analyses were run to note differences between lower education (below the 6th grade) and higher education (above the 6th grade) groups. On the bivariate level, significant educational disparities exist in major study variables except for chronic illnesses. Yet, final models in hierarchical multiple regressions show cognition and depression greatly contribute to functional limitations and life satisfaction regardless of educational level. Friendships as opposed to support from children are significant predictors for both functional limitation and life satisfaction. While female gender and older age are predictors of functional limitations, marital status and welfare recipients are more likely related to life satisfaction. Implications for gerontological practice and policy are discussed in this paper.

## SESSION 700 (PAPER)

## RACE, GENDER AND HOSPICE USE

### PATTERNS OF HOSPICE USE AMONG ASIANS, AFRICAN AMERICANS, HISPANICS AND WHITES IN A CENTRAL FLORIDA

I.V. Carrion, N.S. Park, *Social Work, University of South Florida, Tampa, Florida*

Understanding hospice use patterns among different racial/ethnic groups is critical in providing culturally competent services. The purposes of this study were to examine characteristics of individuals in hospice by racial/ethnic groups and provide implications for practice. Method: The study included a total of 22,936 patients served by a hospice during a four-year period, 2002-2006 (Mage = 75.4, SD = 18.5). Of these, 80.6% were White, 9.6% were African-American, 9.3% were Hispanic and .5% were Asian American/Pacific Islanders. Chi-square tests and ANOVA were used to examine associations between characteristics of hospice users and race/ethnicity. Results: More females than males (51%-62% vs. 38%-50%) were represented. Older adults (ages 65 and older) were the most frequent users of hospice across four racial/ethnic groups. As for primary caregivers, spouse caregivers were most common for Whites (35%) and Asian/Pacific Islanders (36%), “other” (41%) caregivers for African Americans, and daughters (33%) for Hispanics. A majority of individuals had religious affiliation, but Asian/Pacific Islanders has the most diverse religious preferences including no religious affiliation (12%). Cancer was the primary diagnosis across the four groups; 60% of Asian/Pacific Islanders were diagnosed with cancer. Racial minorities were more likely to rely on Medicaid than Whites (10-70% vs. 4%). African Americans were most likely to be transferred from hospital (57%), whereas Whites had the highest proportions of people who were referred from assisted living/nursing homes (16% vs 7-10%). Lengths of services were comparable across groups. Implications: As the hospice settings become more racially/ethnically diverse, it is essential to attend to different circumstances and needs of racial/ethnic groups in providing care.

### PREFERENCE FOR HOSPICE AMONG OLDER ADULTS: THE ROLES OF UNCERTAINTY, SPIRITUALITY, GENDER AND RACE

J.G. Cagle, M.A. Lamantia, S.W. Williams, J. Pek, L. Edwards, *Institute on Aging, UNC Chapel Hill, Chapel Hill, North Carolina*

Previous research has identified that African American persons are less likely than Whites to receive hospice care at the end of life. To better understand the etiology of this disparity, this study used a secondary data analysis of the 2003 North Carolina End of Life survey (N=3,586) to explore how individual preferences for hospice are influenced by factors including: attitudes, behaviors, and demographic characteristics. The survey collected data from a random sample of AARP members across the state using a self-report questionnaire. Only respondents who indicated a familiarity with hospice were included in these analyses. Competing categorical models were fit to determine which factors predicted a preference for hospice care. In the first model, preference for hospice was constructed using “yes” and “no” responses, omitting responses of “unsure.” The second model included “yes” and “no or unsure” responses. In the first model, race was not a predictor of a preference for hospice, as an equal percentage (4%) of Black and White respondents did not want hospice care. When responses of “unsure” were included in the dependent variable, Black respondents were 2.2 times more likely than Whites to indicate no/unsure about a preference for hospice care ($p<.001$). In both models gender, the presence of an advance directive, and spirituality were consistent predictors of choosing hospice. Pre-existing uncertainty about preferences for end of life care may help explain differences in care at the end of life. Interaction effects, study limitations, and implications for future research will also be discussed.

### USE OF ROLE MODEL STORIES TO REDUCE BARRIERS TO HOSPICE AMONG AFRICAN AMERICANS

S. Enguidanos[1,2], A. Coulourides-Kogan[1], G. Taylor[2], *1. Davis School of Gerontology, University of Southern California, Los Angeles, California, 2. Partners in Care Foundation, San Fernando, California*

Numerous barriers to Hospice exist for African Americans and include lack of experience, knowledge, and misconceptions of hospice (Chung, Essex, & Samson, 2009; Born et al., 2003; Reese et al.,1999). The purpose of this study was to develop and test theoretically driven role model stories, real stories of other African Americans on Hospice, aimed at increasing knowledge and improving attitudes toward hospice to increase access to hospice care for seriously ill older African Americans. The role model brochure was developed from individual interviews with African Americans on hospice and their family members. Stories were developed based on theoretical concepts, including Social Learning Theory and Theory of Reasoned Action that have been used with other health behaviors. These stories incorporate the language of the storytellers and carry the cultural values and imagery of the intended audience. Methods. A pre post design was conducted to determine the impact of the role model stories in improving knowledge, attitudes, and intentions toward hospice. Seventy-one African Americans 62 and older with two or more chronic conditions were surveyed before and after reading the role model brochure. Results. Survey results demonstrated significant improvement in knowledge ($t= -5.7$, $p<.001$), with 63.6% scoring higher on knowledge at post test. Intentions to enroll family members and themselves also increased following review of the brochure ($p<.05$). Conclusion. Use of theoretically driven role models stories may improve access to Hospice among traditionally underserved populations.

### FACTORS INFLUENCING HOSPICE LENGTH OF STAY

M. Sengupta, E. Park-Lee, A. Bercovitz, R. Valverde, *CDC/NCHS, Hyattsville, Maryland*

Hospice care provides palliative services and recognizes patient autonomy, both of which studies have shown improve quality of life for dying patients. Studies have shown that hospice care needs to be provided for at least a month to realize the maximum benefits from care. Medicare pays a hospice provider a daily rate for each day that a patient receives care. Although studies have shown that the average length of stay has declined and a third of hospice patients die within the first 7 days of care, recently, the Medicare Payment Advisory Commission (MedPAC) identified an increase in the percent of patients with lengths of stay exceeding 180 days. MedPAC attributed this increase to a business model that boosts the profitability of the Medicare hospice benefit by maximizing length of stay. The purpose of this study is to identify individual and organizational factors that may influence hospice length of stay. Using the 2007 NHHCS, we examined which patient and provider characteristics are associated with length of stay in hospice. About 63% were in hospice for 30 or fewer days, 11% received care for 180 or more days, and 4% received care for over a year. Women had a longer average length of stay than men. The median length of stay was 20 days in proprietary agencies and 15 days in nonprofit agencies. Study findings could be used to inform policy decisions about factors that affect the cost of hospice care.

# SESSION 705 (PAPER)

## SERVING OTHERS AND EXPRESSING SPIRITUALITY

### CONSTRUCT VALIDITY OF MCDONALDS EXPRESSIONS OF SPIRITUALITY INVENTORY IN YOUNG AND OLD ADULTS

J. Fish, B. Hayslip, S. Clark, *Experimental Psychology, University of North Texas, Denton, Texas*

McDonald's Expression of Spirituality Inventory (ESI) assesses many aspects of spirituality. Confirmatory factor analysis yielded four factors for the ESI: F1- cognitive orientation toward spirituality, the importance of spirituality/religiosity, F2- experiential/phenomenological spirituality, assessing individuals' belief in having had divine experiences, F3- wellness, examining individuals' assessment of life events, and F4 - Paranormal Beliefs, reflecting individuals' belief in such phenomena (psychokinesis, ghosts) (Hayslip, et.al., 2010). These factor scores were subsequently correlated with a variety of measures of spirituality, religiosity, and well being in young adults (n=409, M = 21.3, SD = 1.77) and older adults (n=361, M = 73.16, SD = 8.21). These correlations were examined in light of the ESI's construct validity. In young adults, F1 was highly correlated ($p < .05$) with religious coping, a belief that God helped throughout life, personal spirituality, spirituality as a component of well being, cognitive religious commitment, and behavioral religious commitment. F3 correlated with somatization, obsessive compulsivity, interpersonal sensitivity, depression, anxiety, and negative affect. F2 and F4 were not highly correlated with any such measures. Among older adults, F1 correlated with a belief that God helped throughout life, lifetime religious social support, personal spirituality, spirituality as a component of well being, positive religious coping, and cognitive religious commitment. F3 correlated with somatization, obsessive compulsivity, interpersonal sensitivity, depression, anxiety, negative affect, and negative religious coping. Again, F2 and F4 did not correlate with any other measures. These data in part support the construct validity of the ESI in younger and older adults.

### AS WELLS RUN DRY: CLERGY, CONGREGATIONS AND SECULAR PROVIDERS COLLABORATE TO SERVE ELDERS

G.G. Glicksman, *Reconstructionist Rabbinical College, Wyncote, Pennsylvania*

The population of elders - increasing at a time of crisis in economic and other resources – challenges traditional providers to develop more effective models of support. By examining the ways that members of one religious tradition – Judaism – are reshaping their responses to these changing realities, the author hopes to lift up a model that holds promise for other groups. Rabbis and lay leaders of Jewish congregations face the challenges we all face, including diminishing economic, spiritual and personal resources amid increasing demands for support. There is greater geographic mobility, an ever-diminishing social safety net, and fewer familial and kin-like social supports. For many, the needs emerge in both the professional and the personal sphere, increasing the level of stress. Stress is even greater in congregations where members are dispersed over a wide geographic area, which is the case in many non-Orthodox Jewish congregations. One particularly exciting approach in the Jewish community is collaboration between synagogues and Jewish social service agencies. These partnerships promise increasing efficiency and effectiveness, enabling professionals and lay leaders to focus on their areas of expertise. They also encourage well-being through increased participation of elders and increased multi-generational involvement. This paper grows out of the author's survey of rabbis in non-Orthodox congregations, using computer-based questionnaires and follow-up in-depth interviews. The author is adding focused interviewing of rabbis, lay leaders and social workers who collaborate to serve elders and will highlight trends that suggest that this model is one that could be helpful for other faith communities.

### RELIGION AMONG OLD PEOPLE IN KOREA

J. Kim[1], M. Lee[2], Y. Lee[3], *1. NORC, Chicago, Illinois, 2. Chung-Ang University, Seoul, Republic of Korea, 3. Konkuk University, Seoul, Republic of Korea*

While religion is an important gerontological research area in the US, little attention is given to the religion of old people in Korea, where half of population is identified with either Buddhism or Christianity. Using the 1985, 1995, and 2005 Korean Census micro-data, and 2003-2008 Korean General Social Survey cumulative data (KGSS), we aim to provide basic information about religious affiliation, church/temple attendance, and subjective religiosity. The Korean Census from 1985 to 2005 shows that the non-religious population has decreased 12 percentage points from 50% to 38%, and that Catholicism has gained more adherents (7%) than Buddhism and Protestantism (4% respectively) in this period. At the same time, the traditional religions have lost 3 percentage points, dropping from 5% in 1985 to 2% in 2005. KGSS shows that 83% of Protestants, 76% of Catholics, and 7% of Buddhists attend church/temple once a week or more. Unlike religious participation, the difference between Buddhists and Christians is not relatively substantial in terms of subjective religiosity. For example 26% of Buddhists, 41% for Protestants, and 30% for Catholics said that their strength of religious belief is strong. Compared to younger people, old people have stronger religiosity across all religions. Given that old people become more religiously affiliated, have more frequent religious service attendance, and have stronger feelings of religiosity, religion merits greater attention to gerontologists in Korea.

### CARE, RECREATION AND AFFILIATION – OLDER VOLUNTARY WORKERS OF THE CHURCH OF FINLAND IN COSTA DEL SOL, SPAIN

J. Spannari, *University of Helsinki, Helsinki, Finland*

Positive relationship between voluntary work and personal well-being has been documented by multiple studies. But what meanings are attached to voluntary work in religious organizations by older volunteers themselves and what do they tell about the role of volunteering in a community of older adults? This paper focuses on the Finnish winterbird community in Costa del Sol, Spain - an exceptionally interesting community of older adults in its geographical distance but mental proximity to the country of provenance, and with religious organizations at the hub of social life. The study is based on texts and interviews of Finnish older adults residing in or frequently visiting the Spanish Costa del Sol and volunteering in Finnish religious organizations during their stay. Voluntary work is viewed 1) as care, recreation and a search for a role from the viewpoint of older volunteers and 2) as an intricate process of collective identity formation, affiliation and manifestation of values from the viewpoint of the community.

# SESSION 710 (SYMPOSIUM)

### STRETCHING THE BOUNDARIES OF THE AMBIVALENCE FRAMEWORK: NEW ARENAS FOR RESEARCH

Chair: *K. Hooker, HDFS, Oregon State University, Corvallis, Oregon*
Discussant: *T.M. Cooney, University of Missouri, Columbia, Missouri*

Intergenerational ambivalence is a thriving area of research that has enriched knowledge about family relationships in later life and has been shown to affect health and well-being. As the nuances of the intergenerational ambivalence framework are unpacked, it may provide a new lens through which to examine other relationships fraught with ambivalence. The papers in this symposium utilize the construct of ambivalence to examine caregiving relationships from interdisciplinary perspectives. In a longitudinal study of 121 families Blieszner, Roberto, and Savla examine ambivalence and biomarkers of stress among older married couples coping with mild cognitive impairment (MCI). Pearson and Duffy use case law and relevant research evidence to probe the legal implications and real-life consequences (e.g., loss of fortunes; jail time) of ambivalence in caregiver relationships. Williams and Qualls utilize a qualitative approach to determine the extent to which ambivalence may explain the low rates of future care planning among aging families of individuals with intellectual disabilities. Mejía and Hooker examine ambivalence in the context of discovering behavioral signatures, through sensor data and care documentation, in the creation of alternative late life family structures in long-term care. These papers all address ambivalence in relation to some aspect of caregiving in later life from the perspective of spousal partners, fiduciary agents and care receivers, parents who have dealt with dependence over their lifecourse, and families in long-term care settings. The discussant, Teresa Cooney, integrates the studies and will provide her perspective on ambivalence in caregiving and family relationships in later life.

### MILD COGNITIVE IMPAIRMENT AS A SOURCE OF AMBIVALENCE IN FAMILY RELATIONSHIPS

R. Blieszner, K.A. Roberto, J. Savla, *Human Development, Virginia Polytechnic Institute and State University, Blacksburg, Virginia*

Early memory loss among older adults diagnosed with mild cognitive impairment (MCI) challenges spousal and adult child-aging parent relationships because of their unique constellation of remaining strengths and emerging limitations in cognitive, affective, and behavioral functioning. Using a mixed-methods design incorporating structured scales and open-ended questions, we conducted in-depth interviews on 3 occasions over 3 years with multiple members of 121 families with an older adult diagnosed with MCI. For a subsample of 30 spouses, we also collected 7 days of daily diaries and assayed 4 days of salivary stress hormones. Analyses revealed that ambiguous symptoms and prognoses led to multiple dimensions of self-reported stress that was confirmed by the biomarkers. Participants reported numerous coping difficulties and perceived contradictions in relationships with the diagnosed person. Nevertheless, spouses and adult children remain committed to providing support to persons with MCI and exhibit ambivalence-associated coping strategies from which others can learn.

### LEGAL IMPLICATIONS OF AMBIVALENCE IN CAREGIVER RELATIONSHIPS

K.C. Pearson[1], J. Duffy[2], *1. Dickinson School of Law, Penn State University, Carlisle, Pennsylvania, 2. Queen's University Belfast, Belfast, United Kingdom*

"I trusted her" is what 98-year old Bertha said about her great-niece, who became her agent and caregiver. The great-niece said: "I did what she asked me to do, to the best of my ability." So, why was Bertha testifying against the great-niece on charges of theft and misuse of legal documents signed by Bertha? Analysis of this case suggests that both parties began with only a vague understanding of what their relationship might entail, "assisted" by an attorney who asked few, if any, relevant questions. Failure to recognize that caregiver relationships are fraught with the potential for deep ambivalence can have tragic results. In this instance, Bertha lost over $800,000 — and the great-niece went to jail. The authors use an American case history, relevant research evidence and a case decided by the Supreme Court of Ireland to probe the legal implications of ambivalence in caregiver relationships.

### AMBIVALENCE ABOUT PLANNING FOR FUTURE CARE TRANSITIONS IN AGING FAMILIES OF INDIVIDUALS WITH INTELLECTUAL DISABILITIES

A.A. Williams[1,2], S.H. Qualls[1,2], *1. Psychology Department, University of Colorado at Colorado Springs, Colorado Springs, Colorado, 2. Gerontology Center, Colorado Springs, Colorado*

Low rates of future planning in highly dedicated families suggest that ambivalence may be a powerful factor in deterring planning processes. The present study investigated interpersonal as well as intrapersonal role ambivalence that serves as a barrier to future planning. Older parents of individuals with intellectual disabilities (ID) typically have in mind plans for future transitions in care and advocacy structures when they can no longer serve those roles, yet they engage in very low rates of planning. A qualitative study conducted using a phenomenological framework engaged 33 members from 8 families in in-depth interviews. Ambivalence was an overarching theme across members of all families, with variations organized by family role. This project suggested that parents, siblings, and care systems each experience intrapersonal ambivalence about the process of planning for the post-parental future of adults with ID, and their interpersonal interactions often build rather than reduce ambivalence.

### EXPLORING THE BEHAVIORAL SIGNATURE OF HOME AND FAMILY IN A LONG-TERM CARE SETTING

S. Mejia, K. Hooker, *Human Development and Family Sciences, Oregon State University, Corvallis, Oregon*

Ambivalence is ubiquitous across resident, staff, and family members' interactions in long-term care. The formation of alternative family structures in long-term care environments may reconcile these feelings by fostering a sense of place and home among participants, as they transition into new roles and expectations. Our study explores how these alternative family structures are co-created by residents, staff, and family members. We used unobtrusively collected sensor data coupled with care documentation from two contrasting houses at Oatfield Estates, a residential care facility in Oregon. Oatfield Estates is known for its use of smart technology to support quality of life among residents, and dedication to aging in place for residents with diverse physical and cognitive capabilities. We examined characteristics and patterns of behavior among residents, caregivers, family members, and management at Oatfield Estates to explore the behavioral signature of an environment that supports and nurtures a sense of home and family.

## SESSION 715 (POSTER)

## TECHNOLOGY: DEVICES AND USERS

### VOICING UNCERTAINTIES ABOUT THE BEST DEVICE TO HAVE FOR REACHING HELP QUICKLY: THE EXPERIENCE OF AN OLDER HOMEBOUND WOMAN WHO HAD TRIED MULTIPLE DEVICES

E.J. Porter, *University of Missouri, Columbia, Missouri*

More community-dwelling older persons are adopting devices for reaching help quickly (RHQ), many by subscribing to a personal emergency response system (PERS). Most related research has focused on device effectiveness and client satisfaction. The few qualitative studies have pertained to considering PERS subscription, adjusting to having a PERS, or intentions about using one's PERS. Most PERS subscribers continue subscribing. Little is known about experiences of older women who cease PERS subscription, opting for another RHQ device. Data for this case study were obtained during a descriptive phenomenological study of the experience of RHQ with 40 women (aged 85-98). One woman, who had ceased a PERS subscription and installed a security system, voiced uncertainties about that decision during the 18-month study. She experienced falls, acute health problems, and household emergencies – situations that influenced her contemplations as a person knowledgeable of multiple options for RHQ. Facets of life-world associated with her experience of RHQ were described, including: noting that I could change back to the PERS if I had to and predicting that I will go back to the PERS when the security contract expires. Her struggle became a chronic stressor, influencing her eventual decision to break the security contract and re-subscribe to PERS. As options for RHQ devices increase, increasing numbers of older persons could become serial users of various devices and experience the stressor of wondering if they would be "better off" with a different device. Researchers should describe personal and societal implications of this newly identified chronic stressor.

### USABILITY TESTING OF WEB-BASED MULTIMEDIA HEALTH TUTORIALS BY OLDER ADULTS

B. Xie, I. Watkins, N. Thakker, *College of Information Studies, University of Maryland, College Park, Maryland*

Three consecutive sessions of usability testing of three Web-based multimedia health tutorials – MedlinePlus Surgery Videos and MedlinePlus Interactive Tutorials both maintained by the National Institutes of Health, and EdHeads Virtual Surgery by a non-profit organization – with 10 older adults was conducted in February-March of 2010. The aim of the study was to compare the senior-friendliness of these multimedia health tutorials and to generate preliminary data on older adults' use of Web-based multimedia features. Data were collected from interviews, surveys, and observation. Major findings are: 1) Interactivity (e.g., built-in hands-on practice, quiz) can be useful but needs to be the right amount (not too little, not too much) and the right type (not too simple, not too complicated) for the right audience; 2) a clickable element that entails both a symbol and a word is more easily recognizable by older adults than that with a symbol alone; and 3) showing "the big picture," including showing both how a specific body part is in relation to the whole human body and where the user is located within the broader framework of the tutorial, is important for the user to understand and follow the tutorial. Overall, the MedlinePlus Interactive Tutorial site was the most popular, followed by EdHeads. The MedlinePlus Surgery Video site, which has little interactivity, presents the most difficult clickable elements, and shows no "big picture," was the least popular. Based on the test findings, we recommend design and training interventions to facilitate older adults' use of Web-based multimedia health tutorials.

### TECHNOLOGY USE IN LATER ADULTHOOD: THE ROLE OF ATTITUDES AND COGNITIVE ABILITIES

B. Williger, F.R. Lang, *Institute of Psychogerontology, Erlangen, Germany*

Successful aging highly depends on the functional allocation of the physical, cognitive, social, and emotional resources which are partially challenged by age-related losses. Recent studies suggest that these resources do also determine the use of technical devices in later adulthood. Accordingly, lower or reduced cognitive mechanics (e. g. information processing, spatial abilities) as well as technology anxiety seem to be associated with less frequent use of new technologies. In addition, cognitive pragmatics such as general knowledge or reading comprehension were found to predict the breadth and intensity of computer experience. We were able to replicate and extend these findings in an ongoing longitudinal study with 74 older adults. The participants were asked to regularly test and evaluate technical products and prototypes within the course of twelve months. First wave results show that the mechanics of intellectual capabilities constitute important resources when deciding whether to use new technologies in later adulthood. Furthermore, older adults' attitudes towards technology were found to strongly influence their usage behavior. Accordingly, participants with high technical openness and less distrust towards technology reported more frequent use of modern technical devices. The effects remain stable when controlling for age, education and personality. Results confirm theoretical considerations that fluid cognitive abilities as well as positive and negative attitudes towards technology predict the use of technical innovations among older adults. Follow up data of the one-year longitudinal study will help to understand which role technical expertise as a form of crystallized intelligence play when deciding on technology use.

### THE IMPACT OF AN INTERGENERATIONAL VIDEO GAME EXPERIENCE ON YOUNG ADULT'S PERCEPTIONS OF AGING AND OLDER ADULTS

M.M. Wood, K. Reis, M. Freitag, B. Davis, M. Sloan, S.J. Kohn, *Psychology, Valdosta State University, Valdosta, Georgia*

A key strategy for enhancing both undergraduate teaching and learning in gerontology and aging psychology courses often involves selective use of innovative intergenerational curricular activities. This study addresses the results of a second wave of a long-term project involving 124 undergraduate students (M-age=22.42) and 21 community-dwelling older members (M-age=74.16) of a campus-wide continuing education program. Our primary goal was to gather participants from different generations in a relaxed, informal setting to share a mutual recreational experience (playing Nintendo's Wii video game system) to promote intergenerational communication, while reducing ageist stereotypes. The undergraduate students were administered objective and subjective measures as pre-tests at beginning of the academic year (T1) prior to engaging in the 2-3 times/week Wii-sessions with the older adults. Using a repeated measures design, we then administered the measures again as a post-test at the conclusion of the academic year (T2). Thirty-four students did not attend any Wii sessions, but did complete the pre- and post-test measures; and thus served as a control group that was limited to learning experiences from course materials and assignments. Paired-sample T-tests for T2 showed significant mean value changes from T1 for the Fraboni Ageism Subscales. A series of ANOVAS also revealed significantly greater reduction in ageist beliefs for the students participating in the Wii-sessions compared to the control-group (which did not participate). These results are important because they suggest that the Wii experience may have heightened students' gerontological learning experiences above and beyond traditional scholastic outcomes limited to the domain of the classroom.

### THE EMOTIONAL RESPONSES OF OLDER ADULTS TO NEW TECHNOLOGIES

K. Kim, W. Chodko-Zajko, A. Schwingel, L. Malavasi, *University of Illinois, Urbana, Illinois*

Understanding the perceptions and emotions of older adults when they encounter new technologies is important. If the benefits of using new technologies are perceived to be less worthwhile than the difficulties experienced while using them, older adults might decline to adopt otherwise useful tools. This study is designed to assess older adults responses to several examples of novel and familiar technological devices. The familiar technological devices will be TV remote controls and the novel devices will be pedometers (also known as "step counters"). For both the familiar and novel devices, older adults will be invited to inspect an "easy-to-use" and a "complex" version of a commercially available product and provide information about how likely they would be to adopt the new product in their everyday lives. Using a simple mixed method research design, four older adults (2 men; 2 women) will be asked to rate each product using a simple pencil and paper instrument known as Product Personality Profiling (PPP). PPP is frequently used by industrial designers to assess consumer reactions to new products. In addition, each participant will be invited to participate in a 60-90 minute focus group in which they will be given an opportunity to comment on their reaction to each of the four devices. The goal of the study is to increase our understanding of how older adults feel when they are asked to use new physical activity promoting technology.

## BRIDGING THE GENERATIONS: COMPUTER USE AMONG OLDER ADULTS IN A SENIOR HOUSING SETTING

A.D. Peeples[1,2], A. Frankowski[2], M. Kessler[2], A. Handers[2], *1. Doctoral Program in Gerontology, UMBC/UMB, Baltimore, Maryland, 2. Center for Aging Studies, UMBC, Baltimore, Maryland*

Motivated older adults are rapidly overcoming the digital divide in order to improve their access to computer networks, maintain contact with family, and pursue available information on health and dating. To understand this transition, ethnographic research was conducted with a low income, racially and ethnically mixed population of older adults residing in an independent living senior housing community located in a metropolitan area in a mid-Atlantic state. Four researchers over a two year period met bi-monthly with residents for a series of informal, individualized computer and internet skills tutoring sessions. A significant number of these residents suffer from chronic illness (e.g., stroke, Parkinson's, arthritis, diabetes-related amputations, poor eyesight, mild dementia), the manifestations of which currently hinder computer use. This poster provides data on two focal questions in our study: 1) what adjustments in computer design and 2) what changes in social attitudes are needed to enable older adults learn and utilize computer technology with ease and confidence? We examine the effects of gender, age, social class, health status, and former occupational patterns of research participants on computer use, and determine what residents most need and want from computers in their everyday lives.

## DETERMINANTS OF TELEHOME CARE NEEDS WITH CORONARY ARTERY DISEASE IN THE CHINESE COMMUNITY ELDERLY

M. Lee[1], P. Chen[2], M. Lee[3], *1. Long-Term Care, National Taipei College of Nursing, Taipei, Taiwan, 2. National Taipei College of Nursing, Taipei, Taiwan, 3. National Taipei College of Nursing, Taipei, Taiwan*

Background: Coronary artery disease (CAD) is a life-threatening disease in the elderly. Due to the limitations of medical resource and costs, the combination of technology and care services in home care becomes an important issue. Any innovative care services should be tested through an understanding of the feelings of customers to truly reflect the value of the services. Thus, the purposes of this study are to investigate the needs of telehome care in the community elderly with CAD. Method: A descriptive correlation study, with 120 CAD elderly participants who were discharged from three medical institutions within a year was recruited for the study purposes. Uncertainly, social support, personal and disease characteristics, and telehome care needs of the study participants were explored in this study. Results: The results demonstrated that the score of telehome care needs was skewly distributed to the right, and the mean score was relatively low. In the subdimension of telehome care needs, the results also showed that the needs of emergency assistance was the highest, and the need of role adjustment and social interaction was the lowest. Subjects with the highest scores of telehomecare needs were married, well educated, had more co-morbidities, functional limitations, and higher scores in social support. By using logistical regression analysis, co-morbidities and social support were the only two strongest predictors in telehome care needs. Conclusion: According to this study results, the suggestions were proposed in both practice and design for tele-home care among the community elderly CAD patients. Keywords:Telehome care needs, coronary artery disease, elderly

## PLUGGED IN, PUT DOWN: IMAGES AND RESPONSES TO IMAGES OF OLDER ADULTS ON SOCIAL NETWORKING SITES

C. Douglass[1], N. Dougen[2], *1. Public Health, Northern Illinois University, DeKalb, Illinois, 2. Clinton Rosette Middle School, DeKalb, Illinois*

An intergenerational research team, consisting of a middle-school student and his gerontologist parent, undertook this study of images and responses to images of older adults on social networking sites (SNS) including YouTube and Google Videos. The purpose of the study was to determine if images of older adults were primarily positive or negative and, equally important, what types of responses to these images were posted by SNS participants. Past research has shown that older adults are frequently portrayed negatively in the media including television (Harwood, 2000) and films (Bazzani, 1997). The researchers hypothesized that a similar pattern would exist for images of older adults on SNS. This hypothesis was confirmed. The researchers examined the responses to these images to better understand how participants of SNS experienced the images. This second area of research was exploratory, no predetermined hypotheses were tested. Using a grounded theory approach, analysis was conducted by the two researchers resulting in overarching themes describing both the images and responses to the images. Three primary themes emerged from the images: 1) older adult as foolish, 2) older adult as victims, and 3) older adults as superhuman (portrayed initially as frail, then transforming with superhuman powers). The overwhelming response to all three of these image types was humor. Most people indicated that they found these images amusing to view. Two additional themes emerged from the posted responses: 1) pity was seen in relation to older adults as victims and 2) praise was seen in relation to older adults as superhuman.

## ELECTRONIC MEDICAL RECORD (EMR) USE IN HOME HEALTH AND HOSPICE CARE AGENCIES

A. Bercovitz, M. Sengupta, P. Jamison, *National Center for Health Statistics, Hyattsville, Maryland*

EMRs are proposed as mechanisms to improve quality and cut costs, including improvement of coordination of care through electronic exchange of information. Nationally representative data on EMR use among providers of home health and hospice care are limited. Using data from the National Center for Health Statistics' 2007 National Home and Hospice Care Survey, we examined EMR use among home health and hospice care providers. Forty-one percent of providers had EMRs, and an additional 15% planned to have EMRs within the next year. Among providers with EMRs 98% had a component for recording patient demographics, 82% had a component for clinical notes, and over half had clinical decision support systems or computerized physician order entry, but less than 10% had the capability to share records with other health care organizations. Larger providers of only home health care or only hospice care, non-profit and government providers, providers owned by or operated with hospitals or other types of health care organizations, and providers with contracts with skilled nursing facilities were more likely to have EMRs. Since less than half of providers of home health and hospice care have EMRs, their use would have to increase significantly for providers to be able to exchange information electronically.

## EFFECTS OF TRAINING AND EXPERIENCE ON COMPUTER RELATED SELF-EFFICACY AND ANXIETY IN OLDER ADULTS

K. Wild, N.C. Mattek, H. Jimison, J. Kaye, *Oregon Health & Science University, Portland, Oregon*

According to U.S. Census data, the percent of households of individuals 65 years and older that have Internet access increased from 29% in 2003 to 53% in 2009. The rapid expansion of computer and Internet access in this age group coincides with recent research that puts to rest the misconception of older adults as technophobes. However, much of that research is based on attitudes towards hypothetical uses of technology rather than eliciting opinions based on personal experience. This study describes differences in computer related self-efficacy and anxiety in subgroups of older adults, and changes in those measures following exposure to a systematic training program and subsequent computer use. Participants were subjects in the Intelligent Systems for

Assessment of Aging Changes Study (ISAAC) carried out by the Oregon Center for Aging and Technology. The training program, consisting of six one-hour sessions, was designed to help participants achieve computer proficiency, as defined by the ability to turn on and off the computer, launch programs from the desktop, send and receive Email, and navigate the World Wide Web. Participants (n=141; mean age = 84, 73% female) were administered two questionnaires prior to training and again one year later, related to computer self-efficacy and anxiety. Baseline comparisons by age and gender, but not cognitive status (MCI vs. Normal), yielded significant differences in anxiety and confidence related to specific aspects of computer use. At one-year follow-up, participants reported less anxiety and greater confidence; however the benefits of training and exposure varied by group and task.

### SELF-RATED HEALTH, PERCEIVED CONTROL AND DEPRESSION AMONG MIDDLE-AGED AND OLDER USERS OF ELECTRONIC CANCER SUPPORT GROUPS

G. Seckin, T. Turner, *University of Maryland, Baltimore County, Baltimore, Maryland*

Eighty-two percent of the Americans aged 50 to 64 and 66% of those aged 65 and older use web resources to obtain medical and health information. This study examined the associations between socio-demographic variables, self-rated health, perceived control, and depression among a convenience sample of cancer patients (M age=50.23, S.D. =10.91) who were participants in mailing lists of electronic cancer support groups (n=350). Direct associations were modeled between self-rated health (conceptualized as perceived distress with treatments and satisfaction with health status), perceived control over health, and depressive symptoms. Analyses indicated that younger age (Slope = -.005; B= -.09, p =.05), higher perceived distress with treatments (Slope = .15; B= .22, p =.001), lower satisfaction with health status (Slope = -.24; B= -.39, p =.001) and less perceived control over health (Slope = .08; B= .13, p =.004) were significantly associated with higher levels of depressive symptoms. Multiple regression analyses also indicated importance of open communication between providers and patients who use electronic information sources, as patients' comfort level in bringing internet information to attention of medical professionals was associated with less depressive symptoms (Slope = -.08; B= -.12, p =.01). Interestingly, frequency of discussion was found to be significantly associated with depression (Slope = .08; B= .10, p =.05). These findings suggest that patients' increased need to discuss information obtained from online cancer groups may be indicative of higher levels of psychological distress, and patients feeling comfortable in communicating with their doctors emerges as a significant variable to enhance psychological well-being when coping with a chronic illness.

### ARE HEALTH ANSWERS ONLINE FOR OLDER ADULTS?

M. Cresci[1], T. Templin[1], R. Morrell[2], *1. Wayne State University Insitute of Gerontology and College of Nursing, Detroit, MI, 2. Human Resources Research Organization, Alexandria, Virginia*

The Internet has the potential for engaging older adults in managing their health by providing greater access to health information and services. Yet little is known about their interest in using the Internet as a health management tool. This study explored interest among community dwelling older adults in learning to use the internet as a health management tool. Survey data collected at the 9th Annual Art of Aging Successfully (n=187) were analyzed. Prevalence of Internet use was 54.6% with 73.2% accessing the Internet from home. Mean age was 69.89 (SD=8.542, range 50-97); 95.7% were female, 55.6% were African American, 70% had greater than a high school education and 60.4% had income > $20,000. Findings indicated that 41.2% of those who used the internet used it for health information with 43.9% seeking information about specific diseases and 36.4%, specific treatments. Use of the internet for health information was significantly related to age, education, and income ($p < .05$) but not to race/ethnicity. In logistic regression only age remained significant, with probability or internet use for health information ranging from 77% (50-60 yr old) to 19% (70-80 yr. old). Findings also indicate an interest in using a secure, private, safe, elder friendly health web portal to store and access: personal health information (41.2%); selected health websites (47.6%); current medications (44.3%); health benefit resources (49.2%); and health care providers (48.7%). Future studies are needed to explore health outcomes related to the use of an elder friendly health web portal.

## SESSION 720 (SYMPOSIUM)

### THE INTERPLAY OF PSYCHOSOCIAL RESOURCES AND HEALTH IN ADULTHOOD AND OLD AGE

Chair: *F.J. Infurna, Penn State University, State College, Pennsylvania*
Co-Chair: *D. Gerstorf, Penn State University, State College, Pennsylvania*
Discussant: *J. Heckhausen, University of California, Irvine, Irvine, California*

Lifespan research has long been interested in examining structural relations between domains of functioning. The major objective of this symposium is to bring together a collection of empirical studies using a multitude of different approaches to investigate how psychosocial resources and health shape key outcomes of adult development and aging. Polito and Lachman report from an experimental study that a personality trait (conscientiousness) was protective against increases in physiological markers of stress (cortisol) to a laboratory stressor and highlight that age moderates this relationship. Bergeman and Montpetit apply dynamic systems modeling to daily diary data and examine day-to-day associations between stress and negative affect. Their results indicate that individuals exhibiting less coupling between stress and negative affect are more stress resistant and protected from adversity. Carsten Wrosch uses a longitudinal panel study spanning 4 years to illustrate that longer sleep duration is protective of a key physiological mechanism of functioning (cortisol output), independent of sociodemographics and central health-related variables. Infurna and colleagues target long-term antecedents, correlates, and outcomes of perceived control. They report that control predicts subsequent risks for disability and mortality and in turn is predicted by levels and changes in social participation, life satisfaction, and health. The discussion by Jutta Heckhausen will integrate the four papers and highlight how various types of integrative research on the interplay between psychosocial resources and health will further our understanding of adult development and aging.

### CONSCIENTIOUSNESS AND CORTISOL: PERSONALITY AND AGE DIFFERENCES IN HEALTHY HPA AXIS REGULATION

M.J. Polito, M. Lachman, *Psychology Department, Brandeis University, Waltham, Massachusetts*

Cortisol is a key hormonal marker of stress in the hypothalamic-pituitary-adrenal (HPA) axis, and some profiles have been identified as indicators of healthy regulation, both in the naturally occurring diurnal cycle and in the laboratory. In a sample of adults aged 22 to 89, we examined whether HPA axis regulation was associated with age, education, sex, and conscientiousness, a trait previously linked to health and longevity. We found that high conscientiousness predicted healthy cortisol patterns, including a larger awakening response, steeper daily decline, and less reactivity and quicker recovery to a laboratory stressor. Age moderated these relationships, such that the beneficial effects of conscientiousness were larger with increasing age for the awakening response but smaller with age for the daily decline. The results add to the growing body of work linking conscientiousness and health by considering the link with cortisol, a major stress biomarker.

### STRESS RESISTANCE AND STRESS RECOVERY ON HEALTH: NOTRE DAME STUDY OF HEALTH AND WELL-BEING (NDHWB)

C.S. Bergeman[1], M.A. Montpetit[2], *1. University of Notre Dame, Notre Dame, Indiana, 2. Illinois Wesleyan University, Normal, Illinois*

Resilience is the ability to encounter exacerbations in daily stress without a concomitant acceleration in negative affect (NA; stress resistance), or to damp stress-induced NA more quickly (stress recovery). The study used 56 days of self-report data (N=700) from the NDHWB. Results from dynamical systems analysis using a coupled linear oscillator model indicated significant frequency ($\eta$=.35±.00), which represents the oscillation of NA around one's equilibrium, and significant damping ($\zeta$=-.03±.01), which is conceptualized to represent stress recovery. Individuals who return to equilibrium more quickly are thought to be hardier or more resilient. Acceleration in Stress was coupled with acceleration in NA ($\gamma$=.21±.01); loosely interpreted, the conception of stress reactivity represents the emotional sensitivity of an individual to the impact of daily stressors. Exhibiting less coupling represents stress resistance, which protects one from adversity. These components are in turn used to predict health outcomes in mid and later life.

### SLEEP DURATION BUFFERS DIURNAL CORTISOL INCREASES IN OLDER ADULTHOOD

C. Wrosch, *Psychology, Concordia University, Montreal, Quebec, Canada*

This study examined associations between reports of sleep duration and diurnal cortisol secretion in older adulthood. It was hypothesized that long sleep would protect older adults against increases in diurnal cortisol secretion over time. The hypotheses were tested using three waves of data from a 4-year longitudinal study involving 160 older adults. Results from growth curve analyses and cross-lagged panel analyses suggest that high levels and increases in sleep duration were associated with fewer increases in subsequent levels of diurnal cortisol secretion. Cortisol secretion, by contrast, was not associated with changes in sleep duration. The results were independent from baseline levels of sociodemographic characteristics (age, sex, and SES) and health-related variables (chronic disease, functional disability, physical symptoms, medication usage, BMI, and smoking). The findings suggest that longer sleep duration can protect older adults from exhibiting increases in cortisol output over time. Implications for theories of successful aging are discussed.

### LONG-TERM ANTECEDENTS AND OUTCOMES OF PERCEIVED CONTROL: LINKS TO SOCIAL PARTICIPATION, LIFE SATISFACTION, HEALTH, AND MORTALITY ACROSS ADULTHOOD AND OLD AGE

F.J. Infurna[1], D. Gerstorf[1,2,3], N. Ram[1,2,3], J. Schupp[3,4], G.G. Wagner[2,3,5], *1. Penn State University, State College, Pennsylvania, 2. Max Planck Institute for Human Development, Berlin, Germany, 3. DIW Berlin (German Institute for Economic Research), Berlin, Germany, 4. Free University, Berlin, Germany, 5. Berlin University of Technology, Berlin, Germany*

Perceived control plays an important role in shaping development throughout adulthood and old age. Using data from the German Socioeconomic Panel study, we explore long-term outcomes and antecedents of perceived control and examine if associations differ across adulthood. Targeting outcomes of control, survival analyses revealed that perceived control predicted 14-year hazard rates for disability and mortality. The effect for mortality, but not for disability, was independent of sociodemographic and psychosocial factors and more pronounced in older ages. Targeting antecedents and correlates of control, findings indicated that higher levels of social participation, life satisfaction, and self-rated health, in addition to more positive changes in social participation over the preceding 10 years were each predictive of perceived control. Limited support was found for age differential associations. We discuss that perceived control is embedded in various systems of influence and how these may or may not differ across adulthood and old age.

## SESSION 725 (SYMPOSIUM)

### AGING, ALCOHOL, AND ADDICTIONS: INTERDISCIPLINARY SOLUTIONS TO SCREENING AND INTERVENTION FOR OLDER ADULTS IN TRANSITION

Chair: *J. Culberson, Baylor College of Medicine, Houston, Texas*
Discussant: *K. Barry, University of Michigan, Ann Arbor, Michigan*

The Aging, Alcohol, and Addictions Informal Interest Group has cultivated novel interdisciplinary approaches to the emerging clinical entities of alcohol and prescription drug misuse in older adults. Presenters will demonstrate that transitions experienced by older adults during their lifetime have a significant effect on the development of hazardous patterns of alcohol and prescription drug use, and create specific challenges for screening and intervention. The symposium will include a presentation of the Healthy Living as You Age Study. This is a randomized trial of an intervention that includes personal feedback, advice from a physician, and health educator counseling to reduce at-risk drinking among older adults in a primary care setting. A second presentation will describe prescribing patterns for opioid analgesics in the management of persistent pain in an ambulatory geriatric primary care clinic. Results will be compared to evidence-based guidelines recently updated by the American Geriatrics Society for the treatment of persistent non-malignant pain. Another presentation will demonstrate the use of factor analysis to identify age-appropriate subscales and scale items for developing a short version of the Pain Medication Questionnaire. This work is essential in the development of instruments to assess potential opioid medication misuse in an aging population. Finally, results will be presented from a program providing referral-based outpatient age-specific treatment for addictions in older adults. The presentation will highlight treatment approaches and outcomes for late life addictions, and examine the unique needs of the individual with substance use disorders in later life.

### REDUCING AT-RISK DRINKING AMONG OLDER ADULTS IN PRIMARY CARE: THE HEALTHY LIVING AS YOU AGE STUDY

A.A. Moore[1], F. Blow[2], M. Hoffing[3], S. Welgreen[4], L. Tang[1], K. Barry[2], *1. UCLA, Los Angeles, California, 2. University of Michigan, Ann Arbor, Michigan, 3. Desert Oasis Healthcare, Palm Springs, California, 4. Kaiser Permanente, Panorama City, California*

Purpose: We conducted a randomized trial testing the efficacy of a primary-care based intervention to reduce at-risk drinking among older adults. Methods: Control group participants (n=321) got a booklet on general health behaviors and intervention group participants (n=310) got personalized feedback, a booklet on alcohol and aging, advice from their physician and up to three health educator counseling calls. Results: At baseline, 73% of participants were at-risk due to alcohol-medication combinations; At 12 months, alcohol consumption was less in the intervention compared to the control group (9.27 vs. 10.71 drinks per week; and 0.29 vs. 0.52, heavy drinking days per week (both p<0.5). At 12 months, 53.87% of intervention vs. 60.38% of controls (OR 0.77; 95% CI 0.54 to 1.11) were at-risk drinkers. Conclusions: The intervention among older at-risk drinkers in primary care reduces amount of drinking and between group differences in drinking outcomes largely persist at 12 months.

### OPIOID ANALGESIC USE IN ELDERLY AMBULATORY VETERANS

A. Gomez, J. Culberson, N.J. Rianon, *Baylor College of Medicine, Houston, Texas*

The American Geriatrics Society (AGS) has established evidence-based guidelines for the management of persistent pain, which includes the appropriate use of opioid analgesics. We performed a chart review of ambulatory patients seen in the Houston MEDVAMC Geriatric clinic during October 2009. Fifty-three received either an initial or renewed analgesic prescription. Data was gathered on demographics, co-morbidities, analgesic use, and pain level. Descriptive statistics and bivariate analysis were performed. The prevalence of opioid analgesic use was 43% and only 30% of those receiving opioids were prescribed these on a scheduled basis. About 70% of veterans receiving opioids reported moderate to severe pain, however, among those 2/3rd (69%) were prescribed opioids on an "as-needed" basis. We conclude that opioid analgesics were commonly prescribed to elderly ambulatory patients; however, most veterans who reported moderate to severe pain received opioids as-needed as opposed to the scheduled basis, recommended by current AGS guidelines.

### AGE-APPROPRIATE SCREENING FOR MEASURING OPIOID MEDICATION MISUSE IN COMMUNITY-DWELLING OLDER ADULTS WITH CHRONIC PAIN

J. Park, *School of Social Work, Florida Atlantic University, Boca Raton, Florida*

Assessing opioid medication misuse in geriatric populations is difficult due to absence of age-appropriate and validated instruments. The Pain Medication Questionnaire (PMQ) was developed based on risk factors associated with opioid medication misuse in chronic pain patients; it has been validated in a general pain population but not utilized specifically with the elderly. Factor analyses were conducted to identify age-appropriate subscales and scale items with the intent to develop a short version of the PMQ. Exploratory factor analysis and confirmatory factor analysis were performed on data collected from 163 older adults who had completed the PMQ. Two factors (maladaptive behaviors and efficacy of pain medication) and 7 items in these factors were identified. By accurately assessing opioid medication misuse with the revised PMQ, older adults may receive age-appropriate interventions and decrease health care utilization costs and hospital admissions by reducing adverse events due to drug misuse.

### LATE LIFE ADDICTIONS: EXAMINING TREATMENT APPROACHES AND OUTCOMES OF AN AGE-SPECIFIC CLINIC IN NYS

N.S. MacFarland, *University at Albany, Albany, New York*

Substance use disorders (SUDs) are of growing concern among the aging population in the US. As the baby boomers age, the number of seniors requiring services for alcohol/illicit drug abuse or dependence will likely grow in unprecedented numbers. Expanding available services for addicted seniors is of paramount importance. It is also critical that such services be tailored to the unique needs of this population and grounded in evidence-based practices. Provided will be a description of a NYS licensed chemical dependency outpatient clinic catering exclusively to the 50+ population, showing a 70% 3 month retention rate, 60% discontinued use rate, and a 53% increase in units of service. This program's treatment engagement and retention strategies, as well as a change project that contributed to even better outcomes in these areas, will be described. Implications for future practice and research in the area of late-life chemical dependency treatment will be summarized.

## SESSION 730 (SYMPOSIUM)

### EXPLORING GERIATRIC HEALTH CARE TRANSITIONS: NURSING ASSESSMENTS

Chair: *D.F. Mahoney, School of Nursing, MGH Institute of Health Professions, Boston, Massachusetts*

Discussant: *M. Henderson, School of Nursing, MGH Institute of Health Professions, Boston, Massachusetts*

Gerontologists have been charged to better illustrate and address the needs of older adults during significant transition points over their life course. This symposium presents four studies designed to increase understanding of issues involved at key transition points across the spectrum of U.S. health care settings and addresses providers, prescribers, and family caregivers. Both qualitative and quantitative research methods are represented. Mahoney will begin the symposium by presenting data from a content analysis of gerontological nurse practitioners' perceptions of issues that arise during prescription transition points across a variety of settings. Second, Rosenbloom-Brunton will focus on older adults' transitioning from home to the acute care hospital setting and report on her study of family caregivers' perceptions of facilitators and barriers to their involvement in their loved ones care during hospitalization. Third, Kelly will report on the practical findings from testing a minimum data set of communication items as a handoff tool to improve older adult's transitions from the skilled nursing facility to the acute care hospital. Fourth, Palan Lopez will address a final transition point moving into palliative care. Her study tests a theory of uncertainty based on Mishel's model of uncertainty with surrogate decision makers for nursing home residents with dementia to better understand how the model's tenets may guide care at this very difficult time. Finally, Henderson will lead the panel in a discussion of the implications these studies hold for policy, practice, and nursing care.

### PRESCRIBING TRANSITION POINTS: GERONTOLOGICAL NURSE PRACTITIONERS' PERSPECTIVES

D.F. Mahoney, E. Ladd, *School of Nursing, MGH Institute of Health Professions, Boston, Massachusetts*

As attention turns towards better understanding of issues that arise related to older adult's transitions across geriatric health care settings, the need to reconcile medications has surfaced as a key component. Despite practice and policy standards supporting reconciliation and coordination of drug therapy upon relocation from one setting to another, problems remain. The purpose of this study was to explore, through qualitative research, the perceptions of Gerontological Nurse Prescribers (GNPs) to assess their understanding of the issues that arise during prescription transition points. Two focus groups (n=15) were conducted by the authors at a national meeting of GNPs with a content analyses of their responses. Results revealed key issues related to the type of setting, variations in physicians' practice patterns, Medicaid/formularies, institutional "drug deals", family demands, packaging policies, and sample usage. GNPs provided a multi-faceted role that addressed transition barriers in a steadfast manner

### AIDING TRANSITIONS FROM HOME TO ACUTE CARE - NURSE/FAMILY CAREGIVER PARTNERSHIP

D. Rosenbloom-Brunton, *MGH Institute of Health Professions, Boston, Massachusetts*

Family members have critical knowledge about older adults admitted to acute care settings from home or long term care. Yet little is known about the barriers and facilitators of family participation in the older adult's inpatient care. To gain further understanding of their potential to inform caregiving, fifteen caregivers of older adults admitted to an urban teaching hospital were interviewed to identify concerns and potential for participating more in their family member's care. Content analysis revealed three themes that give clarity to barriers and facilitators for family participation: partnership, therapeutic relationships, and environment. These themes are exemplified by nurses working closely with the patient and family in a partnership, listening and being present to establish a therapeutic relationship, and providing a calm, unhurried environment, to support participation. Findings suggest the need for development and testing of interventions that promote cooperation between family caregivers and nurses through a family-centered care approach.

### TESTING A MODEL OF UNCERTAINTY IN DECISION MAKERS FOR NURSING HOME RESIDENTS WITH DEMENTIA

R. Lopez, A.J. Guarino, *MGH Institute of Health Professions, Charlestown, Massachusetts*

Uncertainty is a considerable barrier for surrogate decision makers (SDMs) to transition nursing home residents with dementia to palliative care. We assessed the direct and indirect effects of (a) Perceived Self-Efficacy, (b) Structure Providers, and (c) Stimuli Frame on Uncertainty from Mishel's Theory. Participants (N = 156) were SDMs for nursing home residents with dementia who completed a survey designed to measure the theory's constructs. Results of the path analysis indicated that both Perceived Self-Efficacy ($\beta$ = -.24, p < .01) and Structure Providers ($\beta$ = -.24, p < .01) explained 13% of the Uncertainty variance (p < .01). Higher levels of Structured Providers and Perceived Self-Efficacy had direct effects on lower levels of Uncertainty. There were no statistically significant indirect effects on Uncertainty. The re-specified model suggests that health care providers may attenuate SDMs Uncertainty by providing social support, credible information, and increasing SDMs' perceived-self efficacy for decision making.

### STANDARDIZED COMMUNICATION TOOL FOR HANDOFF COMMUNICATION FROM A SKILLED NURSING FACILITY TO AN ACUTE CARE HOSPITAL

N.A. Kelly[1], A. Bonner[2], T.A. O'Malley[3], *1. MGH IHP, Boston, Massachusetts, 2. Massachusetts Department of Public Health, Boston, Massachusetts, 3. Partners Continuing Care, Boston, Massachusetts*

Research into older adults' transitions of care between skilled nursing facilities (SNF) and acute care hospital settings is a key priority (Naylor and Keating, 2008). The Joint Commission has identified safe handoff communication as a national safety goal. However, there is no established standard of care involving such communication nor agreement upon the "minimum data set" needed for good communication. In response we developed, in concert with caregivers from both the SNF and acute care settings, a standardized communication tool containing mutually agreed upon key elements of communication. We present the findings from the development and initial pilot testing of this tool between one skilled nursing facility and one tertiary care hospital. Preliminary findings show improved communication of the key elements.

## SESSION 735 (PAPER)

## FINDING SUPPORT: FRIENDSHIP, FAMILY AND RELIGION

### AN ASSESSMENT TOOL FOR IDENTIFYING DEMENTIA CAREGIVER RESOURCES, VULNERABILITIES AND SERVICE NEEDS

E. Marziali, L. McCleary, *Baycrest, Toronto, Ontario, Canada*

Objectives: The aim of this study was to, 1) examine a battery of questionnaires for assessing the personal resources and vulnerabilities of family caregivers of persons with dementia (Alzheimer or other); and 2) determine allocation of services according to assessment of caregiver needs. Methods: A cross-sectional survey design was used to obtain dementia caregiver responses to questionnaires that focused on caregiver stress response, self-efficacy, physical/mental health status, personality and social support. Two hundred and thirty-two caregivers of family members with dementia were recruited. Data were collected by trained graduate and senior undergraduate allied health students. Results: Descriptively the sample was similar to that reported in most studies of dementia caregivers. Regression analysis showed that a personality factor (neuroticism) explained over 20% of the variance in caregiver mental health status and depression. With caregiver distress levels associated with different domains of care recipient disability as the dependent variables, personality and self-efficacy accounted for 15% to 17 % of the explained variance. Interpretation of individual score levels on each measure was linked to possible service needs. Conclusions: The results suggest that measures of personality factors, self-efficacy, mental health status, and distress response could be used for determining the combined service needs of caregivers and care recipients. Identifying levels of stress response according to separate domains of care recipient disability adds specificity to determining caregiver service needs. This individualized assessment approach could insure allocation of multi-component service programs that have been shown to be effective in sustaining caregiver role functions.

### COMPASSION FATIGUE IN INFORMAL CAREGIVERS

J. Day, *Nursing, Duke University, Durham, North Carolina*

**Background**: Compassion fatigue is a concept used with increasing frequency within the nursing and health care literature. Several scholars have defined compassion fatigue, but there is no commonly accepted definition. Compassion fatigue is often used synonymously with *caregiver burnout, secondary traumatic stress*, and *vicarious traumatization*. These concepts appear frequently in the fields of sociology and psychology however, there is little empirical research on compassion fatigue in the nursing literature. **Methods**: The Schwartz-Barcott and Kim hybrid model of concept development was used to analyze and redefine compassion fatigue based on existing empirical evidence. **Findings**: Compassion fatigue for informal caregivers is an experience of individuals in emotional relationships caring for individuals who are suffering. Compassion fatigue arises when the informal caregiver is unable to fulfill the desire to relieve the suffering of the care recipient. This disjunction causes the informal caregiver to feel helpless, apathetic, and withdrawn from the caregiving situation and may place the care recipient at risk for abuse, neglect, and premature admission to a nursing home. **Conclusions**: Research is needed to better understand the impact of compassion fatigue on informal caregivers, to identify informal caregivers at risk for compassion fatigue, and to provide an empirical basis for developing nursing interventions for caregivers experiencing compassion fatigue.

### MARRIAGE AND BIOLOGICAL RISK: EXAMINING THE QUANTITY AND QUALITY OF MARITAL RELATIONSHIPS

C.J. Donoho[1], E. Crimmins[1], T. Seeman[2], *1. University of Southern California, Los Angeles, California, 2. University of California, Los Angeles, Los Angeles, California*

Substantial evidence indicates that social relationships play a significant role in health outcomes ranging from catching the common cold to mortality. The health benefits experienced by married adults are well documented and are thought to reflect stable access to social, emotional, and tangible support. However, marital status does not account for the quality of marital relationships or the duration of time spent in and out of marital relationships. Duration and quality may interact such that long high-quality relationships may be salutary and long low-quality relationships may be detrimental. Using data from two waves of the Survey of Midlife in the US (N = 1024; age range: 35-86) we model the relationship between marital quality (global satisfaction, support, strain) and duration with a 17-marker index of cumulative biological risk with four sub-indices (inflammatory, cardiovascular, metabolic, and neuroendocrine). Controlling for age, regression analyses indicated that compared to continuously married men, never married and remarried men had more cumulative risk factors, respectively. Never married women had more inflammatory risk factors than continuously married women. For women with a history of disruption, longer disruptions were related to higher levels of inflammatory risk, but this was attenuated with the addition of marital quality 10 years earlier. Among the continuously married, higher marital quality was associated with lower biological risk for women, but not men. The present study elucidates the psychosocial and physiological mechanisms through which marriage affects health outcomes and disease processes.

### DISCUSSION OF INPATIENTS' RELIGIOUS AND SPIRITUAL CONCERNS DURING HOSPITALIZATION

J.A. Williams[1], D. Meltzer[2], V. Arora[2], G. Chung[3], F.A. Curlin[3], *1. Pritzker School of Medicine, University of Chicago, Chicago, Illinois, 2. Section of Hospital Medicine, Department of Medicine, The University of Chicago, Chicago, Illinois, 3. Section of General Internal Medicine, Department of Medicine, The University of Chicago, Chicago, Illinois*

Background: Religious physicians are much more likely to discuss religion and spirituality (R/S) issues with patients, but little is known about which patients desire and engage in discussions about religious and spiritual issues. Methods: We examined data from the University of Chicago Hospitalist Study, which gathers sociodemographic and clinical information from all consenting general internal medicine patients at the University of Chicago Medical Center. Primary outcomes were whether or not patients desired to have their religious or spiritual concerns addressed while hospitalized, whether or not anyone talked to them about religious and spiritual issues, and which member of the health care team spoke with them about these issues. Primary predictors were religious attendance, trying hard to carry one's religious beliefs over into other dealings in life, and self-rated spirituality. Results: Forty-one percent of inpatients desired, and 32% reported having, a discussion of R/S concerns while hospitalized. Some (20%) desired a conversation but did not have it, and 11% did not desire a conversation yet had it anyway. Religious patients and those experiencing more severe pain were more likely both to desire and to have discussions of spiritual concerns. Patients who discussed R/S concerns were more likely to be extremely satisfied with their medical care (74% vs. 63%, OR 1.7, 95%CI 1.4-2.0), regardless of whether or not they had wanted such discussion to occur. Conclusions: Many patients welcome conversations about R/S. Discussing R/S concerns with patients may improve their assessment of their hospital stay.

## SESSION 740 (SYMPOSIUM)

### IMPROVING HEALTH BY TRANSITIONING CARE OF OLDER ADULTS IN RURAL ARKANSAS THROUGH TELEHEALTH

Chair: *A. Overton-McCoy, UAMS-Texarkana Regional Center on Aging, Texarkana, Arkansas*
Discussant: *K. Shea, Arizona State University, Phoenix, Arizona*

This session will demonstrate how the transition of care within the geriatric population in rural Arkansas has impacted healthcare outcomes. Arkansas is a rural state, in which a large percentage of older adults reside with chronic illnesses. Arkansas is categorized as having an above average population of those 65 years of age and older. Arkansas also ranks in the top five states for older residents with chronic illnesses. Arkansas has implemented programs for the rural senior population that utilize advanced healthcare technology to increase healthcare access and improve health outcomes. The objective of this symposium is to bring together the collection of programs that have utilized technology for health benefits in acute care settings, primary care settings, and the private homes' of older adults. Healthcare in rural settings is limited, often to the extent specialty care is non-existent in many of the most outlying rural areas. Rural emergency rooms often lack the neurologists needed to diagnose strokes and facilitate the appropriate treatment. Older adults in rural areas may not have transportation to travel the required distance to see a geriatrician in a metropolitan area. Rural older adults have gained the ability to self-manage chronic diseases from home with the assistance of advancing technology. The programs identified herein demonstrate that an older adults can receive access to quality specialized healthcare regardless of their residency in a rural areas. Telehealth technology demonstrates the ability to increase healthcare accessibility. Telehealth technology provides positive health outcomes.

### THE ARKANSAS AGING INITIATIVE PROMOTING A HEALTHIER LIFE FOR ARKANSAS SENIORS: USING TECHNOLOGY TO INCREASE ACCESS AND AUGMENT AND EXPAND GERIATRIC WORKFORCE

C.J. Beverly, R.E. McAtee, *College of Nursing, University of Arkansas for Medical Sciences, Little Rock, Arkansas*

Arkansas is one of five states with the highest rates of chronic illnesses in the nation and the highest stroke death rate. The state's top two causes of mortality are heart disease and cancer. Further, Arkansas is a predominantly rural state, with 84% of its 75 counties classified as rural or nonmetropolitan, and 55 (73%) classified as medically underserved. And with respect to workforce, Arkansas is experiencing one of the worst physician and nurse shortages in the country. We will discuss strategies the Arkansas Aging Initiative has employed to have a better prepared geriatric workforce and to expand and augment the current workforce throughout the state. Increased access to interdisciplinary geriatric care for patients living in rural parts of the state will also be presented.

### ONE LINK, MANY LIVES: OUTCOMES OF A RURAL TELESTROKE PROGRAM

J. Hall-Barrow, T. Benton, T. Imus, S.G. Keyrouz, *Center for Distance Health, University of Arkansas for Medical Sciences, Little Rock, Arkansas*

Arkansas SAVES (Stroke Assistance through Virtual Emergency Support) improves emergency care for stroke patients in the rural state of Arkansas through telemedicine. This program helps rural emergency rooms diagnose stroke patients and improve their outcomes through real-time, interactive video. Telemedicine unites remote neurologists in real-time with rural stroke patients on an around-the-clock basis, creating a virtual environment where rural patients can seek the level of care afforded to patients at urban medical centers. This program has increased the administration of tPA among rural populations that lacked access to emergency neurological care prior to telemedicine collaboration. Through training, public awareness, and quality control, Arkansas SAVES continues to grow and improve with reducing response times by 50% since the project's pilot phase.

### GERIATRIC TELEMEDICINE: TRANSITIONING CARE TO OLDER ADULT'S RURAL COMMUNITIES

A. Overton-McCoy, M.S. Bishop, *UAMS-Texarkana Regional Center on Aging, Texarkana, Arkansas*

Southwest Arkansas has one of the highest percentages of populations of individuals that are 65 years of age and older within both the state of Arkansas and within the nation. Health services and geriatric expertise are limited within this area of the state. It is vital to explore proficient methods to increase geriatric clinical services to rural Southwest Arkansas while allowing this population to stay within their own communities. Through telemedicine services a plan was formulated to increase access to geriatric specialty care in a cost effective manner to older adults who live in the rural communities in south Arkansas. The telemedicine services will allow an extension of geriatric interdisciplinary care and educational services to these rural areas in a holistic manner. Telemedicine can provide services to long-term facilities with access to geriatric specialties without the patient being discharged from the facility.

### HOME MONITORING THROUGH TELEMEDICINE TO IMPROVE CHRONIC DISEASE MANAGEMENT OF MEDICARE BENEFICIARIES

K.A. Allen[1,2], L. Nelson[1,2], L. Russell[2], *1. Care Improvement Plus, Fort Worth, Texas, 2. XLHealth, Baltimore, Maryland*

Care Improvement Plus is a Medicare Advantage organization committed to delivering quality healthcare to Medicare beneficiaries. Care

Improvement Plus uses telemedicine in its implementation of preventive care, care coordination and disease management. Two specific programs are the PharmAssist Call Center and the 24-Hour Nurse Hotline. The PharmAssist Program is monitored by specialized pharmacists available 24/7 to answer beneficiaries' medication questions. The 24-Hour Nurse Hotline is available 7 days a week to assist members in understanding health concerns, locating health providers, and seeking appropriate after hour care. A third use of telemedicine is the placement of real-time monitored cardio scales in homes of high risk cardiac patients. This session will present the cumulative implementation of these telemedicine programs regarding patient outcomes and access to care. Additional information will be presented in how these programs are successful in assisting in beneficiary disease self-management and improving medication compliance.

## SESSION 745 (PAPER)

## PHYSICAL FUNCTION AND REHABILITATION

### EFFECTS OF WEIGHT LOSS, EXERCISE, OR COMBINED ON PHYSICAL FUNCTION IN FRAIL, OBESE OLDER ADULTS

D.T. Villareal[1,2], S. Chode[2], N. Parimi[2], D. Sinacore[2], T. Hilton[3,2], C. Qualls[1], K. Shah[3,2], *1. University of New Mexico School of Medicine - New Mexico VA Health Care System, Albuquerque, New Mexico, 2. Washington University School of Medicine, St Louis, Missouri, 3. University of Rochester School of Medicine, Rochester, New York*

BACKGROUND. Although obesity causes frailty in obese older adults by exacerbating the age-related decline in physical function, appropriate treatment is controversial. METHODS. We conducted a 1-year randomized-controlled trial to evaluate the independent and combined effects of weight loss and exercise on physical function, body composition, and QOL in 107 obese (BMI≥30 kg/m2) older (≥65 yrs) adults. They were randomized to Diet-only, Exercise-only, Diet+Exercise, and Healthy-Lifestyle (HL) groups. RESULTS. Ninety-four (87%) participants completed the study; adherence was 82% for diet and 81% for exercise interventions. Diet-only and Diet+Exercise induced weight loss (-10%), whereas Exercise-only and HL maintained weight (-0.5%) (between-group P<.05). Exercise-only and Diet+Exercise improved (27-34%) muscle strength, whereas Diet-only and HL maintained strength (1%) (P<.05). Although Diet-only and Exercise-only improved (11-15%) physical performance test (PPT) scores, Diet+Exercise improved (21%) PPT more than either intervention only (P<.05). Moreover, although Diet-only and Exercise-only improved (8-10%) VO2peak, Diet+Exercise improved (17%) VO2peak more than either intervention only (P<.05). Furthermore, Diet-only and Exercise-only improved (4-6%) functional status questionnaire (FSQ) scores, but Diet+Exercise improved (10%) FSQ more than Diet-only (P<.05). Diet-only decreased (-6%) muscle mass while Diet+Exercise attenuated this decrease (-2%) (P<.05). Diet-only and Exercise-only improved obstacle course and limb stance scores (27-55%), while Diet+Exercise improved limb stance (160%) more than Exercise-only (P<.05). Exercise-only (14%) but not Diet-only improved gait speed. All interventions improved (10%) SF-36 physical subscale scores (P<.05). CONCLUSIONS. Combined weight loss and regular exercise provides greater improvement in physical function than either intervention only and is therefore recommended to treat obese older adults.

### DOES HISTORY OF FALLING PREDICT LENGTH OF STAY IN POST-ACUTE GERIATRIC REHABILITATION?

E. Martin[1], R. Dreher[2], S. Rochat[1], C.J. Bula[1], *1. University Medical Center, Lausanne, Switzerland, 2. Ensemble hospitalier de la Côte, Morges, Switzerland*

**Objectives:** To investigate the associations between falls before hospital admission, falls during hospitalization, and length of stay in elderly people admitted to post-acute geriatric rehabilitation. **Method:** History of falling in the previous 12 months before admission was recorded among 249 older persons (mean age 82.3±7.4 years, 69.1% women) consecutively admitted to post-acute rehabilitation. Data on medical, functional and cognitive status were collected upon admission. Falls during hospitalization and length of stay were recorded at discharge. **Results:** Overall, 92 (40.4%) patients reported no fall in the 12 months before admission; 63(27.6%) reported 1 fall, and 73(32.0%) reported multiple falls. Previous falls occurrence (one or more falls) was significantly associated with in-stay falls (19.9% of previous fallers fell during the stay vs 7.6% in patients without history of falling, P=.01), and with a longer length of stay (22.4 ± 10.1 days vs 27.1 ± 14.3 days, P=.01). In multivariate robust regression controlling for gender, age, functional and cognitive status, history of falling remained significantly associated with longer rehabilitation stay (2.8 days more in single fallers, p=.05, and 3.3 days more in multiple fallers, p=.0.1, compared to non-fallers). **Conclusion:** History of falling in the 12 months prior to post acute geriatric rehabilitation is independently associated with a longer rehabilitation length of stay. Previous fallers have also an increased risk of falling during rehabilitation stay. This suggests that hospital fall prevention measures should particularly target these high riskpatients.

### MUSCLE FUNCTION AND FUNCTIONAL PERFORMANCE IN ASSISTED LIVING RESIDENTS AFTER PARTICIPATION IN A QUANTITATIVE PROGRESSIVE EXERCISE REHABILITATION PROGRAM

C. Montgomery[1], N. Fisher[2], C.V. Granger[3], M.R. Tomita[2], *1. SUNYAB School of Nursing, Buffalo, New York, 2. SUNYAB Department of Rehabilitation Science, Buffalo, New York, 3. SUNYAB Department of Rehabilitation Medicine, Buffalo, New York*

An 8-week quantitative progressive resistance exercise rehabilitation (QPER) program was investigated to determine muscle function (strength, endurance) and functional performance (6-minute walk distance, stair climb time) changes in assisted living (AL) residents. Forty-five AL residents, mean age = 85.6±6.1 years, were randomized to either QPER (EX, n=30) or C (n=15). All participants were tested at pre and post-intervention, and then 6 months after cessation of exercise. Tests included maximal isometric strength and endurance of the quadriceps and hamstrings, 6-minute walk distance and stair climb time. After 8-weeks, three participants had dropped from EX and none from C. The post-test results showed that EX had significant increases in quadriceps (50%) and hamstring (77%) strength, quadriceps (103%) and hamstring (1382%) endurance, 6-minute walk distance (7%) and stair climb time (3%), while C had significant decreases in strength (11% and 14% for quadriceps and hamstrings, respectively), endurance (27% and 54%, respectively), 6-minute walk distance (7%) and stair climb time (13%). At 6 months follow-up, the group sizes were 20 in EX and 10 in C. However, EX was still significantly above baseline for quadriceps (76%) and hamstring (95%) strength and endurance (76% and 136% for quadriceps and hamstrings, respectively) and maintained their stair climb time. C had continual decreases in strength and endurance. Their stair climb time was significantly worse (24%, p<.01). In conclusion, QPER is an effective resistance training program for assisted living residents that may be used to help this population age in place instead of transferring to a nursing home.

### GETTING HOME: A NATIONAL STUDY OF VARIATION OF OUTCOMES OF COMMUNITY BASED HIP FRACTURES

N. Leland[1], J. Bynum[2], P.L. Gozalo[1], V. Mor[1], T. Wetle[1], J.M. Teno[1], *1. Center for Gerontology and Health Care Research, Brown University, Providence, Rhode Island, 2. Dartmouth College, Hanover, New Hampshire*

Returning to independent living is an important goal of hip fracture rehabilitation. This study examined state variation in discharge location and time to return home between those discharged to an inpatient rehabilitation facility (IRF) or skilled nursing facility (SNF). Discharge location and time from hospital discharge to spending 30 days at home was examined among Medicare Beneficiaries 75 and older at the time of first hip fracture without a nursing home (NH) stay in 180 days prior to the fracture between 1999 and June 1 2007. State variation in discharge location and median time to getting home are reported. A Cox Proportional Hazard model was used to examine the timing of transition to home among person discharge to SNF and IRF after adjustment for age, gender, race, and measures of comorbidity. Of 1,210,366 patients, 64.5% did not have a NH stay prior to hip fracture. Of these, 77.4% were discharged home with a stay of at least 30 days. There was state variation in use of IRF ranging from 4.86% (Oregon) to 56.36% (Arkansas). Among those discharged to SNF or IRF (n=626,005), 81% were discharged home varying between 75.82% (Louisiana) and 86.40% (Connecticut). Using a Cox Proportional Hazard model, state use of IRF (states in the lowest quintile: Hazard Ratio 1.17, 95% CI 1.11-1.13) and race are significant in predicting getting home (Blacks: Hazard Ratio 0.78, 95% CI 0.77-0.80). There is a significant geographic and racial variation in discharge location and the time to get home after a hip fracture.

## SESSION 750 (SYMPOSIUM)

### SERIOUS GAMES FOR HEALTHY AGING: BEYOND THE BRAIN GAME REVOLUTION

Chair: *E. Crimmins, University of Southern California, Los Angeles, California*
Co-Chair: *C. Winstein, University of Southern California, Los Angeles, California*
Discussant: *E. Zelinski, University of Southern California, Los Angeles, California*

Confronting declines in cognitive and physical function that accompany aging has provided motivation for the development of serious games. Games are enjoyable, motivating, and engaging which can encourage regular and consistent use and in turn foster benefits. Recent developments in simulations and video games for cognitive functions, physical exercises and rehabilitation of those aging with and into disability has attracted the attention of scholars and consumers. The objective of this session is to synthesize information that has motivated these developments and some of the promising cognitive, physical, and rehabilitative outcomes associated with the use of interactive games for healthy aging. Each talk highlights a unique aspect of technology or outcomes targeting specific applications. First, with an increase in the number of older adults living with long-standing neurological disorders, including multiple sclerosis, there is significant impetus for the development of computer aided and telehealth interventions targeting cognitive rehabilitation. Second, in response to recent federal physical activity guidelines promoting the importance of balance, strength and aerobic training to prevent falls, commercially available video game exercises are now being used to improve balance and reduce falls in community dwelling older adults. Finally, while innovations in movement-controlled video games offer the rehabilitation community a novel and motivating alternative to traditional rehabilitation exercises, technological modifications to commercial games are needed to better address balance and falls for individuals aging with and into disabilities. Technological advances include modified game devices that now integrate a clinician interface, impairment assessment, intervention and outcomes.

### COGNITIVE DIFFICULTIES AND THE ROLE OF COGNITIVE REHABILITATION IN ADULTS AGING WITH NEUROLOGICAL DISEASE

I.R. Molton, M.P. Jensen, *University of Washington School of Medicine, Seattle, Washington*

It is well known that the prevalence of disabling neurological conditions, such as vascular dementia, increases with age. What is less well known is that, due to recent medical advances, the population of older adults living with long-standing neurological disorders such as Multiple Sclerosis and neuromuscular disease has also increased dramatically. These individuals represent a rich intervention target for cognitive rehabilitation, and particularly for computer aided and "telehealth" interventions that can be adapted to accommodate for physical limitations and other barriers to accessibility. This talk will review common cognitive difficulties associated with several "early onset" neurological disabilities. We will also discuss the intersection of these cognitive limitations with normative brain changes in aging, and will discuss potential areas for computer and game aided cognitive rehabilitation in this population.

### ACTIVE VIDEO GAME EXERCISE TO IMPROVE BALANCE AND REDUCE FALLS IN COMMUNITY-DWELLING OLDER ADULTS

J. Rowland, *University of Illinois at Chicago, Chicago, Illinois*

Falls and fall-related injuries pose serious threats to the health and wellbeing of older adults. Recently-published federal physical activity guidelines highlight the importance of balance, strength, and aerobic training to prevent falls. Despite the overwhelming evidence that exercise-based programs can prevent falls in older adults, this cohort remains one of the most sedentary of any age group. One novel approach to increasing physical activity in the general population in recent years has been active video games such as the Wii Fit Plus. Results will be presented in the following context: Hypothesis 1: Older adults participating in the Wii Fit Plus exercise program will demonstrate: a) Increased dynamic and static standing balance; b) Increased lower extremity strength and flexibility; c) Improvements in cardiorespiratory fitness; Hypothesis 2: Older adults participating in the Wii Fit Plus exercise program will decrease their fear of falling as evidenced by scores on the Falls Efficacy Scale.

### INTERACTIVE GAME-BASED REHABILITATION TOOLS: NEVER TOO OLD TO PLAY

S. Flynn, B. Lange, C. Chang, B.L. Kennedy, A.". Rizzo, *University of Southern California, Los Angeles, California*

Innovations in movement-controlled interface devices and video games offer a novel and motivating alternative for promoting activity and rehabilitation across the lifespan. Already, game industry giants are developing products (Nintendo Wii, Sony EyeToy, Microsoft Xbox Project Natal) that aim to capitalize on the billion-dollar exergaming (and potential rehabilitation) market. The focus of this presentation is on our lab's efforts in two areas: 1) the modification and use of these existing commercial systems, such that meaningful rehabilitation activity can be implemented, and 2) the creation of new games and interface devices that are specifically designed to enhance rehabilitation activities based on good science. We will present our work on the design/evaluation of VR systems that aim to enhance balance and reduce falls in those aging with disabilities and demonstrate prototypes that allow a clinician to modulate game parameters for optimizing assessment and intervention based on an individual's level of impairment.

# SESSION 755 (POSTER)

## TECHNOLOGY, EDUCATION AND ATTITUDES

### “ADAPTING TO HEALTH CHANGE” PROGRAM ENCOURAGES MEDICAL STUDENT EMPATHY FOR SENIORS

T. Teasdale[1,2], S.A. Mapes[1], K. Sharp[1], J. Belzer[1], *1. Dept of Geriatric Medicine, University of Oklahoma, Oklahoma City, Oklahoma, 2. Veterans Affairs, Oklahoma City, Oklahoma*

Healthcare students often have (or absorb) societal conceptions and misconceptions about the aged. A required “Adapting to Health Change” program was started for medical students in 1997 to teach empathy for changes older adults often encounter during the aging process, and to develop common sense methods for helping patients cope with diminishing abilities. To date, 1,987 MS2s have participated in the two-hour simulation training. The unique element of this very interactive experience becomes evident when students assume “roles” in the form of diagnoses and are outfitted with appropriate gear to experience the associated impairments. Simulation equipment includes ear plugs, vision impairment glasses, gait and digit restrictors, wheelchairs, canes, walkers and (yes) adult diapers. A short introduction to physical impediments to normal aging is presented. Older volunteers and staff then guide the students through five stations designed to mimic ADL/IADL tasks. A final thirty minute debriefing period with a geriatrician reinforces learning points and encourages discussion. With their “limitations,” students found that managing pills, dressing, eating, etc rate high in difficulty and many question how elderly patients with physical deficiencies are able to handle the tasks (qualitative data). Quantitative data reveal that 64% “strongly agree” with four positively worded, Likert-like evaluative questions regarding the exercise; another 26% endorsed “agree”, resulting in a 90% approval rating. Medical school faculty and students are pleased with this required experience. A newly developed, exportable version (ASiST) appropriate for multiple disciplines will be available for exploration at the poster.

### LEARNING BY LIVING © RESEARCH PROJECT: A CULTURE OF AGING LIVED BY MEDICAL STUDENTS

M. Gugliucci, *University of New England, Biddeford, Maine*

Medical schools do not prepare future physicians in how to work effectively with elders living in nursing homes. With the inherent shortage of trained physicians in caring for older adults, the Learning by Living © project has proven to be a unique and effective approach for medical student learning. Learning by Living © applies a Qualitative Ethnographic and Biographic research design that involves “admitting” medical students into nursing homes to live the life of an elder nursing home (NH) resident for 2 weeks – 24 hours per day – complete with a medical diagnosis and “standard” procedures of care (toileting, transferred, bathed, fed (pureed foods, etc). The researcher (medical student) observes a “culture” while living within an environment (nursing home). Data collection by students (18 have been admitted thus far) occurred through journal writing during pre-fieldwork (preparing to enter the nursing home); fieldwork (while living in the nursing home); and post-fieldwork (upon leaving the nursing home). Data analysis is conducted using manual qualitative research analysis and N-VIVO software. Sample themes include communication, dependence, routine, and care. Findings are enduring: increased understanding of touch and eye contact; increased ability to communicate using voice tone, body language, word usage and cadence; consciousness regarding the role of routine in a person’s life and connecting heart to heart with older adults regardless of disease or degree of frailty. Learning by Living © has provided a precedent to help our society change our negative views of nursing homes and instill new models of care.

### INTERPROFESSIONAL QUALITY IMPROVEMENT (QI) LEARNING ACTIVITY FOR SENIOR NURSING STUDENTS AND GERIATRIC MEDICINE FELLOWS

G.T. Buhr[1], M. Yanamadala[1,4], J. Gontarz[2], B.J. Dotson[2], S.M. Williams[2], E.S. McConnell[3,4], *1. Medicine/Geriatrics, Duke University Medical Center, Durham, North Carolina, 2. Watts School of Nursing, Durham, North Carolina, 3. Duke University School of Nursing, Durham, North Carolina, 4. Durham VA, GRECC, Durham, North Carolina*

Both medicine and nursing endorse practice-based improvement and interprofessional teamwork and collaboration as core competencies – skills best learned through hands-on experiences. Geriatric medicine fellows and senior pre-licensure nursing students were introduced separately to the FOCUS- Plan-Do-Study-Act QI model. As part of a year-long longitudinal long-term care experience, the fellows developed QI proposals with mentoring from faculty. Two teams of 2 fellows and 19 nursing students were formed. The nursing students used literature to modify the proposals. The fellows collaborated with subgroups of the nursing students in two 6-week blocks to collect baseline data, carry out a small test of change, and collect post-intervention data. The experience was evaluated with pre and post self-efficacy surveys of QI and interprofessional collaboration skills (6 point scale); the QI proposals were assessed using the QI Proposal Assessment Tool (QIPAT-7); and the fellows’ knowledge was assessed with the QI Knowledge Application Tool (QIKAT). Baseline data showed the nurses were more confident in their ability to collaborate with other professionals (5.46) and locate strong evidence (4.56), yet less confident in constructing a run chart (3.57) and data analysis plan (4.11). The fellows felt confident in formulating a data collection plan (5.5), yet less confident in carrying out the data analysis plan (4.25). At baseline, the fellows needed practice-based improvement training as assessed by the QIKAT (1.7 out of 5). This innovative learning activity targeted fellows and nursing students, offering opportunities to improve teamwork and collaborative skills. This approach should be applicable to other groups of learners.

### GERIATRIC GEMS AND PALLIATIVE PEARLS: SPACED EDUCATION AND CASE STUDY RESULTS

J. Larson, N. Ahmed, M. Hossain, *Dept. of Medicine, The University of Texas- Health Science Center- Houston, Houston, Texas*

Purpose: Spaced education has proven to be an efficient delivery system (Kerfoot, Kearney et al. 2009; Kerfoot 2010) for improving resident knowledge (Spitzer 1939; Roediger and Karpicke 2006). The purpose of this study was to determine if spaced education improved patient management measured by Design-A-Case. Design-A-Case is a web-based application that focuses on patient management through an interactive case. Methods & Materials: Six PGY02 residents from internal medicine were assigned to cohort A, the intervention group, and three PGY02 family medicine residents were assigned to cohort B, the control group. Cohort A received spaced education in the form of weekly “sound byte,” emails that contained a catchy teaching point and a link to a website containing more information on the topic. At the end of the month, both cohorts were asked to complete a topic related Design-A-Case. The grader was blinded to the participant’s cohort and scored the case based on the answers originally developed with the case. Results: A simple linear regression model was used to analyze the data. The model was fit to the response variable with the intervention as a covariate on both the adjusted and unadjusted scores. The adjusted score demonstrated a significant intervention effect p=0.0316. Conclusions: Spaced education contributes to resident’s ability to correctly answer a geriatric case and may assist residents in managing geriatric patients as evidence by improved scores when completing a Design-A-Case. Limitations: Due to the small sample size, findings cannot be generalized beyond this group.

### IMPROVING RESIDENT SAFETY IN NURSING HOMES: PRIORITIES FOR FRONT LINE STAFF EDUCATION

V. Shier[4], S. Taylor[1], D. Saliba[2,3,1], *1. RAND Corporation, Santa Monica, California, 2. VA Greater Los Angeles GRECC, Los Angeles, California, 3. UCLA/JH Borun Center for Gerontological Research, Los Angeles, California, 4. Pardee RAND Graduate School, Santa Monica, California*

Purpose: In the past two decades, hospitals have made substantial efforts to implement patient safety practices and reduce medical errors, while efforts to adopt these safety principles in the nursing home (NH) setting have lagged behind. Educational curriculum for front line NH staff will support the translation of safety research into actual improvements in NH care. We sought stakeholder input on prioritization of resident safety improvement issues which will be addressed through the development of educational materials. Methods: We assembled a national NH patient safety expert panel that included representatives from multiple stakeholder groups. Panelists were provided with a listing of existing guidelines and safety targets set by national groups. They individually ranked their top five resident safety issues based on the criteria: a) the process to outcome link is defined enough to develop educational material, b) front line staff play a significant role in the resident safety issue, c) prevalence, and d) impact on patient outcomes and quality of life. During the meeting, panelists discussed importance of each of the issues and then again ranked their top five issues post-meeting. Results: Panelists identified falls prevention and recognition and response to changes in resident's condition as the top two resident safety needs in NHs in both pre-meeting rankings and post-meeting rankings. Some panelists ranked pressure ulcer prevention, while others felt the topic had already received significant national attention. Pain detection and management and drug safety were also ranked as top resident safety needs.

### SIMULATION: A MILLENNIAL INNOVATION FOR ENHANCING GERONTOLOGICAL CONTENT IN A NURSING CURRICULUM

L.M. Underwood, *University of Utah - Hartford Center, Salt Lake City, Utah*

An eleven fold increase this century in those over 65 exceeds the growth rate of the entire population. With changing demographics of the American population, nurses will likely spend a majority of their practice time caring for older adults with diverse and complex health needs. Nursing educators are often challenged to provide quality student learning experiences to support student interest and competence in caring for older adults without the addition of a separate geriatric course. This poster presents a millennial approach to integrating gerontology nursing education standards within a set curriculum. High-fidelity simulation provides a flexible, interactive, clinical learning approach to addressing the care needs of older adults. Educators are only limited by their imagination as simulation, unlike the clinical setting, can duplicate real-life clinical experiences for all students. Simulation provides opportunities for incorporating communication, psychomotor skills, clinical judgment, teamwork, and delegation while addressing the individualized physical, safety, and psychosocial needs of the patient and family. Through pre-briefing and debriefing sessions, nursing educators can take advantage of teachable moments to clarify content and to discuss legal, ethical, and social issues unique to the care of older adults and their families. Time and resource investments in high-fidelity simulation enhance gerontological nursing education by providing real-life simulated clinical learning experiences in a safe, risk-free environment. Simulation conveys respect for the well being of older patients and their families as recipients of compassionate and competent care rather than as task focused opportunities for student skill practice in the clinical setting.

### EFFECTS OF HEALTH INFORMATION TECHNOLOGY ADOPTION ON QUALITY OF CARE AND PATIENT SAFETY IN US ACUTE CARE HOSPITALS

B. Seblega[1], N.J. Zhang[1], T. Wan[1], L. Unruh[1], R. Hillestad[2], *1. PhD in Public Affairs, University of Central Florida, Orlando, Florida, 2. Pardee RAND Graduate School, Santa Monica, California*

Healthcare information technology (HIT) is advocated by policy makers, healthcare providers, consumer groups, as well as concerned organizations such as Institute of Medicine (IOM), Agency for Healthcare Research and Quality (AHRQ), and The Leapfrog Group as critical in addressing the growing crisis in the healthcare industry. The primary objective of this research is, therefore, to understand the relationship between the adoption of HIT in US acute care hospitals and two important healthcare outcomes: patient safety and quality of care. This is accomplished by building a regression model with HIT adoption as an independent variable and patient safety and quality of care as dependent variables after controlling for organizational and environmental factors. We used data from 2006 obtained from three different sources: AHA Annual Survey, HIMSS Analytics Annual Survey and HCUP data set. The findings indicate that in 2006 the adoption of HIT was positively associated with for-profit ownership, HMO penetration, urban location, small size, and membership of an Integrated Delivery System (IDS). In addition, the relationship between the adoption of HIT and the two healthcare outcomes, i.e. patient safety and quality of care, was found not to be statistically significant. On the other hand, patient safety is positively associated with for profit ownership, urban location, and higher proportion of Medicare and Medicaid patients, while quality of care is positively associated with higher proportion of Medicare and Medicaid patients and negatively associated with higher full-time equivalent of personnel and IDS membership.

## SESSION 760 (SYMPOSIUM)

### ADDRESSING THE CHALLENGES OF RURAL AGING: INNOVATIONS AND SOLUTIONS FROM RURAL AMERICA

Chair: *J. Crittenden, Center on Aging, University of Maine, Bangor, Maine*

Discussant: *D. Wagner, Towson University, Towson, Maryland*

Rural elders face numerous challenges to healthy aging including a traditional lack of access to critical transportation, healthcare, and support services. Rural older adults have poorer health outcomes and are more economically disadvantaged when compared to their urban counterparts. However, despite these challenges there exists a growing body of evidence that rural elders and community members are developing innovative and creative ways to manage what may appear to be unmanageable situations. As our rural communities continue to confront the many challenges of scarce resources, increasing level of need among residents, and an increase in older residents, it is imperative that rural researchers, advocates and educators share the homegrown success stories of innovation and solutions. This symposium will examine how rural elders are able to overcome and compensate for the lack of resources and the barriers that challenge independent living in nonmetropolitan areas, to support their own healthy aging. Symposium presentations will explore specialized topics and research on developing informal support networks, empowering rural older adults to manage their own health, innovative strategies for engaging older adults in identifying the needs of their communities, and best practices for providing support and outreach to rural grandfamilies. Presentations will highlight the use of innovation and the potential for rural areas to serve as an incubator, in particular, for community-based and person-centered solutions that support healthy and active aging.

### LESSONS IN TRANSITION EXPERIENCED BY CUSTODIAL GRANDPARENTS IN A RURAL SUPPORT GROUP

T.L. Peterson[1,2], M.R. Crowther[1,2], *1. University of Alabama, Tuscaloosa, Alabama, 2. Center for Mental Health and Aging, Tuscaloosa, Alabama*

An estimated 2.4 million Americans are custodial grandparents. Though raising a grandchild can have benefits, custodial grandparenting can pose substantial stress. For rural residents, the strain and rewards of custodial grandparenting is compounded by limited resources, increased risk of poverty, and geographic isolation. This paper will describe transitions experienced by custodial grandparents attending a rural support group. Data collection involved co-facilitators observing a monthly support group. The findings revealed five areas of transitions: managing household finances, navigating community-based organizations, adjusting to rural school systems, discussing adolescent issues, and integrating technology in the home. Support groups can benefit rural custodial grandparents. Learning Objectives After attending this session, participants will be able to: 1. Identify characteristics of rural custodial grandparents 2. Discuss key transitions faced by rural custodial grandparents 3. Identify strategies to improve support to rural custodial grandparents

### COACHING AGING RURAL COMMUNITIES TOWARD HEALTH

R. Oscarson, S. Stluka, *South Dakota State University, Brookings SD, South Dakota*

The overall goal of this USDA (NIFA)-funded project was that rural South Dakota communities become contexts which support healthy behaviors and provide adequate access to services. Using a professional coaching model, this project enabled middle-aged and older adults in nine rural communities to prioritize local health concerns, identify desired health outcomes, and mobilize resources to reach designated outcomes. Coaching was delivered to rural communities by SD Extension Educators who first received coach training. We will provide an overview of the project's objectives, the coaching process, community goals and efforts, lessons we learned, and future directions.

### STRATEGIES FOR REMAINING INDEPENDENT WHILE GROWING OLDER IN RURAL COMMUNITIES

A.L. Cohen, *Sociology and Gerontology, Miami University, Oxford, Ohio*

Older adults aging in rural areas face challenges accessing both informal assistance from family, friends, and others and paid formal assistance from a variety of professional agencies. Despite these challenges, many rural elders have been able to construct and maintain support networks that assist them with the daily struggles of growing older in rural communities. This paper presents results from a exploratory and descriptive qualitative study which took place in rural the Appalachian Region of North Carolina. One-on-one Interviews were conducted with 16 rural elders, eight support network members and staff from six HCBS provider agencies. Results reveal strategies that rural elders use to create and sustain support networks as they develop physical challenges that limit their ability to care for themselves.

### USING PICTURES TO INDEX HEALTH CONCERNS AMONG RURAL ECONOMICALLY DISADVANTAGED ELDERS IN LOUISIANA

K. Kopera-Frye[1], M.A. Alibeli[1], K.Y. Griffin[1], M. Hall[2], F. Fathi[3], *1. Dept. of Gerontology, Sociology, & Political Science, University of Louisiana at Monroe, Monroe, Louisiana, 2. University of Louisiana at Monroe, Psychology Dept., Monroe, Louisiana, 3. University of Louisiana at Monroe, Biology Dept., Monroe, Louisiana*

Visual qualitative research methods are gaining more popularity among the social sciences. Photovoice involves individuals identifying and representing issues of interest through photos. This technique has primarily been used among diverse populations (e.g., homeless, Native Americans, etc.) by researchers to involve the public as stakeholders in community issues. This technique is ideally suited for use with economically and/or socially disadvantaged individuals in representing their concerns and giving them a voice. Additionally, the technique is invaluable for use with individuals who have limited education or literacy problems who might otherwise have difficulty in expressing their needs in verbal or written formats. Economically disadvantaged rural elders in northeast Louisiana were given cameras and asked to photographically represent regional and health issues and concerns they had for their community. Analyses indicated that this was a powerful technique which provided very informative data among the poorest, isolated elders in the US.

## SESSION 765 (SYMPOSIUM)

### ADMINISTRATION ON AGING'S COMMUNITY INITIATIVES: WHERE WE HAVE BEEN AND WHERE WE ARE GOING

Chair: *L. Alecxih, The Lewin Group, Falls Church, Virginia*
Co-Chair: *J. Lugo, Administration on Aging, Washington, District of Columbia*
Discussant: *C. Gruman, The Lewin Group, Falls Church, Virginia*

Funded by the US Administration on Aging (AoA), the Aging and Disability Resource Center (ADRC), the Community Living Program, and the Veteran's Directed Home and Community Based Services initiatives support the goals that state agencies, community organizations and advocates are working toward in many states - to make the long term service system more person-centered and consumer-directed, make it easier for people with disabilities of all ages to access information about home and community-based alternatives to institutional services, and support people of all income levels to live independently in their communities. Inspired by demonstrated state success and codified in the Older Americans Acts 2006 reauthorization, these programs support states in identifying innovative, cost-effective strategies for modifying state long term care systems, designing flexible programs that respond to the needs and preferences of individuals and families, and targeting services to individuals at risk for institutional placement so they can remain at home or in community settings. The AoA and the Centers for Medicare & Medicaid Services originally funded 43 states and territories to develop ADRC programs between 2003-2005. In September 2009, $11 million in grants were awarded to 49 states and territories to implement or expand the ADRC Program. Including several state representatives on the panel will allow for a diverse exchange of information about the strengths and weaknesses of the current system including: agency adaptation to consumer directed models, leveraging existing resources, managing systems faced with extreme fiscal constraints, evaluation strategies, and outcomes for all three programs.

### CASH AND COUNSELING: EVALUATION METHODOLOGY AND POLICY ISSUES

N. Shugrue[1], J. Robison[1], I.C. Reed[1], M. Morton[2], *1. University of Connecticut Center on Aging, Farmington, Connecticut, 2. Connecticut Department of Social Services, Hartford, Connecticut*

Connecticut has implemented its cash and counseling program through two caregiver respite programs. An independent longitudinal evaluation was conducted via telephone interview. Caregivers choosing cash and counseling and a comparison group of caregivers choosing traditional agency services are surveyed at baseline, three months, and program discharge. Topics include satisfaction, unmet need, depression, caregiver burden and benefits, and likelihood of nursing facility admission. Twenty months of data show few statistically significant differences between the groups. Both groups report high satisfaction and similar levels of depression, burden and unmet need. A large percentage of both groups indicate a high likelihood that the care recipients would have entered a nursing home without these services. After piloting the program, permanent expansion of cash and counseling program features were instituted legislatively. However, the state budget crisis threatens the progress made in enhancing individual autonomy and choice.

### MASSACHUSETTS' ADRCS AS COMMUNITY FOCAL POINTS FOR LONG TERM SERVICES AND SUPPORTS SYSTEMS CHANGE: EXPERIENCES AND POLICY IMPLICATIONS

H. Johnson, R. Palombo, *MA Executive Office of Elder Affairs, Lunenburg, Massachusetts*

Massachusetts was one of the pioneer states to implement the AoA-funded Aging and Disability Resource Center grant in 2003. Since then, the ADRCs continue to evolve as a central focal point for new State initiatives and systems change activities. ADRCs are now integrally linked to the implementation of the AoA-funded Community Living Program and Veterans-Directed Home and Community-Based Care initiatives, and are also pilot sites for two State-funded initiatives: Long Term Care Options Counseling and Consumer-Directed Service Options within State-funded home care programs. Within the two pilot projects, consumer satisfaction and agency experience data is being tracked and analyzed to support statewide expansion. This session will highlight both the practical program level lessons learned through data analysis as well as state-level policy implications in furthering the role of the ADRCs serving as community catalysts for systems change and consumer-directed options.

### THE VETERAN DIRECTED HOME AND COMMUNITY BASED SERVICE PROGRAM: A MULTI-STATE PERSPECTIVE

C. Gruman, L. Alecxih, *The Lewin Group, Falls Church, Virginia*

Beginning in 2008, the AoA began a collaboration with the Veterans Health Administration to serve Veterans of all ages at risk of nursing home placement. The VDHCBS program provides veterans the opportunity to self-direct their long-term supports and services. Veterans enrolled in this program have the opportunity to manage their own flexible budgets, to choose a mix of goods and services that best meet their needs, and to hire and supervise their own workers. Currently, 341 veterans are receiving services through the new program. This session will explore experiences with consumer direction, outcomes, programmatic challenges, individual case studies, and future directions.

## SESSION 770 (SYMPOSIUM)

### AN UPDATE ON RESEARCH ABOUT HIRING RELATIVES AS CAREGIVERS: MOVING BEYOND MYTHS AND ASSUMPTIONS

Chair: *L. Simon-Rusinowitz, School of Public Health, University of Maryland, College Park, Maryland*

Co-Chair: *K.J. Mahoney, Boston College, Chestnut Hill, Massachusetts*

Discussant: *P. Doty, US DHHS ASPE, Washington, District of Columbia*

While some publicly-funded community-based personal care programs have allowed consumers to hire relatives as caregivers for decades, this policy option remains controversial. Policy decisions about this option have often been based on myths and assumptions; however, there is a growing body of research to better inform these decisions. With increased interest in consumer-directed services (CD), which allow consumers to choose their caregivers, an option to hire relatives as caregivers has become a key part of personal care services. Some option supporters view it as one solution to worker shortages and possibly a means of cost saving. The Cash and Counseling Demonstration and Evaluation (CCDE), provided extensive data and experience from three CD state Medicaid programs. The majority of CD consumers hired relatives as caregivers. Research about the California In-Home Supportive Services (IHSS) program, a large, long-standing CD personal care program with many paid family workers, can also inform policymakers about this option. Lori Simon-Rusinowitz will begin the symposium with an historical overview about this policy option and a synthesis of CCDE findings on this topic. Next, Sara Moorman will present new findings about the association between CCDE family caregiver pay status and the consumer/ caregiver relationship. Robert Newcomer will present IHSS program findings comparing relatives and non-relatives as providers among racial/ethnic groups, including health care use by caregiver group. Kathryn Kietzman will present findings from a study about the perceived choice that ethnically diverse IHSS family caregivers have in assuming paid roles. Lori Simon-Rusinowitz and Pamela Doty will be discussants.

### PAYING FAMILY CAREGIVERS: ASSOCIATIONS WITH STRAIN AND CAREGIVER/CARE RECIPIENT RELATIONSHIP QUALITY

S.M. Moorman[1], D.M. Loughlin[2], L. Simon-Rusinowitz[2], *1. Sociology, Boston College, Chestnut Hill, Massachusetts, 2. University of Maryland, College Park, Maryland*

While most family caregivers in the United States are unpaid, in states where it is implemented, the Cash and Counseling program allows Medicaid recipients to pay family caregivers. We investigate the associations among pay status, caregiver strain, and caregiver/care recipient relationship quality in a sample of 1,699 family caregiver/care recipient dyads residing in Arkansas, Florida, and New Jersey. We find that paid family caregivers report higher levels of relationship quality than do informal family caregivers. This association is mediated by level of strain: Paid family caregivers report lower levels of strain than do informal family caregivers, and lower strain is associated with better relationship quality. However, the paid and unpaid groups are comprised of different relations. For example, grandchildren and spouses each comprise about 7% of informal caregivers, but among paid caregivers, 15% are grandchildren and less than 1% are spouses. We discuss implications for policy.

### HIRING RELATIVES AS CAREGIVERS: WHAT DID WE LEARN FROM CASH AND COUNSELING?

L. Simon-Rusinowitz[1], D.M. Loughlin[1], K.J. Mahoney[2], *1. University of Maryland, College Park, Maryland, 2. Boston College, Chestnut Hill, Massachusetts*

While some publicly-funded community-based personal care programs have allowed consumers to hire relatives as caregivers for decades, this policy option remains controversial. Policy decisions about this option have often been based on myths and assumptions; however, there is a growing body of research to better inform these decisions. This presentation will discuss early research about this topic and findings from the Cash and Counseling Demonstration and Evaluation (CCDE), a consumer-directed option in which the majority of consumers hired relatives. We will synthesize findings on this topic from the original CCDE; a secondary analysis of family and non-family caregivers in Arkansas; focus groups with paid workers in three CCDE states; and a two-state case study of stakeholders' views about this policy option. This presentation will provide background information for the other presentations.

### ALLOWING SPOUSES TO BE PAID HOME CARE PROVIDERS: EFFECTS ON MEDICAID-FUNDED SERVICE USE AND COSTS

R. Newcomer[1], T. Kang[1], P. Doty[2], *1. University of California, San Francisco, California, 2. Office of the Assistant Secretary for Planning & Evaluation, Washington, District of Columbia*

Analyses investigated whether recipients in California's In Home Supportive Service (IHSS) program who used a spouse as a paid personal assistance provider had at least comparable health care use and nursing home placement outcomes compared to recipients having other paid providers. Medicaid claims and assessment data for all recipients age 18 or older in 2005 (n=330,392) were used. There was no financial disadvantage and some advantages to Medicaid in terms of lower average Medicaid expenditures and fewer nursing home admissions, and similar hospitalization rates comparing recipients having spouses, parents, or other relatives as paid IHSS providers with recipients using non-relatives. This argues in favor of honoring the recipient's and family's preference for such providers. This research was supported by the Office of the Assisted Secretary for Planning & Evaluation, Department of Health & Human Services; and the National Institute for Disability and Rehabilitation Research.

### PAID FAMILY AND FRIEND CAREGIVERS: HAVING A CHOICE TO PROVIDE CULTURALLY RESPONSIVE CARE

K.G. Kietzman[1,2], A. Benjamin[3], R.E. Matthias[3], *1. Partners in Care Foundation, San Fernando, California, 2. Health and Aging Policy Fellow, Washington, District of Columbia, 3. UCLA School of Public Affairs, Los Angeles, California*

This mixed method study focuses on the experiences of family and friend caregivers who are paid to provide personal care services to Medicaid-eligible disabled and elderly through California's In-Home Supportive Services program. While much discussion about consumer-directed care has focused on the self-determination of care recipients, this study investigates the perceived choice that related caregivers have in assuming these paid caregiver roles. We find that caregiver perception of choice is rooted in a wide array of cultural and gender norms and is quite variable, both within and across cases. Among this ethnically diverse sample of family and friend caregivers, these norms appear to influence their initial assumption of the paid caregiver role and the ways in which they subsequently construct and manage these care arrangements. The findings indicate that related caregivers are often well positioned to provide culturally appropriate care that is responsive to both care recipient and caregiver preferences.

## SESSION 775 (PAPER)

## ECONOMICS OF AGING

### THE EFFECTS OF MEDICARE DRG PAYMENTS ON THE QUALITY OF HOSPITAL CARE

J. Huang, G.A. Jensen, *Wayne State University, Detroit, Michigan*

BACKGROUND: Concerns about the soaring costs of Medicare have dominated recent discussions about how to reform this program so that spending is better-controlled. Medicare's hospital DRG payment schedule is an important tool legislators have available to limit program spending. Yet, little is known about the nature of the gradient between hospital care quality and what Medicare pays for specific DRGs. This study examines this issue empirically for hospital stays with a diagnosis of pneumonia, which are relatively common under Medicare. METHODS: We first develop a theoretical model, which generates the key hypothesis — that Medicare payment is positively related to quality. We then test this empirically by estimating the relationship between Medicare's DRG payment for pneumonia and the quality of pneumonia care, using seven different clinically-recognized measures of quality. Data on more than 3000 U.S. acute hospitals observed in 2007 fiscal year from the "Hospital Compare" data base maintained by CMS are used for this analysis, and were linked with data from the Healthcare Cost Report Information System, the Hospital Impact File maintained by CMS, and the Area Resource File maintained by the Bureau of Health Professions. RESULTS AND IMPLICATIONS: Six of the seven quality measures are positively and significantly related to Medicare's pneumonia DRG payment. Although we find a gradient between payment and quality, it is rather small for most measures examined. This is evidence that hospital quality of care for pneumonia admissions would suffer, but only by a very small amount, if Medicare DRG payments for pneumonia were reduced.

### TAPPING HOME EQUITY FOR LONG-TERM CARE EXPENSES: EVIDENCE FROM THE HEALTH AND RETIREMENT SURVEY

D.L. Redfoot, L. Walker, *AARP Public Policy Institute, Washington, District of Columbia*

Home equity is the primary asset for most older homeowners, but most evidence indicates that it is a largely untapped asset. Most older homeowners indicate no interest in accessing their home equity to use as an income supplement – as evidenced by the fact that less than 2 percent of older homeowners have taken out a reverse mortgage despite the high proportion of elderly homeowners who are income-poor and housing-rich. Older homeowners appear more willing to tap home equity to deal with major life crises. In particular, some evidence suggests that older homeowners are using home equity to pay for long-term care services, especially for private pay options like assisted living. In this presentation, we use data from the Health and Retirement Survey (HRS) to explore the extent to which elderly homeowners draw-down home equity and other assets after experiencing major changes in disability status. Using the panel nature of the HRS, we can observe how household asset levels (we look at a number of asset measures) change before and after the incidence of a major change in disability status. We can observe changes in housing location and housing choices (such as housing offering services) associated with a significant increase in disability. From these patterns, we can begin to infer the degree to which older homeowners are using home equity to fund long-term care services. Such research can begin to fill important policy-related knowledge gaps about the degree of private financing of long-term care.

### RELATIVE INCOME AND MOONLIGHTING BY PRE-AND POST-RETIREMENT AGE WORKERS

L.H. Nitz, *Political Science, University of Hawaii, Honolulu, Hawaii*

A stream of research in behavioral economics attempts to trace satisfaction and its correlates to either absolute income level or a comparison of own income to that of some reference group. By one interpretation, work is one of the sources of life satisfaction. The absolute income hypothesis suggests that people with less income are more likely to moonlight to raise their aggregate income. The relative income hypothesis suggests that having low income relative to an important reference group is a motivator for additional work—for the purpose of restoring a sense of equity. The 2004 panels of the Survey of Income and Program Participation has 15857 individuals near and post retirement age. For most of these individuals there are twelve repeated measures of consecutive months of employment data. Dividing the population into older and younger cohorts allows a test of relative income predictions. The GEE estimate of the older group (-4.15, p.10) shows lower moonlighting income than the younger group. The interaction between income ratio and age is -2,69 (p.035) indicating that younger workers moonlight more when relative income is low, but older workers do not. Absolute income has a positive association with moonlighting, contrary to expectation.

## SESSION 780 (SYMPOSIUM)

### THE NATIONAL BALANCING INDICATOR CONTRACT: MEASURING STATES' EFFORTS TOWARD A PERSON-CENTERED SYSTEM OF LONG-TERM SERVICES AND SUPPORTS

Chair: *O. Urdapilleta, IMPAQ International, LLC, Columbia, Maryland*
Co-Chair: *T. Moore, Abt Associates Inc., Cambridge, MA, Massachusetts*
Discussant: *S.A. Flanagan, Westchester Consulting Group, Washington, District of Columbia*

As states reform their long-term support systems (LTSS), there is a growing interest in determining their successes in attaining and maintaining person-centered care, and an adequate mix in the provision of Medicaid institutional care and community-based services and related expenditures. These issues continue to be critical components of federal and state level discussions on the current state of and future for LTSS. This symposium presents the work of the National Balancing Indicator Contract (NBIC) assisting the Centers for Medicare & Medicaid Services (CMS) and states to develop a set of indicators measuring states' progress in offering LTSS. Papers highlight the development and testing of LTSS indicators achieved through collaboration with CMS, 10 State Profile Tool (SPT) grantees, a technical expert panel and a wide range of key stakeholders. Despite substantial research efforts studying LTSS, there remains a gap in the availability of common indicators to measure measures of individual choice, control and access of the full array of LTSS. The first paper presents a conceptual framework and principles that guided the NBIC in the development of the LTSS indicators. The second paper describes the processes through which a larger set of indicators were narrowed, operationalized, and vetted by CMS, SPT grantees, national experts and stakeholders and the third paper presents results of baseline data collected from SPT grantees.

### SUSTAINABLE AND PERSON-CENTERED: THE LONG-TERM SUPPORT SYSTEM OF THE FUTURE

T. Moore[1], O. Urdapilleta[2], M. Eastman[1], D. Walker[1], *1. Abt Associates Inc., Cambridge, Massachusetts, 2. IMPAQ International, LLC, Columbia, Maryland*

The National Balancing Indicator Contract (NBIC) is assisting the Centers for Medicare & Medicaid Services (CMS) to develop and test national indicators to assess states' efforts to attain a person-driven long-term support systems (LTSS). Part of the work of the NBIC has been to develop a vision and conceptual framework for the future of the LTSS, in order to subsequently measure the performance of that system. The NBIC's framework represents a departure from former notions of "rebalancing," in that we focus more broadly on a system that is "person-driven", provides full access to community alternatives, and is responsive to the needs and desires of individuals. In this presentation the conceptual framework for the NBIC will be presented, along with findings that indicated the need to develop an entirely new set of performance indicators to estimate state-level efforts at achieving person-centered, sustainable LTSS.

### DEVELOPING INDICATORS TO MEASURE PROGRESS AND SUCCESS IN LONG-TERM SUPPORT SYSTEMS

L. Clark[1], T. Moore[2], O. Urdapilleta[1], M. Eastman[2], *1. IMPAQ International, LLC, Columbia, Maryland, 2. Abt Associates Inc., Cambridge, Massachusetts*

The National Balancing Indicator Contract (NBIC) was tasked with determining a set of indicators that specify states' progress in providing a person-centered, person-driven long-term supports system (LTSS). The LTSS indicators were developed through extensive review and selection of existing measures in conjunction with the development of novel measurements. Each indicator was then vetted through a panel of technical experts, representatives from State Profile Tool (SPT) Grantees, and stakeholders ranging from national associations to consumer advocates. The final set of indicators represents the LTSS principles of sustainability, self-determination, community integration, shared accountability, prevention, and coordination and transparency. This paper presents the rationale for selection, key measurement concepts, data specifications, and operationalization of each indicator. In addition, challenges faced by the NBIC in developing the set of indicators and strategies used to overcome these challenges will be discussed.

### RESULTS FROM THE NATIONAL BALANCING INDICATOR CONTRACT BASELINE DATA COLLECTION

O. Urdapilleta[1], T. Moore[2], L. Clark[1], M. Eastman[2], *1. IMPAQ International, LLC, Columbia, Maryland, 2. Abt Associates Inc., Cambridge, Massachusetts*

The National Balancing Indicator Contract (NBIC) collaborated with 10 State Profile Tool (SPT) grantees to collect data on states' progress in offering person-centered, person-driven long-term supports and services (LTSS). Data from SPT grantee states were collected on 15 LTSS indicators, representing sustainability, self-determination, community integration, shared accountability, prevention, and coordination and transparency. Indicators were classified per type of indicator: a baseline measure of current state in the corresponding LTSS indicator or a benchmark/target measure of states' progress toward optimal LTSS characteristics. This paper will first present the scoring methodology for selected indicators, followed by state-specific results. Issues relevant to across-state comparisons will then be discussed, including the feasibility and validity of comparing LTSS given variance in Medicaid state policies and other state characteristics influencing long-term care delivery. Finally, implications for future data collection efforts using the LTSS indicators will be discussed.

## SESSION 785 (SYMPOSIUM)

### TRANSITIONING NURSING HOME RESIDENTS DURING HURRICANE EMERGENCIES—THE MORBIDITY AND MORTALITY CONSEQUENCES OF EVACUATION VERSUS SHELTERING IN PLACE DURING HURRICANES KATRINA, RITA, GUSTAV AND IKE

Chair: *D. Dosa, Medicine, Brown University, Providence, Rhode Island, Providence VAMC, Providence, Rhode Island*
Co-Chair: *K. Hyer, University of South Florida, Tampa, Florida*
Discussant: *H. Moody, American Association of Retired Persons, Washington DC, District of Columbia*

The devastating effects of Hurricane Katrina on the Gulf Region highlighted the importance of emergency preparedness and cast a sharp media spotlight on nursing homes (NHs) such as St. Rita's that failed to evacuate their residents prior to the storm. Four weeks later, the most resounding image of Hurricane Rita was the burned out bus where 23 NH evacuees lost their lives. To date, a central unanswered question remains. Is it better to evacuate or shelter in place when it comes to frail NH residents? In this symposium we will present 5 papers designed to answer this question. Using data from the last four major Gulf hurricanes (Katrina, Rita, Gustav, and Ike), Paper 1 will present the cumulative consequences of the storms on NH residents in terms of mortality, hospitalizations, and functional decline. Paper 2 will present mental health consequences from the storms. Paper 3 will address qualitative data from NH directors contrasting the preparedness for evacuations in 2005 versus 2008. Paper 4 will identify facility level predictors of the decision to evacuate. Finally, Paper 5 will identify the consequences of evacuation versus sheltering in place. Two discussants will participate in this symposium: Harry Moody is the Director of Academic Affairs for the American Association of Retired Persons (AARP) and Joe Donchess is the Executive Director of the Lousiana Nursing Home Association. After attending this activity, participants will have an understanding of the consequences of evacuation versus sheltering in place and will be able to define predictors of evacuation.

### THE MORTALITY AND MORBIDITY CONSEQUENCES OF HURRICANES KATRINA, RITA, GUSTAV, AND IKE ON NURSING HOME RESIDENTS

K. Hyer[1], D. Dosa[2], L.M. Brown[1], Z. Feng[2], K.S. Thomas[1], V. Mor[2], *1. School of Aging Studies, University of South Florida, Tampa, Florida, 2. Brown University, Providence, Rhode Island*

Introduction: Two hurricanes in 2005 (Katrina, Rita) later followed by two hurricanes in 2008 (Gustav and Ike) ravished the Gulf Coast. This paper compares and contrasts the mortality and morbidity of nursing home (NH) residents in the Gulf Region for all four storms. Methodology: We compare the 30 and 90 day mortality and morbidity rates (e.g. hospitalizations, functional decline) of NH residents exposed to the hurricanes and compare it with control data from the same NHs in the two years prior to the storm. Mortality, Hospitalization rate, and Functional decline outcomes were ascertained using data from either the Minimum Data Set (MDS) and/or Medicare claims. Results: Thirty and 90 day mortality, hospitalization rate, and functional decline increased ($p<0.05$) for all residents exposed to Hurricanes Katrina or Rita. By modeling Gustav and Ike we can compare the morbidity and mortality rates of 2008 storms to those of 2005.

### NEEDS OF NURSING HOME RESIDENTS FOR DISASTER MENTAL HEALTH SERVICES

L.M. Brown[1], K. Hyer[1], L. Polivka-West[2], *1. Aging and Mental Health Disparities, University of South Florida, Tampa, Florida, 2. Florida Health Care Association, Tallahassee, Florida*

A mixed-methods study was conducted to evaluate residents' pre- and post-hurricane mental health service use in Gulf region nursing homes (NHs). A questionnaire was administered to 258 NHs to identify residents' disaster mental health needs and staffs' interest and ability to provide services. In four subsequent focus group meetings with 22 NH administrators, underlying factors influencing residents' use of services were evaluated. Although most facilities provided some form of mental health care during normal operations, disaster-related mental health services were not routinely provided. Half of the respondents indicated interest in offering residents a pre-disaster, resilience-building intervention and also psychological first aid post-disaster. Approximately 10% indicated that they didn't have access to mental health clinicians to deliver disaster mental health interventions. Respondents felt that NH staff could be trained to deliver psychological first aid and in procedures for making referrals for follow-up evaluation.

### COMPARING NURSING HOME ADMINISTRATOR PERCEPTIONS OF EMERGENCY PREPAREDNESS BETWEEN HURRICANES KATRINA (2005) AND GUSTAV (2008)

D. Dosa[1,2], G. Blanchard[3], L.M. Brown[4], K. Hyer[4], V. Mor[1], *1. Medicine, Brown University, Providence, Rhode Island, 2. Providence VAMC, Providence, Rhode Island, 3. Saint Vincent's Hospital, Worchester, Massachusetts, 4. University of South Florida, Tampa, Florida*

Introduction: This paper qualitatively describes perceptions of Louisiana nursing home (NH) administrators (ADs) who experienced both Hurricanes Katrina (2005) and Gustav (2008) to elicit whether facility preparedness improved. Methodology: ADs who participated in a series of qualitative telephone interviews to evaluate their lessons learned from Katrina were contacted after Gustav to compare preparedness. Specifically, ADs were asked about issues with evacuation (e.g., transportation, injuries) and to rate their confidence with state assistance and their evacuation preparedness. Results: 16 of the 20 NHs that participated in 2005 agreed to be surveyed. Unlike Katrina, when only 45% evacuated, 100% evacuated before Gustav. Overall, ADs rated their confidence in preparedness for Gustav as a mean of 8.4 (range 5-10) – compared to 5.7 (range 3-8) for Katrina, a 47% improvement. Additionally, 80% reported improved collaboration with the state. Perception of improvement by ADs will be contrasted with outcomes data presented in Paper 1.

### PREDICTORS OF NURSING HOME EVACUATION—WHAT FACTORS DO NURSING HOME ADMINISTRATORS CONSIDER?

K.S. Thomas[1], D. Dosa[2], K. Hyer[1], L.M. Brown[1], Z. Feng[2], V. Mor[2], *1. School of Aging Studies, University of South Florida, Tampa, Florida, 2. Brown University, Providence, Rhode Island*

Introduction: This paper describes the predictors for nursing home (NH) evacuation for the four most recent hurricanes to affect the Gulf Region (Katrina, Rita, Gustav and Ike). Methodology: NHs were geocoded and the facility's distance from the storm's center was calculated at 24, 48, and 72 hours prior to landfall based on National Hurricane Center forecasts. Additional factors considered were the NHs elevation, and distance to the shoreline. Demographic factors and the facility-level rates of certain illnesses (e.g. heart failure, COPD, etc.) were also considered. All factors were placed in a multivariate Probit model. Results: The largest predictor of evacuation was the distance of the facility to the storm at 48 hrs (Z coefficient=-9.43; $p<0.005$). Being west of the storm at 48 hrs was predictive of sheltering in place (Z=-4.46; $p<0.005$). Patient demographics (e.g. race, gender, age) and the relative burden of illness were not predictive of the evacuation decision.

### ARE WE DOING THE RIGHT THING BY EVACUATING NURSING HOME RESIDENTS? THE EFFECT OF EVACUATION ON RESIDENT MORTALITY AND MORBIDITY

V. Mor[1], D. Dosa[1,2], L.M. Brown[3], K.S. Thomas[3], Z. Feng[1], K. Hyer[3], *1. Medicine, Brown University, Providence, Rhode Island, 2. Providence VAMC, Providence, Rhode Island, 3. University of South Florida, Tampa, Florida*

Introduction: This paper describes the effects of evacuation versus sheltering in place on nursing home (NH) residents during the last 4 major Gulf storms (Katrina, Rita, Gustav, and Ike) Methodology: Demographic variables (age, gender, race), patient level comorbidities (e.g. CHF, Cancer, COPD, Renal Failure, etc), and facility level variables (e.g. decision to evacuate, Medicaid rate, Payment mix, etc.) were considered in a Probit multivariate regression. An instrumental variable approach was utilized to control for biases related to unmeasured factors. Results: For both Hurricanes Katrina and Rita, the effect of evacuation independent of storm factors resulted in a statistically significant increase in death at 30 days (Z=2.88; p=0.004) that was greater than the effects of patient specific diagnoses such as CHF (Z=2.74; p=0.006) and Cancer (Z=2.29; p=0.02). Hospitalization rates were similarly affected by evacuation. Data from 2008 storms will be available this spring and will complete the analysis.

## SESSION 790 (POSTER)

## BIOLOGICAL SCIENCES POSTER SESSION

### SENESCENCE-RELATED FUNCTIONAL NUCLEAR BARRIER BY DOWN-REGULATION OF NUCLEO-CYTOPLASMIC TRAFFICKING GENE EXPRESSION

S. Kim, H. Kang, H. Choi, K. Lee, S. Park, *Biochemistry, Seoul national university College of medicine, Seoul, Seoul, Republic of Korea*

One of the characteristic natures of senescent cells is the hypo- or irresponsiveness not only to growth factors but also to apoptotic stress. In the present study, we confirmed the inhibition of nuclear translocation of activated p-ERK1/2 and NF-kB p50 in response to growth stimuli or LPS in the senescent human diploid fibroblasts. In order to elucidate the underlying mechanism for the senescence-associated hypo-responsiveness, we carried out the comparison study for gene expression profiles through microarray analysis. In consequence, we observed the vast reduction in expression of nucleo-cytoplasmic trafficking genes in senescent cells, when compared with those in young cells. Expression levels of several nucleoporins, karyopherin α, karyopherin β, Ran, and Ran-regulating factors were confirmed to be down-regulated in senescent HDFs by using RT-PCR and Western blot methods. Taken together, these data suggest the operation of certain senescence-associated functional nuclear barriers by down-regulation of the nucleo-cytoplasmic trafficking genes in the senescent cells.

## CIRCULATING RENIN ANGIOTENSIN SYSTEM BIOMARKERS AND COGNITIVE FUNCTION IN HYPERTENSION WITH COGNITIVE IMPAIRMENT

I. Hajjar[1,2,3], M. Hart[3], W. Milberg[1,4], L. Lipsitz[1,2,3], *1. Harvard Medical School, Boston, Massachusetts, 2. Beth Israel Deaconess Medical Centre, Boston, Massachusetts, 3. Institute for Aging Research, Hebrew SeniorLife, Boston, Massachusetts, 4. GRECC VA Boston Healthcare, Boston, Massachusetts*

Hypertension is associated with cognitive impairment especially in the executive function domain. Evidence from animal models suggests that the renin angiotensin system (RAS) plays a role in cognitive function. We aimed at studying the association between circulating markers of RAS and cognitive function in elderly hypertensives with early cognitive impairment. Participants (n=47, 71.2 years, 60% women, 28% African Americans, 86% on treatment) were enrolled in the antihypertensives and vascular, endothelial, and cognitive function (AVEC) trial. We measured plasma renin activity (PRA) and aldosterone at baseline. Those receiving antihypertensives had their medications tapered off (3-4 weeks). A blood specimen was collected during the baseline visit using standard procedure. Cognition was assessed using (executive clock draw (CLOX1), Hopkins Verbal learning Test (HVLT) and forward and backward Digit Span test (DST). After adjusting for demographics, education, body mass index and blood pressure, higher circulating aldosterone was associated with lower CLOX1 scores (beta=-0.2±0.1; p=0.04) and lower HVLT score (beta=-0.15±0.06, p=0.02). Further, aldosterone to PRA ratio was associated with lower HVLT score (beta=-0.09±0.04;p=0.02). Further adjustment to antihypertensives did not affect the results. DST was not associated with RAS biomarkers. This study suggests that greater RAS activity, reflected by higher biomarkers, is associated with worse executive cognitive function and memory in elderly hypertensives with early cognitive decline.

## ACTIVATION OF THE JAK/STAT SIGNALING PATHWAY AND CARDIOMYOCYTE RESPONSE TO OXIDATIVE STRESS

G. Azhar[1], A.M. Borras[2], X. Zhang[1,3], G.O. Johnson[1], J.Y. Wei[1,3], *1. Geriatrics, UAMS, Little Rock, Arkansas, 2. Harvard Medical School, Boston, Massachusetts, 3. CAVHS, GRECC, Little Rock, Arkansas*

Background: Cardiovascular disease is the number one cause of morbidity and mortality in the aging population. Oxidative stress-induced damage plays a central role in the pathogenesis of several cardiac diseases and the molecular response to oxidative stress is of increasing interest. We sought to determine whether members of the Janus kinases (JAK) and signal transducers and activators of transcription (STAT) family are activated in response to hydrogen peroxide and simulated ischemia-reperfusion in cardiac muscle cells. Methods: Rat primary cardiomyocytes and H9C2 cells were exposed to oxidative stress conditions mediated by using varying concentrations of hydrogen peroxide. A simulated ischemia-reperfusion chamber was also induced to the stress of ischemia and then reoxygenation. in primary cardiomyocytes. Results: Exposure to hydrogen peroxide resulted in a rapid and significant increase in tyrosine phosphorylation of JAK2, STAT1 and STAT3 in both H9C2 and primary cardiomyocytes. Simulated ischemia alone did not activate the JAK-STAT proteins, but ischemia followed by reperfusion caused rapid tyrosine phosphorylation of JAK2, STAT1 and STAT3. This phosphorylation was inhibited by catalase. The phosphorylated STAT1 and STAT3 bound specifically to the DNA cognate sequence known as the sis-inducible element (SIE). Inhibition of JAK2 decreased the phosphorylation of STAT3 but not STAT1. Conclusion: These results demonstrate that oxidative stress, especially reperfusion activates the JAK/STAT pathway in cardiomyocytes, via JAK2-STAT 3 signaling. The induced signaling via the JAK/STAT pathway may play an important role in cardiac cell injury or repair in hearts of older individuals who are more vulnerable to oxidative stress.

## ANTIOXIDANT EFFECT OF 4,4'-DIAMINODIPHENYLSULFONE AGAINST OXIDATIVE STRESS IN HUMAN DIPLOID FIBROBLASTS

S. Cho, J. Rhim, Y. Son, S. Lee, S. Park, *Department of Biochemistry and Molecular Biology, Seoul National University College of Medicine, Seoul, Republic of Korea*

4,4'-diaminodiphenylsulfone (DDS), an old antibiotic drug, is used in treating several dermatologic diseases, including Hansen's disease. Despite its long term use, the debate on its nature of antioxiative or prooxidative effects has been continued. In this study, we tested the effect of DDS as an antioxidant on paraquat (PQ) or hydrogen peroxide (H2O2)-induced oxidative stress in human diploid fibroblasts (HDFs). Preincubation of HDFs with DDS prevented the cytotoxic damages in a dose-dependent manner otherwise caused by PQ or H2O2-induced oxidative stress. . The specific effects of DDS in PQ or H2O2 treated HDFs are summarized as follows: a) in PQ-induced oxidative stress, DDS reduced the expression of NADPH oxidase 4 (NOX4) via inhibiting PQ-induced activation of protein kinase C (PKC), and also DDS effectively adjusted the PQ-induced abnormality in mitochondrial complex protein levels, membrane potentials and superoxide generation in HDFs; b) in H2O2-induced oxidative stress, DDS increased the levels of catalase (CAT), glutathione peroxidase (GPx) and glutathione reductase (GR) activities, and also the GSH/GSSG ratio, indicating the activation of glutathione system against oxidative stress. Taken together, it can be concluded that DDS can be a good antioxidant against PQ or H2O2-induced oxidative stress in HDFs in addition to its antibiotic function and might serve as a potential tool in prevention of oxidative stress-related pathologies.

## PREDICTORS OF 16α-HYDROXYESTRONE, AN ESTROGEN METABOLITE ASSOCIATED WITH LOWER BLOOD PRESSURE

C. Masi, S.A. Patel, L. Hawkley, J.T. Cacioppo, *University of Chicago, Chicago, Illinois*

We recently identified an inverse relationship between systolic blood pressure (SBP) and serum 16α-hydroxyestrone, a metabolite of 17β-estradiol, in postmenopausal women. Formation of 16α-hydroxyestrone is catalyzed primarily by the cytochrome P450 enzyme, CYP1A2. The goal of this study was to evaluate the relationships between known modifiers of CYP1A2 activity and serum 16α-hydroxyestrone in postmenopausal women. We hypothesized that dietary fiber from fruits and vegetables (a known inducer of CYP1A2) would be more positively associated with serum 16α-hydroxyestrone than dietary fiber from grains and legumes, which tend to have less soluble fiber. We used ordinal logistic regression to evaluate the cross-sectional relationship between dietary and demographic factors and serum 16α-hydroxyestrone concentration in a population-based sample of 42 postmenopausal women aged 55-69 living in Cook County, Illinois. Relative to dietary fiber from grains and legumes, dietary fiber from fruits and vegetables was associated with a greater log odds (B = 0.201, p = 0.036) of having a higher serum concentration of 16α-hydroxyestrone after adjusting for multiple covariates. In contrast, the log odds of having a higher serum concentration of 16α-hydroxyestrone was lower among African-American women (B = -2.300, p = .030) compared to white women. These results are consistent with previous studies demonstrating an inverse relationship between SBP and dietary fruits and vegetables and a positive relationship between SBP and African-American race. Further research is needed regarding dietary and behavioral factors that may influence $16\alpha$-hydroxyestrone production, as well as the potential mechanisms by which serum $16\alpha$-hydroxyestrone is associated with race.

### A SINGLE BOUT OF AEROBIC EXERCISE RESTORES THE ANABOLIC EFFECT OF MIXED FEEDING IN OLDER ADULTS

K.L. Timmerman, S. Dhanani, E.L. Glynn, C.S. Fry, M.J. Drummond, B.B. Rasmussen, E. Volpi, *Sealy Center on Aging, University of Texas Medical Branch, Galveston, Texas*

Skeletal muscle is resistant to the anabolic effects of both insulin and mixed feeding in older adults, in part due to endothelial dysfunction. Aerobic exercise restores the ability of insulin to induce vasodilation and stimulate muscle protein synthesis in older persons. However, it is unknown if it can also restore the anabolic response of muscle to mixed feeding. We used a randomized cross-over design to measure muscle protein kinetics (13C6-phenylalanine) and microvascular perfusion (contrast enhanced ultrasound) at baseline and during mixed meal ingestion (20g of essential amino acids + 35g of glucose) on 2 occasions: after rest or after a bout of aerobic exercise. We report preliminary data from 6 healthy, elderly subjects (age: 70±3 yr). Microvascular perfusion (Rest, basal: 0.48±0.18, meal: 0.45±0.21; Exercise, basal: 0.37±0.08, meal: 1.23±0.23 VI/sec) and mixed muscle protein synthesis (Rest, basal: 0.060±0.006, meal: 0.056±0.006; Exercise, basal: 0.055±0.004, meal: 0.072±0.009 %/h) increased ($P<0.05$) from baseline during mixed meal ingestion only after exercise, but not after rest. Amino acid delivery to the leg increased significantly ($P<0.05$) under both conditions (Rest, basal: 137±35, meal: 422±240; Exercise, basal: 129±15, meal: 664±107, nmol/min/100 ml leg), but the change was larger ($P<0.05$) after exercise. In conclusion, these preliminary data suggest that a prior bout of aerobic exercise restores the muscle protein anabolic effect of mixed feeding in older adults, possibly due to increased microvascular perfusion and amino acid delivery.

### THE SYSTEMIC CONSTRAINTS THEORY OF AGING: INTEGRATING EVOLUTIONARY AND MECHANISTIC APPROACHES

A.A. Cohen, *Groupe de Recherche PRIMUS, Centre Hospitalier Universitaire de Sherbrooke, Sherbrooke, Quebec, Canada*

The three current evolutionary theories of aging – Mutation Accumulation, Antagonistic Pleiotropy, and the Disposable Soma – all fail to adequately explain the diversity of lifespans and aging processes observed across species. There are many existing mechanistic theories, but no one has proposed a way to understand or integrate their relative importance or assess their roles. Here, I develop a theory of physiological systems that can be used to contextualize ideas such as allostatic load and homeostenosis. Many existing mechanistic theories are subsumed and integrated under this theory, including inflammation and free radical damage. The mechanistic idea is then extended to an evolutionary context, where it is proposed that macro-evolutionary forces such as inertia constraints and algorithm constraints may force trade-offs differentially on different taxa, such that within some taxa (such as mammals) aging rate and lifespan evolve as a result of trade-offs, but in other taxa (such as turtles) trade-offs are weak or non-existent. Macro-evolutionary patterns in aging and lifespan are thus attributed primarily to constraints, while micro-evolutionary patterns are attributed to natural selection and genetic drift according to the existing theories. This theory is the first to successfully integrate all levels of biological knowledge on aging, including biochemical, cellular, genetic, organismal, micro-evolutionary, and macro-evolutionary.

### HEALTHY AGING AND OBESITY RESISTANCE IN MICE LACKING THE CATALYTIC C BETA SUBUNIT OF PROTEIN KINASE A

L.C. Enns, H.B. Richards, K.L. Bible, W. Ladiges, *Comparative Medicine, University of Washington, Seattle, Washington*

Protein kinase A (PKA) plays a major role in the regulation of energy balance. Our previous studies showed that C57BL/6 mice lacking the $C\beta$ subunit of PKA ($C\beta$ null) are resistant to obesity, fatty liver and leptin insensitivity when fed a high calorie diet. We examined $C\beta$ null mice maintained on a regular diet, at 12 and 24 months of age. At 12 months, mutants had body fat percentages of 24% compared to 28% for WT females ($P=0.016$), and metabolic rates on average 7% higher in the mutants ($P<0.05$). At 24 months of age, 43% of WT littermates, but none of the mutants had body weights approaching 40% body fat. Healthy aging was observed in mutant hearts. At 24 months of age echocardiography showed that WT littermates had significantly higher Ea/Aa ratios, MPI, and fractional shortening and lower ventricular circulation times and aorta/left atrium ratios than $C\beta$ null mice. WT mice had enlarged hearts, 20% heavier than mutants ($P=0.024$). PKA cross talks with the AMPK (AMP-activated protein kinase) pathway, phosphorylating AMPK in response to leptin to stimulate fatty acid oxidation. Phosporylated AMPK also inactivates ChREBP, reducing transciption of enzymes involved in lipogenesis. We now have data to show that $C\beta$ null mice have increased levels of phosphorylated AMPK, and reduced levels of ChREBP, indicating that increased fatty acid oxidation and decreased lipogenesis through the AMPK pathway may be the mechanism by which PKA $C\beta$ disruption leads to obesity resistance and healthy aging.

### LONGEVITY AND METABOLISM OF SPONTANEOUS DWARF RAT (SDR)

T. Shinkai, S. Nomoto, *Tokyo Metropolitan Institute of Gerontology, Tokyo, Japan*

Spontaneous Dwarf Rat (SDR), a dwarf rat strain derived from Sprague-Dawley (SD) rats, is an experimental model for pituitary dwarfism and has growth hormone (GH) deficiency. The body weight of SDRs reduces to one-third that of normal SD rats. The mean lifespan of SDRs were 29.3 +- 3.3 months in male and 26.8 +- 5.3 months in female. They were increased by 20-40% in males and 10-20% in females, comparing to the reported longevity data of SD rats. Hormones involved in metabolism showed low levels in SDRs. For instance the concentration of GH was significantly lower in SDRs than in SD rats. Both IGF-1 and insulin levels were also decreased compared to SD rats. The concentration of thyroxin showed 70% reduction from SD rat level. The circadian rhythm of core temperature was higher in nighttime and lower in daytime in both rats, on the other hand average core temperature was lower in SDRs (37.0 C) than in SD rats (37.7 C). Moreover, using a computed tomography scanner we found that SDRs were rich in subcutaneous fat. Our findings suggest that decrease metabolism may prolong the lifespan of SDRs, and that subcutaneous fat may regulate metabolism by prevention of heat diffusion. Therefore, SDRs, with different characters in longevity, metabolism and endocrinology, are considered to have a possibility of a new animal model for an aging research.

### SERUM GAMMA-GLUTAMYL TRANSFERASE HAS AN EFFECT ON HYPERTENSION PROGRESSION AMONG COMMUNITY-BASED ELDERLY POPULATION IN KOREA

J. Jeong[1], K. Hong[2], D. Kim[1,3], *1. Institute of Aging, Hallym University, Chuncheon, Gangwon, Republic of Korea, 2. Dept. of Internal Medicine, Hallym University, Chuncheon, Gangwon, Republic of Korea, 3. Dept. of Social and Preventive Medicine, Hallym University, Chuncheon, Gangwon, Republic of Korea*

Serum gamma-glutamyl transferase(GGT), clinical marker for excessive alcohol consumption and oxidative stress, is implicated in the development and progression of hypertension. This study was preformed to identify whether serum GGT level is associated with progression of hypertension among community-dwelling population in Korea. The study subjects were participants enrolled in Hallym Aging Study, population based cohort aged 45 or over constructed in 2004. Follow-up survey was conducted in 2007. They were invited to a general hospital and were measured for clinical tests. Structured questionnaire was used to collect information on socio-demographic factors, past medical history, and behavioral factors by trained interviewers. We analyzed whether GGT level at baseline have an effect on progression of hypertension in follow-up survey using multivariate logistic regression analysis. Out of 647 men and women participated in both baseline and follow up study, 230 subjects without hypertension based JNC-7 criteria at baseline survey were enrolled in the final analysis. Among 230 subjects without hypertension at baseline survey, 115 subjects (50%) were found to develop new hypertension at the follow-up survey. 3 year cumulative incidence of hypertension according to GGT level classified by quartile were 35.6, 52.6, 54.7, and 57.1%. After adjusting for potential covariates, the adjusted odds ratio [aOR] comparing Q3 and Q4 to Q1 of baseline GGT for the risk of progression of hypertension were 2.59(95% Confidence Interval [CI]=1.10-6.73) and 3.19(95% CI=1.14-8.93), respectively. These results suggest that higher serum GGT level was an independent risk factor of hypertension progression among community dwelling adults in Korea.

## THE EFFECT OF INFLAMMATION ON BONE TURNOVER MARKERS AND BONE MINERAL DENSITY IN MEN AND WOMEN FOLLOWING HIP FRACTURE

J. Chan, D. Orwig, R.R. Miller, M. Shardell, E. Streeten, M. Hochberg, J. Magaziner, *University of Maryland Baltimore, Baltimore, Maryland*

Inflammatory cytokines are known to affect the normal bone remodeling process. Following hip fracture, inflammation is a physiological response to both the event and its surgical repair, and inflammatory cytokine levels may remain elevated for a year. This analysis examined how inflammatory cytokines are related to bone turnover markers (BTM) and bone mineral density (BMD) in the six months following hip fracture, and explored how the relationship differs between males and females. Serum was analyzed for the inflammatory cytokines sTNF-αR1 and IL-6, and the BTMs, PINP, a marker of formation, and CTX, a marker of resorption. BMD was measured by DXA. DXA were performed and serum collected at baseline (within 15 days of hospital admission) and 2- and 6-months after fracture. Generalized estimating equations modeled the association of inflammatory cytokine levels with BMD and BTM over time adjusting for covariates. The analyses included 151 participants (75 men, 76 women). In men, higher levels of IL-6 and lower levels of sTNF-αR1 were associated with lower femoral neck (p=.0048, p=.0033, respectively) and total hip BMD (IL-6: p=.0129, sTNF-αR1: p<.07). Patterns in the relationship between inflammatory cytokines and BMD differed in women, however: IL-6 levels were positively associated with BMD (p>.09), while sTNF-αR1 levels were inversely associated with BMD. Across all participants, sTNF-αR1 levels were positively, but non-significantly, associated with CTX (p>.07). Additional support for a relationship with inflammation and BTM was non-evident. These results demonstrate that inflammation may affect BMD following hip fracture and this relationship may vary between men and women.

## ENDOGENOUS SECRETORY RECEPTOR FOR ADVANCED GLYCATION END PRODUCTS AND CHRONIC KIDNEY DISEASE

M.S. Dalal[1], R. Semba[1], K. Sun[1], S. Bandinelli[4], R. Varadhan[1], J. Walston[1], J. Guralnik[2], L. Ferrucci[3], *1. Johns Hopkins Medical Institutions, Baltimore, Maryland, 2. Laboratory of Epidemiology, Demography, and Biometry, NIA, NIH, Bethesda, Maryland, 3. Longitudinal Studies Section, Clinical Research Branch, NIA, NIH, Baltimore, Maryland, 4. Azienda Sanitaria Firenze, Florence, Italy*

Advanced glycation end products (AGEs) and the receptor for AGEs (RAGE) have been increasingly implicated in pathological processes related to aging. The relationship of endogenous secretory receptor for AGEs (esRAGE) and chronic kidney disease (CKD) has not been well-characterized. The aim of the study was to determine whether plasma esRAGE is associated with chronic kidney disease (CKD) and is predictive of developing CKD in older adults. The relationship between plasma esRAGE and CKD (>stage 3 of National Kidney Foundation classification; estimated glomerular filtration rate [eGFR] <60 ml/min/1.73 m2) and CKD at 6 years follow-up was examined in a cross-sectional and prospective study design in 1020 men and women, ≥65 years, in the InCHIANTI study, a population-based cohort study of aging in Tuscany, Italy. Plasma esRAGE was measured using ELISA (B-Bridge International, Mountain View, CA). At enrollment, 158 (15.5%) had CKD. Mean (Standard Deviation [S.D.]) plasma esRAGE was 0.45 (0.24) ng/mL. Plasma esRAGE (ng/mL) was associated with CKD (Beta = 1.28, Standard Error = 0.12, P <0.007) in a multivariable linear regression model, adjusting for potential confounders. Plasma esRAGE was an independent predictor of incident CKD over 6 years of follow-up (Hazards Ratio per 1 S.D. = 1.42, 95% Confidence Interval 1.13, 1.78; P <0.003) in a multivariable Cox proportional hazards model, adjusting for potential confounders. Elevated plasma esRAGE is associated with CKD and is an independent predictor of incident CKD in older community-dwelling adults.

## RELATIONSHIP OF INFLAMMATION AND ANTIOXIDANTS WITH ENDOGENOUS SECRETORY RECEPTOR FOR ADVANCED GLYCATION END PRODUCTS IN OLDER COMMUNITY-DWELLING ADULTS

C. Crasto[1], R. Semba[1], K. Sun[1], M.S. Dalal[1], S. Bandinelli[2], J. Guralnik[3], L. Ferrucci[4], *1. Johns Hopkins, Baltimore, Maryland, 2. Azienda Sanitaria Firenze, Florence, Italy, 3. Laboratory of Epidemiology, Demography, and Biometry, NIA, NIH, Bethesda, Maryland, 4. Longitudinal Studies Section, Clinical Research Branch, NIA, NIH, Baltimore, Maryland*

Advanced glycation end products (AGEs) and the receptor for AGEs (RAGE) have been increasingly implicated in pathological processes related to aging. The role of endogenous secretory receptor for AGEs (esRAGE) in aging is not well understood. Elevated circulating esRAGE is thought to act as a decoy by binding circulating AGEs and preventing activation of the AGE-RAGE pathway, but whether high or low esRAGE is beneficial to health is not known. The objective of this study was to characterize the cross-sectional relationships between elevated levels of esRAGE and biomarkers for inflammation, cardiovascular risk, and circulating antioxidants in 1020 adults, ≥65 years, in the InCHIANTI study, a population-based cohort study of aging in Tuscany, Italy. Plasma esRAGE was measured using ELISA (B-Bridge International, Mountain View, CA). Mean (Standard Deviation) plasma esRAGE was 0.45 (0.23) ng/mL. Plasma esRAGE was not significantly associated with triglycerides, cholesterol, plasma carotenoids, vitamin E, or plasma polyunsaturated fatty acids. Serum interleukin-6 (beta = 0.025, standard error [SE] = 0.008, P = 0.002), C-reactive protein (beta = -0.009, SE = 0.003, P = 0.0006), and selenium (beta = -0.003, SE = 0.001, P = 0.02) were associated with plasma esRAGE in a multivariate linear regression model, adjusting for age, sex, body mass index, renal function, and other potential confounders. Elevated plasma esRAGE was associated with inflammation and a marker of elevated oxidative stress in older community-dwelling adults.

## EFFECTS OF POWER VERSUS RESISTANCE TRAINING IN PREFRAIL COMMUNITY DWELLING OLDER PERSONS

M. Drey[1], J. Bauer[1], A. Zech[2], K. Pfeifer[2], E. Freiberger[2], W. Uter[2], C. Sieber[1,2], *1. Klinikum Nürnberg, Nürnberg, Germany, 2. University of Erlangen-Nürnberg, Erlangen, Germany*

Introduction: As a consequence of deteriorating functional status, prefrail and frail older persons are at high risk for negative health outcomes. The objective of the present study was to compare the effects of power versus resistance training on the functional status in prefrail older persons. Methods: 69 community dwelling prefrail older persons >65 years, according to the Fried frailty definition, were included in the study. Equal numbers of participants were randomized into a resistance training group, a power training group and a control group. Training sessions were held twice per week for 60 minutes over 12 weeks. Controls received two lectures about a healthy life style. Primary outcome was the global score of the Short Physical Performance Battery (SPPB). Secondary outcome was the appendicular lean mass (aLM), measured by Dual Energy X-ray Absorptiometry (DEXA). Results: Regarding changes of the SPPB score from baseline, significant heterogeneity was observed (p=0.028). In pairwise comparisons, participants in both training groups increased their SPPB score (Δmedian=1) compared to controls significantly (p=0.011 for both). No statistically differences were found in changes in aLM between the groups (p=0.736), although there was an increase in aLM in both training groups compared to controls, whose aLM decreased. Drop out rate in the power training group (25%) was higher than in the resistance training group (13%). Conclusion: Both training modes improve functional status in prefrail older persons. With regard to drop out rates, resistance training appears to be advantageous when compared to power training.

### DETECTABLE CYTOMEGALOVIRUS (CMV) DNA PREDICTS HIGH CMV-SPECIFIC CD8+ T-CELLS IN HLA-A2+ OLDER ADULTS

X. Yao[1], S.X. Leng[1], R. Semba[1], J. Bream[2], J. Margolik[2], *1. Johns Hopkins University, Baltimore, Maryland, 2. Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland*

Recent studies have shown CMV-specific CD8+ T-cell clonal expansion and shrinking T-cell repertoire in CMV-seropositive older persons, suggesting chronic CMV infection as a driving force in T-cell immunosenescence. However, significant controversy exists regarding the relationship between CMV serology and CMV-specific T-cell expansion in older adults. To seek physical evidence of CMV infection beyond serology in this population, we assessed CMV viral DNA in monocyte-enriched peripheral blood mononuclear cells by nested PCR in 16 HLA-A2 positive elderly volunteers (mean age=83 years, range 72-90) who had positive CMV serology. Only nine (56%) had detectable CMV DNA. Moreover, these individuals had significantly higher percentages of CMV pp65-specific CD8+ T-cells by Class I tetramer analysis than those without detectable CMV DNA (mean+SD: 5%+7% vs 0.09%+0.05%, respectively, p<.001 by Kruskal-Wallis test). These results challenge the current diagnostic paradigm and provide novel insight into chronic CMV infection and its immunological consequences in the elderly.

### HIV PATHOGENESIS EMULATES IMMUNOSENESCENCE IN GUT ASSOCIATED LYMPHOID TISSUE

S. Sankaran-Walters[1], L. Nagy[1], M. Macal[1], M. George[1], T. Prindiville[1], M. Miller[1], J. Flamm[2], S. Dandekar[1], *1. University of CA, Davis, Guinda, California, 2. Kaiser Permanente, Sacramento, California*

Background About 15.4 million women are living with Human Immunodeficiency Virus (HIV) infection worldwide. HIV infection results in the loss of CD4+ T cells in the peripheral blood and Gut Associated Lymphoid Tissue (GALT). HIV disease progression correlates with immune activation. A growing proportion of HIV-infected women are now over 50 years old. With chronic inflammation, as seen in HIV infection, the pathogenic effects of HIV in GALT may be exacerbated during the course of aging and menopause. Methods We evaluated peripheral blood and GALT lymphocyte subsets in controls and HIV-positive participants using flow cytometry. Gene expression profiles in GALT were analyzed using microarray technology, real-time PCR and Robust Multi-Chip based statistical criteria. Results HIV-negative postmenopausal women demonstrated higher percentages of activated T cells in blood and GALT compared to premenopausal women. We observed an increase in gene expression associated with inflammation and T cell activation in CD4+ T cells in healthy postmenopausal controls. Gene expression associated with immune activation and antigen presentation was increased in dendritic cells in healthy postmenopausal women compared to premenopausal women similar to that observed in HIV-positive patients of all age groups. Conclusions HIV-induced T cell activation occurs in GALT early in infection, contributes to cellular immune exhaustion and emulates immunosenescence in gut mucosa. This may result in the delayed repopulation of CD4+ T cells in GALT following antiretroviral therapy. These studies provide the foundation for further investigation of the effects of gender, menopause and aging on HIV pathogenesis.

### LOSS OF SYNAPTIC INTEGRITY IN AGED APOE4 MICE

P.M. Sullivan[1,2], B. Mace[1,2], R. Klein[1,2], S. Moore[1,2], *1. medicine, Duke university, Durham, North Carolina, 2. Durham VA medical center, Durha,, North Carolina*

Individuals who carry an APOE4 allele are at greater risk for age related cognitive decline and Alzheimer's disease compared to APOE2 and E3 carriers. Over one quarter of the US population carry an APOE4 allele. We intend to test the idea that brain apoE protein levels determine relative risk of cognitive decline. We use a human apoE targeted replacement (TR) mouse model to study the relationship between apoE protein levels, age and cognitive decline. We have data which shows significant changes in apoE protein levels and synaptic transmission in human apoE4 TR mice. We also intend to show a correlation between low apoE4 protein levels and reductions in essential fatty acids required for synaptic plasticity. Preliminary studies in our lab show that exposing the TR mice to a Westernized diet exacerbates the cognitive decline in apoE4 TR mice. Our long term goal is to determine if Westernized diets worsen the risk of cognitive decline in apoE4 mice, and if so, how.

### REGULATION OF CARDIAC MICRORNAS BY SERUM RESPONSE FACTOR

X. Zhang[1], G. Azhar[1], S.A. Helms[1], J.Y. Wei[1,2], *1. Geriatrics, University of Arkansas for Med Sciences, Little Rock, Arkansas, 2. GRECC, GRE, CAVHS, Little Rock, Arkansas*

Objective: MicroRNAs are recently discovered regulators of gene expression and are recognized as important regulators of cardiac structure and function. Since serum response factor (SRF) is a transcription factor that regulates many immediate-early genes and cardiac muscle genes through serum response element, we hypothesized that SRF might also regulate certain microRNAs that are important to cardiac function. Methods: We utilized Exiqon microarray to analyze the microRNA expression in wild-type mice and a transgenic cardiac-specific mouse model in which the young adult heart resembles that of the typically aged heart. Results: We observed 50 cardiac-enriched microRNAs in the wild-type mouse heart, which accounted for 80% of the total microRNA expression. 20 microRNAs were significantly impacted by SRF overexpression, 18 of which are novel SRF target microRNAs. MicroRNA detection at 7 days, 2, 4 and 6 months of ages revealed that dysregulation of mir-1, mir-133a and mir-21 occurred 7 days after birth in the transgenic mouse heart, long before the onset of cardiac hypertrophy, indicating that SRF regulated microRNAs may contribute to cardiac hypertrophy. Bioinformatic analysis revealed that miR-199a, miR-199b, mir-214, miR-455, mir-497 and mir-499 could inhibit SIRT1, SIRT4 or FOXO family proteins. Importantly, we observed that SRF regulates microRNA biogenesis through transcriptional regulation where it controls the amount of pri-microRNA available for downstream microRNA maturation process. Conclusions: Age-related increase of SRF protein in the rodent heart during typical adult aging may contribute to altered expression of many cardiac genes and microRNA genes and affect cardiac structure and performance in senescence.

### LOSS OF TABLE MANNERS IN AGED MICE LEADS TO FOOD CONSUMPTION PARADOX

M.E. Starr[1,2], H. Saito[1,2], *1. Department of Surgery, University of Kentucky, Lexington, Kentucky, 2. University of Texas Medical Branch, Galveston, Texas*

Dietary restriction is a well-known method for extending lifespan and reducing the incidence of age-associated pathologies in laboratory rodents. One of the most commonly used protocols for dietary restriction involves monitoring the daily food consumption (food disappearance from receptacle) of freely fed animals and feeding a percentage (usually 60-70%) of that to the dietary restricted animals. Though dietary restriction is often started at an early age and continued throughout life, recent studies have shown improved health using short-term models of dietary restriction started later in life. In this study we evaluated the food consumption of adolescent (2 months-old), adult (5 months-old), old (20 months-old) and very old (29 months-old) C57BL/6 mice. To effectively evaluate actual food consumption, mice were housed on wire-bottom cages and the amount of food disappearing from the food receptacle as well as the amount of food dropped to the cage bottom was monitored. We found that a significant portion (20-40%) of food was dropped to the cage bottom daily and this phenomenon lead to an overestimation of actual food consumption, particularly in old and very old mice. When housed on bedding, dropped food was still not consumed. Additionally, we found that although total food consumption increased in old age, food intake per gram of body weight declined significantly with age. Differences in actual vs. apparent food consumption were also observed in repeated experiments with adult and old Balb/c mice. These findings point out that caution should be taken to accurately quantify food consumption by aged mice.

### SIRTUIN ACTIVATING COMPOUNDS INHIBIT REACTIVE OXYGEN SPECIES AND OSTEOCLASTOGENESIS

M. Pang[1,2], M. Rodríguez-Gonzalez[1,2], M. Hernandez[1,2], I. Fernandez[1,2], B.R. Troen[1,2], *1. Miami VAHS Geriatric Research Education and Clinical Center, Miami, Florida, 2. University of Miami Miller School of Medicine, Miami, Florida*

Osteoporosis is a widely prevalent contributor to frailty and results from an imbalance between bone resorption and bone formation leading to progressive bone loss, fractures, and increased morbidity and mortality. Reactive oxygen species (ROS) play a critical role in the formation and function of osteoclasts and therefore bone resorption. Sirtuin activating compounds (STACs) such as resveratrol (RSV) are prolongevity agents that can extend healthspan in vertebrates. Resveratrol enhances bone mineral density in mice, and sirtuin knockout mice exhibit increased osteoclastogenesis. Sirt1 expression decreases with ovariectomy and is increased by estrogen treatment in vivo. We propose that treatment with STACs will restore the youthful balance between osteoclastic bone resorption and osteoblastic bone formation and maintain bone quality, and are therefore investigating the impact of novel sirtuin1 (Sirt1) specific activating compounds (SRT2183 and SRT1720) on bone during aging.<p> We have been studying RAW264.7 cells and bone marrow cells, both of which can be induced to form functioning multinucleated osteoclasts. We have found that SRT2183 and SRT1720 inhibit osteoclast formation in a dose-dependent manner in both RAW264.7 cells and bone marrow cells, whereas RSV does not. SRT2183 also inhibits resorption of dentine by osteoclasts. SRT2183 enhances mitochondrial function in osteoclast precursors and also enhances viability and reduces the generation of ROS in response to oxidative stress. Furthermore, SRT2183 inhibits the stimulation of ROS by RANKL during osteoclastogenesis, whereas RSV does not. However, RSV treatment in vivo of young mice decreases osteoclastogenesis and increases osteoblastogenesis. MicroCT analysis reveals that the RSV treatment markedly increased bone volume. Moreover, RSV increases mineralization by osteoblasts in vitro. We have also found that osteoclast formation is increased in bone marrow cells from older mice, whereas Sirt1 expression is reduced.<p> Therefore STACs may disrupt osteoclastogenesis and osteoclast function by interfering with the generation of ROS. STACs also enhance osteoblastogenesis. Interestingly, RSV is not effective in vitro, but appears to exert potent effects in vivo. Consequently, STACs appear to exert novel anti-resorptive and anabolic effects upon the skeleton and offer significant potential as therapeutic agents to regulate the balance between osteoclastic bone resorption and osteoblastic bone formation to enhance bone mineral density and bone quality.

### RETINAL MICROVASCULAR ABNORMALITIES AND FUNCTIONAL LOSS IN OLDER PERSONS - THE CARDIOVASCULAR HEALTH STUDY

D. Kim[1,3], I. Hajjar[1,2], E. Newton[2], A.B. Newman[4], E.S. Strotmeyer[4], R. Klein[5], M. Sarnak[6], L. Lipsitz[1,2], *1. Gerontology, Beth Israel Deaconess Medical Center, Boston, Massachusetts, 2. Hebrew SeniorLife, Boston, Massachusetts, 3. Harvard School of Public Health, Boston, Massachusetts, 4. University of Pittsburgh, Pittsburgh, Pennsylvania, 5. University of Wisconsin, Madison, Wisconsin, 6. Tufts Medical Center, Boston, Massachusetts*

Background: It is unclear whether retinal signs, reflecting microvascular disease, are associated with executive dysfunction, slow gait, and depressed mood, which are characteristic features of dysfunction in frontal subcortical regions. Methods: In the Cardiovascular Health Study, 1744 participants (mean age 78) were alive free of stroke and had available retinal photographs and carotid intima-media thickness during the 1997-1998 examination. We used linear and logistic regression to examine the cross-sectional association of retinal signs with digit-symbol substitution test (DSST) score, gait speed, and depressed mood, defined as the Center for Epidemiologic Studies – Depression scale > 9. Results: Each retinal sign was associated with different vascular risk factors: generalized arteriolar narrowing, retinopathy, and focal arteriolar narrowing (hypertension); retinopathy (diabetes); and generalized venular dilation (current smoking). After adjusting for vascular risk factors and carotid intima-media thickness, generalized arteriolar narrowing (-1.21 points [95% confidence interval: -2.25, -0.17]; P = 0.022) and arteriovenous nicking (-2.00 points [-3.83, -0.18]; P = 0.031) were associated with lower DSST score. Generalized arteriolar narrowing (-0.016 m/sec [-0.031, -0.002]; P = 0.030) and retinopathy (-0.049 m/sec [-0.077, -0.022]; P < 0.001) were associated with slower gait. Generalized venular dilation was inversely associated with depressed mood (odds ratio, 0.71 [0.51, 0.98]; P = 0.035). There was a significant effect modification by carotid intima-media thickness of arteriovenous nicking on DSST score and of generalized venular dilation on gait speed. Conclusion: Our findings suggest the independent and potentially synergistic effect of microvascular and macrovascular disease in development of executive dysfunction and slow gait.

## SESSION 795 (SYMPOSIUM)

### TARGETING SIGNALING PATHWAYS IN CANCER, NEURODEGENERATION AND LONGEVITY

Chair: *G.J. Lithgow, Buck Institute for Age Research, Novato, California*

A number of intracellular signaling pathways determine the lifespan of simple animals. The Discovery that TOR signaling determined lifespan in invertebrates generated considerable interest in this pathway that was already known to have links to cancer. A chemical inhibitor of this pathway, a known drug, extends lifespan in lab mice. The scene is now set for the development of interventions in aging and age-related disease based on our understanding of this pathway. Speakers: Pankaj Kapahi, The Buck Institute Matt Kaeberlin University of Washington, Seattle Randy Strong, Barshop Institute Veronica Galvan, University of Texas Health Science Center at San Antonio

# SESSION 800 (SYMPOSIUM)

### AGING AND WORK: ISSUES AND IMPLICATIONS IN A CHANGIN LANDSCAPE

Chair: *S. Czaja, Psychiatry and behavioral sciences, university of miami miller school of medicine, Miami, Florida*
Discussant: *D. Ekerdt, University of Kansas, Kansas, Kansas*

The twenty-first century workplace will be shaped by numerous factors resulting in many challenges for employers and workers that require changes in policies, work procedures, and training systems. Current and projected demographic and economic trends create a need for organizations to accommodate an increasingly older diverse older workforce. At the same time, changes in work structures and ongoing developments in technology create a need for workers to accommodate changes in job demands. This symposium will highlight key issues confronting the future of work in an aging population. S. Czaja will present an overview of the landscape of the workplace of the 21st century and discuss some of the challenges confronting older workers and organizations. R. Schulz will discuss work and caregiving and present some current data from a recent study of working caregivers and employer healthcare costs. N. Charness will provide a discussion of aging, skill acquisition and present some data regarding strategies to enhance training of older workers. J. Sharit will focus on the challenges and opportunities afforded by telework for older workers and highlight some findings from a survey of managers regarding older teleworkers. Finally, R. Wallace, will address the topic of worker wellness and health promotion programs. The goals of the symposium is to provide an overview of emerging research related to aging and work and to highlight critical and timely issues that need to be addressed to accommodate an aging workforce. D. Ekerdt will lead a discussion of these topics and highlight some future research needs.

### WELLNESS PROGRAMS FOR OLDER WORKERS: DO THEY REALLY EXIST?

R.B. Wallace, *The University of Iowa, Iowa City, Iowa*

This presentation will address the availability and scope of Employee Assistance Programs (EAPs) specifically designed for the older worker. In fact, relatively few such programs exist, despite the fact that older workers may participate in EAPs that are suitable for all ages. Reasons for this lack of availability are varied, but ultimately are not easy to determine. This presentation will suggest which programs are likely to be successful at the worksite and some of the impediments to the establishment and maintenance of such programs.

### THE EMPLOYABILITY OF OLDER WORKERS AS TELEWORKERS

J. Sharit[1], S. Czaja[2], M.A. Hernandez[2], S.N. Nair[2], *1. University of Miami, Coral Gables, Florida, 2. University of Miami Miller School of Medicine, Miami, Florida*

Telework has the potential to accommodate many of the needs and preferences of older workers. The viability of telework as a work option for many older workers, however, requires the consideration of issues such as the ability of older workers to adapt to the technological demands that are often associated with telework jobs and managerial attitudes toward older teleworkers. We present findings from a questionnaire study that assessed managers' perceptions of worker attributes desirable for telework and how managers felt older workers compared to younger workers on these attributes. The sample included 314 managers with varying degrees of managerial experience from a large variety of companies in the U.S. The results presented a mixed picture with respect to the employability of older workers as teleworkers, and strongly suggested that less experienced managers would be more resistant to hiring older people as teleworkers.

### AGE AND SKILL ACQUISITION: A FRAMEWORK FOR GUIDING OLDER WORKER TRAINING

N. Charness, *Psychology, Florida State University, Tallahassee, Florida*

The goal for this presentation is to provide a framework for understanding the enabling conditions for skill acquisition in older adulthood. I'll review some of the motivational determinants for self-improvement highlighting age-related changes in motivation. Then I'll examine some classic age-performance functions developed to describe high-level human performance, highlighting some recent data that suggest a shift from the 30s to the 40s for peak performance. Next I'll review some individual difference factors, mainly cognitive abilities that mediate skill acquisition processes. I'll then describe some example studies of skill acquisition in both work-like and work environments. Drawing on the results of those studies and an economic analysis of age and productivity, I'll provide some recommendations for how to support skill acquisition (and maintenance) by older workers.

### COMBINING CAREGIVING AND WORK: PREVALENCE, HEALTH EFFECTS, AND POLICY

R. Schulz, S. Albert, *University of Pittsburgh, Pittsburgh, Pennsylvania*

Of the more than 43 million adults providing care to someone age 50 or older, 50% have full time jobs and 11% have part time jobs. Combining work and caregiving can be a challenge. Two-thirds of working caregivers make workplace accomations including going in late, leaving early or taking time off during the day to provide care. Data also indicate that working caregivers have more chronic health conditions and incur higher health care costs for employers. These findings raise the question, what strategies might maximize worker preformance and minimize caregiving distress? We conclude with a discussion of caregiver work policies that have been implemented, their effectivness, and ways in which they might be improved.

# SESSION 805 (SYMPOSIUM)

### CARING, SHARING AND WELL-BEING: DATA FROM AUSTRALIAN AND NEW ZEALAND LONGITUDINAL STUDIES

Chair: *N.A. Pachana, Psychology, University of Queensland, Brisbane, Queensland, Australia*
Discussant: *F.M. Alpass, Massey University, Palmerston North, New Zealand*

Longitudinal studies of aging processes provide unique perspectives on a range of health, emotional and social processes over time. Globally, increases in the proportion of older adults within the population make the data gleaned from longitudinal studies of increasing importance. Social behavioural phenomena, particularly as they interact with health outcomes and well-being over time, are of particular interest. Data in this symposium come from four large longitudinal studies located in Australia and New Zealand: the Australian Longitudinal Study on Women's Health (ALSWH); the New Zealand Longitudinal Study of Ageing (LSA); the Australian Men, Women and Ageing (MWA); and the New Zealand Enhancing Wellbeing in an Ageing Society (EWAS) studies. Topics covered in this symposium include the following: quantitative and qualitative data used to examine factors which may inhibit or enhance social support in older women (ALSWH); an examination of the interrelationships between caregiving, gender and ethnicity on the physical and mental health of older New Zealanders; a comparative study of sexual activity in Australian men and women aged 82 to 87 years; and associations between subjective wellbeing and Amartya Sen's capability variables including participation in leisure and recreational activities, access to shops and public transport, homeownership, income, employment, participation in community organisations and health. This symposium offers a wide range of important data on social, emotional and role functioning with respect to physical and mental well-being in later life.

### AGEING, WELLBEING AND CAPABILITY

C. Waldegrave[1], P. King[2], *1. Family Centre Social Policy Research Unit, Wellington, New Zealand, 2. Family Centre Social Policy Research Unit, Wellington, New Zealand*

The aim of this research was to identify the drivers of wellbeing and quality of life among the older population. Amartya Sen's capabilities approach has formed the conceptual basis of the theoretical framework (Sen, 1999). This paper will report on the results of a study of ageing and wellbeing with a national random sample of 1,680 New Zealanders aged 65 to 84 years using computer assisted technology interviewing (CATI). Information was sought from survey respondents on their participation and achievement in a range of capability areas and this was set alongside the subjective measures of satisfaction to provide a broad view of how capability and satisfaction contribute to wellbeing. The results demonstrated significant associations between subjective wellbeing and capability variables that included participation in leisure and recreational activities, access to shops and public transport, homeownership, income, employment, participation in community organisations and health.

### GENDER, ETHNICITY AND THE IMPACT OF CAREGIVING ON THE HEALTH OF OLDER NEW ZEALANDERS

F. Alpass, C. Stephens, R. Pond, A. Towers, *Psychology, Massey University, Palmerston North, New Zealand*

An ageing population will lead to an increase in the prevalence of chronic diseases, including dementia. The provision of informal care by family will also increase. Caregivers are more likely to be older women, who report greater caregiver burden than male caregivers. Cultural differences also influence caregiver outcomes. We examined the interrelationships between caregiving, gender and ethnicity on the health of older New Zealanders. Participants (N=2,484) from the first two waves of the New Zealand Longitudinal Study of Ageing completed surveys. Hours of care, gender and ethnicity were not directly related to declines in health or function from 2006 to 2008, however Māori (indigenous New Zealanders) with high levels of caregiving were more likely to suffer a health decline than non-Māori. Hours of care, gender and ethnicity were unrelated to physical health scores in 2008 but Māori had lower mental health scores, with those providing high levels of care having the lowest scores. The multiple roles of elder Māori are thought to contribute to these outcomes.

### NORMAL SEXUAL FUNCTIONING IN OLDER PEOPLE

D. McLaughlin[1], K.A. McCaul[2], L. Flicker[2], Z. Hyde[2], O. Almeida[2], G. Hankey[2], K. Jamrozik[3], J. Byles[4], *1. School of Population Health, The University of Queensland, Herston, Brisbane, Queensland, Australia, 2. The University of Western Australia, Perth, Western Australia, Australia, 3. The University of Adelaide, Adelaide, South Australia, Australia, 4. The University of Newcastle, Newcastle, New South Wales, Australia*

Older people continue to engage in sexual activity into advanced years. We performed a comparative study of sexual activity in men and women aged 82 to 87 years resident in Perth, Australia. Men who participated in the Health in Men Study were surveyed about sexual activity. Women from the older cohort of the Australian Longitudinal Study of Women's Health who were resident in Perth were asked to complete an additional questionnaire about sexual activity. Men were more likely to report sexual activity within the last 12 months and less likely to rate sex as not at all important. Women were more likely to report the absence of a partner. For both sexes the lack of an interested partner was a frequent reason given for the lack of sexual activity. In late adulthood, gender differences in the amount and perceived importance of sexual activity exists between older men and women.

### FACTORS WHICH ENHANCE OR INHIBIT SOCIAL SUPPORT: A LONGITUDINAL ANALYSIS OF SOCIAL NETWORKS IN OLDER WOMEN

N.A. Pachana, D. McLaughlin, J. Adams, A. Dobson, *School of Population Health, The University of Queensland, Herston, Brisbane, Queensland, Australia*

Older people with strong social support have lower mortality and morbidity and better self-rated health in later life. Few studies have used longitudinal data to examine factors which may inhibit or enhance social support. This study used both quantitative and qualitative data to explore older women's social networks. Participants were drawn from participants in the Australian Longitudinal Study on Women's Health (ALSWH) who were born in 1921-26. Larger social networks were associated with better mental health, being widowed, illness or death of a family member and no mobility problems. Women who were not Australian born, had sight problems or who had recently moved house were more likely to have smaller social networks. The use of a mixed methodology enabled the longitudinal quantitative results to be enriched by the women's own views. This research highlights the importance to older women of being able to psychologically, emotionally or physically access their social networks.

## SESSION 810 (SYMPOSIUM)

### CURRENT RESEARCH ON GRANDPARENTS RAISING GRANDCHILDREN: CUTTING EDGE METHODOLOGIES

Chair: *L. Yancura, University of Hawaii, Honolulu, Hawaii*
Discussant: *B. Hayslip, University of North Texas, Denton, Texas*

The number of grandparents raising grandchildren (GRG) has increased dramatically over the past few decades. The number and scope of studies of GRG in the academic literature has grown as well. Corresponding to this growth, research on GRG has become increasingly sophisticated in its use of methodological approaches to understand how contextual factors influence the health and well-being of GRG. Many of these approaches are being used in response to specific characteristics of the GRG population, which are similar to other populations used in gerontological research. The GRG population is difficult to locate and recruit, contains a high percentage of ethnic minorities and includes GRG from a range of social and economic situations. The well-being of GRG is also closely associated with family-level characteristics. Presenters in this symposium address a range of methodologies currently being used to study GRG. These methodologies include strategies for recruitment of culturally diverse samples, techniques for retaining participants in probability samples of longitudinal studies, qualitative methods such as classical grounded theory, and practical approaches for gathering family-level data in grandparent-headed families. Those who attend this symposium will be able to identify current trends in research on GRG and discuss cutting edge research methodologies being used to study these trends.

### OPPORTUNITIES AND CHALLENGES IN MULTIGENERATIONAL RESEARCH WITH GRANDPARENT-HEADED FAMILIES

M.L. Dolbin-MacNab, *Human Development, Virginia Polytechnic Institute and State University, Blacksburg, Virginia*

Despite increased interest in grandchild adjustment and family processes within grandparent-headed families, most researchers continue to gather data from only one family member, typically the grandparent. While grandparent data are valuable, there is much that can be learned about grandparent-headed families by obtaining data from multiple family members such as spouses or partners, grandchildren, and the middle generation. The purpose of this presentation is to provide researchers with practical guidelines for designing and executing multigenerational research with grandparent-headed families. Using lessons learned from studies of custodial grandmothers and their adolescent grandchildren, the presentation will address effective recruitment and retention strategies, as well as issues associated with securing informed consent. Emphasis will also be given to recommendations related to measurement, data management, and appropriate data analysis. Finally, given that multigenerational research in grandparent-headed families may result in ethical challenges, specific attention will be given to strategies for addressing these ethical concerns.

### CLASSICAL GROUNDED THEORY: EXPLORING CUSTODIAL GRANDPARENT-GRANDCHILD RELATIONSHIPS

C.J. Tompkins, *George Mason University, Fairfax, Virginia*

There are 2.4 million grandparents in this country who have the primary responsibility of raising their grandchildren (U.S. Census, 2000), often under challenging circumstances. This study used classical (Glaserian) grounded theory to explore the relationships between grandparents and grandchildren residing within a grandparent-headed household. Grounded theory is a rigorous, inductive research methodology that uses constant comparative analysis to generate explanatory theory directly from data. For over two years, this researcher worked with a classical grounded theorist in order to learn and realize the rigor of the methodology. Twelve grandmothers, 1 grandfather and nine grandchildren were interviewed. These interviews as well as interviews from caregivers of older adults and the caregiving and grandparenting literature were all used as data. This presentation will focus on the collaboration with a grounded theorist and the use of this methodology in generating the core variable explaining caregiving relationships: CPR Partnering – Caring, Protecting and Responding.

### WALKING THE RED ROAD: FIRST NATIONS' GRANDPARENT CAREGIVERS PROMOTING RESILIENCY AND CULTURAL HEALTH

E. Fuller-Thomson, G.E. Thompson, R.E. Cameron, *Faculty of Social Work, University of Toronto, Toronto, Ontario, Canada*

Like American Indian and Alaskan Natives, First Nations Canadians are vastly over-represented among grandparent caregivers. The purpose of this grounded theory study was to provide a framework for understanding the contemporary experience of First Nations grandparent caregivers (n=15). Recruitment of this difficult to locate population was extremely challenging. Creative recruitment strategies included reliance on a bilingual interviewer (Ojibway), snowball sampling both on and off reservations, and volunteering at a Native Friendship Centre's Seniors' Lunch program to promote trust. Symbolic interactionism and social constructionism informed the analysis. Results revealed that First Nations grandparents had leveraged their own experiences of cultural disruption to reinvest in the cultural health and well-being of their grandchildren. One grandfather described this role as "walking the red road" which entailed a responsibility "to provide wisdom and . . . protection." Identified benefits of traditional grandparent care-giving included cultural healing and joy.

### ATTRITION AND RETENTION OF A GRANDMOTHER SAMPLE IN A LONGITUDINAL STUDY

C. Warner, C. Musil, N. Gordon, *FPB School of Nursing, Case Western Reserve University, Cleveland, Ohio*

This paper addresses the retention of a probability sample of 485 grandmothers (grandmothers raising grandchildren, grandmothers in multigenerational homes, and non-caregivers to grandchildren) in a longitudinal study with four waves; 351 grandmothers completed mailed questionnaires at all time points for a 72.4% retention rate. We examined factors associated with attrition, using covariates from the previous completed waves using logistic regression with forward selection. The c statistic, a measure of concordance, is 0.64. There were three statistically significant predictors of attrition: grandmother group, self-assessed health, and race. Grandmothers living in multigenerational homes compared to non-caregiver grandmothers (odds ratio 0.45 [95% CI=(0.26, 0.76)], those with worse self-assessed health (odds ratio 0.75 [95% CI=(0.61, 0.94)], and minorities (odds ratio 0.55 [95% CI=(0.36, 0.84)] were less likely to return the questionnaire. These findings provide valuable information on the characteristics of grandmother caregivers—necessary for sample maintenance in longitudinal studies. Retention strategies are discussed.

## SESSION 815 (SYMPOSIUM)

### THE USE OF MARGINS AND MISSING DATA TO EXAMINE LIMITATIONS OF THE CES-D AMONG OLDER ADULTS

Chair: *D.J. Van Dussen, Sociology, Anthropology, and Gerontology, Youngstown State University, Youngstown, Ohio*

This research examines the patterns and reasons for the patterns of missing data among a sample of 720 older residents of Continuous Care Retirement Communities using the 20 item CES-D (Radloff, 1977). Past research has not adequately examined patterns of or reasons for missing data. This presentation explores patterns of missing data quantitatively using descriptive statistics and multivariate analyses; and qualitatively using respondent comments written in the margins of the quantitative data. Reasons for missingness included ambiguity about the meaning of key words in CES-D statements and differential interpretations of statements based upon respondent's age, gender, and the context of the questions. Findings suggest that in the population studied, missing data was not random or accidental suggesting that current methods may not adequately capture the meaning of depression. The need for further mixed methods research will be discussed to improve understanding of how older adults interpret and respond to depression.

### DEPRESSION INTERVIEWS AS PERFORMATIVE: HOW THE ACT OF ANSWERING CAN CREATE SOCIAL FACTS

B. Dahlberg, *Anthropology, and Family Medicine, University of Pennsylvania, Philadelphia, Pennsylvania*

This paper draws on theory from linguistic anthropology to explore how answering questions about depressive symptoms can socially constitute someone as "a depressed person." Through discourse analysis of semi-structured interviews with older patients with depressive symptoms, I explore the stakes of taking on a label of depression, as well as the sociolinguistic processes that can construct someone as "depressed." My findings shed light on the reasons older patients may avoid answering certain questions, and emphasize that answers not only describe symptom experiences, but can also perform social facts. For example, I find that some older adults avoid "admitting" to depressed feelings because this admission would finalize a construction of them as a "depressed person." This presentation will enable participants to (1) discuss the relationships between eliciting information from patients and negotiating/constructing patients' identities, and (2) understand some of the stakes for older patients that create reasonable concerns about disclosing symptoms.

### THE CES-D AS A THINK ALOUD EXERCISE: HOW AND WHY OLDER ADULTS RESPOND TO STATEMENTS

K. de Medeiros, *1. The Copper Ridge Institute, Sykesville, Maryland, 2. The Johns Hopkins University School of Medicine, Baltimore, Maryland*

The CES-D has been used extensively in gerontological research to estimate depression prevalence in the community. Although the CES-D has been validated in older adults, few studies have explored how the elderly interpret and respond to the individual statements. The current study explored how older adults interpreted CES-D statements and what influenced their subsequent response. 42 people (21 men, 21 women) age 75 and older were enrolled. All participants completed the CES-D as a "think aloud" exercise, in which they provided detailed descriptions of each statement meant to them and their reasons for their response.

Results revealed that three statements in particular varied in meaning and response: future, friendly, and failure. Such variation could potentially lead to errors in determining depression status. Given that depression is under-reported in this population, insight into older adults' interpretation of CES-D questions is an important source of information.

## SESSION 820 (PAPER)

## EARLY LIFE, LATER OUTCOMES

### JOCKS OR BRAINS: THE LONG-TERM INFLUENCES OF HIGH SCHOOL SPORTS PARTICIPATION ON SOCIOECONOMIC SUCCESS AT RETIREMENT AGE

D. Kuo, H. Han, *University of Wisconsin, Madison, Wisconsin*

Athletics in high schools were shown with higher educational aspiration; and any studies found that being an athletic was positively associated with labor market outcomes. Yet, it is remained unclear whether the advantage of being an athletic persisted through adult life. In the current study, we explore the relationships between being an athletic in high school and life-long socioeconomic success among a large group of high school seniors in Wisconsin Longitudinal Study ("WLS") from 1957 to 2004. The high school sports participation of the respondents was coded from the yearbooks when they were 18 years old (1957). Education, occupation and income were measured at age 36, 54 and 65. The WLS was ideal for our inquires because the study contained quality information on socioeconomic background, high school grades, occupational aspiration, college plan and finance, cognitive ability at high school and in later adulthood, and a complete educational and occupational history. Our preliminary findings showed that participation in team sports was positively related to men's educational attainment at age 36, controlling for socioeconomic status, IQ, high school ranking, and occupational aspiration. In particular, being in football teams was the most strongly related to the educational attainment. In this paper, we ask the following questions, 1.Whether being an athletic in high school has an advantage on education, occupational status and income at age 36; 2.Whether the advantages remain until retirement; 3.How gender moderates the advantages.

### LIFE COURSE SOCIOECONOMIC ADVERSITY EXPERIENCE AND MULTI-SYSTEM PHYSIOLOGICAL DYSREGULATION IN LATER ADULTHOOD

T. Gruenewald, A.S. Karlamangla, C.J. Crandall, T. Seeman, *University of California, Los Angeles, Los Angeles, California*

A large body of research suggests that socioeconomic adversity experienced in both childhood and adulthood is associated with poorer physical health in adulthood, although the biological pathways underlying these connections remain to be elucidated. The current study examined whether level of multi-system physiological dysregulation varied as a function of level of socioeconomic adversity experienced in childhood and two points in adulthood. Data come from 896 (45% male, mean age = 58) participants from the Study of Midlife in the U.S. A summary childhood socioeconomic adversity score was constructed from indicators of parental education, childhood welfare status, and perceptions of a poor financial state in childhood. Summary adult socioeconomic adversity measures were constructed from indicators of own educational achievement, household income to poverty level, difficulty paying for bills and meeting basic needs, and perception of a poor current financial situation. A multi-system physiological dysregulation index was calculated by summing the number of 22 biomarkers of cardiovascular, neuroendocrine, metabolic and immune functioning for which participant values fell into high-risk quartiles. Age- and gender-adjusted dysregulation scores were higher in those with more frequent experience of high levels of socioeconomic adversity across childhood and adulthood (linear trend $p < .001$). Additional analyses indicated that health status, health behavior, and psychosocial variables accounted for 27%, 9%, and 34%, respectively, of the association between cumulative socioeconomic adversity and physiological dysregulation. These findings indicate that multiple pathways may account for greater levels of physiological dysregulation in later adulthood among those with greater cumulative experience of socioeconomic adversity.

### EARLY LIFE CONDITIONS, ADULT FRAILTY AND MORTALITY AMONG AGING POPULATIONS IN DEVELOPING COUNTRIES

M. McEniry, *CDE/CDHA, University of Wisconsin, Madison, Wisconsin*

Adverse early life conditions may have strong effects on adult chronic conditions such as obesity and heart disease which then impact adult frailty and mortality. In this paper, we compare and contrast heart disease, diabetes, obesity, frailty and mortality in older adults across a large and diverse set of countries and examine the degree to which poor early life circumstances explain the observed patterns. We include population data from major studies on aging in Latin America and the Caribbean (MHAS-Mexico, SABE-capital or major cities, PREHCO-Puerto Rico, CRELES-Costa Rica), Asia (CLHLS-China, IFLS-Indonesia, MHSS-Bangladesh, WHO/SAGE-India), Africa (WHO/SAGE-Ghana, WHO/SAGE-South Africa) and data from the US (HRS, WLS), the UK (ELSA), the Netherlands (SHARE) and Taiwan (SEBAS) to benchmark results. Frailty is defined according to mobility, range of motion and difficulty with daily activities. Using country-specific and pooled multivariate models we first estimate the effects of early life conditions (season of birth, place of birth, childhood health, SES, markers of nutritional status, mother's education) on heart disease and diabetes; then on frailty and mortality, controlling for heart disease and diabetes. We find that there is some evidence to suggest that older adults from developing countries who were exposed to adverse early life conditions are at higher odds of heart disease and diabetes as well as being at increased risk of being frail and dying. It will be important to further validate these findings and to then design effective health policies and interventions to address the health needs of older adults in these settings.

### WAR-RELATED DISABILITY AND MEN'S LATER LIFE HEALTH TRAJECTORIES

J. Wilmoth, A. London, *Syracuse University, Syracuse, New York*

The majority of older men in the United States served in the military, many during World War II, Korea, or Vietnam. Despite this, relatively little is known about how the later life health status of these men is different from men who did not serve in the military. This research uses data from twelve years of the longitudinal Health and Retirement Study (HRS) to examine three types of later life health trajectories: number of health conditions, activities of daily living (ADLs), and self-rated health. The results based on growth curve models indicate that compared to nonveterans, veterans with war-related disability have significantly higher ADLs and lower self-rated health. However they have less steep age-related increases in number of conditions and ADLs, as well as less steep age-related declines in self-rated health. In contrast, veterans without a war-related disability have significantly fewer health conditions, lower ADLs, and better self-rated health than nonveterans. They exhibit steeper age-related increases in number of conditions and greater age-related declines in self-rated health but less steep age-related increases in ADLs. These differences persist after controlling for childhood socioeconomic status, sociodemographic characteristics, and current health behaviors. Overall, the results suggest that compared to nonveterans, veterans with a war-related disability are generally in poorer health but experience fewer age-related health changes whereas veterans without a war-related disability tend to be in better health but have more age-related health changes. These findings highlight the enduring impact of military service on men's later life health outcomes.

# SESSION 825 (POSTER)

## EMOTION AND AFFECT

### NEGATIVE AFFECT, STRESSOR APPRAISAL, AND AGE DIFFERENCES IN BEDTIME CORTISOL

G.E. Ennis[1], S. Neupert[1], D. Almeida[2], *1. Psychology, NC State University, Raleigh, North Carolina, 2. Pennsylvania State University, University Park, Pennsylvania*

Higher levels of evening cortisol may be associated with alterations in glucose metabolism (Plat et al., 1999). Depressed persons and older adults have been found to have higher evening and nighttime levels of cortisol (Vreeburg et al., 2009; Yehuda, Teicher, Trestman, Levengood, & Siever, 1996). Interpreting that a stressor is a threat to one's social self can activate the hypothalamic-pituitary-adrenal axis resulting in cortisol increase (Dickerson & Kemeny, 2004). Following exposure to psychosocial stressors, cortisol tends to be higher in the recovery period in depressed compared to non-depressed individuals (Burke, Davis, Otte, & Mohr, 2005). Whether feelings of threat are related to evening cortisol have not been sufficiently investigated in either depressed persons or the general population. Utilizing data from the National Study of Daily Experiences II (a substudy of the Midlife in the United States Study), we investigated negative affect, stressor appraisal, and age differences in bedtime cortisol. Controlling for smoking, hours of sleep, number of physical symptoms, and time of cortisol collection, older adults who had higher negative affect and reported that stressors posed a greater risk to how they felt about themselves had higher bedtime cortisol than older adults who had higher negative affect and reported that stressors posed a lesser risk to how they felt about themselves. Similar stressor appraisals by younger adults were not related to differences in their bedtime cortisol levels. Results suggest that stressor appraisal may play a role in the evening cortisol levels of older adults with higher levels of negative affect.

### EMOTION RECOGNITION TRAINING IN OLDER ADULTS: WHICH INDIVIDUAL DIFFERENCE VARIABLES CONSTRAIN TRAINING EFFECTS?

M. Larcom, D. Isaacowitz, *Psychology, Brandeis University, Waltham, Massachusetts*

Some research suggests that in order to successfully recognize emotions in others, one should experience those same emotions. In the current study, we looked at individual difference factors related to emotional experience (e.g., current levels of positive and negative affect, state and trait anxiety, level of neuroticism) in older adults who either did or did not benefit from emotion recognition training. Fifty-five older adults (M = 72.20 years of age, SD = 8.67) were trained to direct their attention toward the eye or the mouth region of faces displaying angry, fearful, and sad expressions. Because both types of training affected emotion recognition accuracy to a similar extent, we examined affective predictors of the participants' greatest change in accuracy (i.e., upper limits) regardless of specific type of training. We found that older adults who improved more in their ability to recognize anger reported significantly higher levels of negative affect and trait anxiety as compared to those for whom the training was not as successful. A near significant trend was found for reports of higher neuroticism levels among those who had greater improvements for identifying sadness. For fear, however, we found a near-significant trend such that those who benefited more from training reported lower levels of negative affect. These findings indicate that affective experience may indeed constrain training effects for emotion recognition accuracy, but the nature of these effects may vary by type of emotion.

### AGE DIFFERENCES IN NEURAL CORRELATES OF AUTOMATIC AND CONTROLLED EMPATHY: AN ERP STUDY

J. Studer, N. Mella, G. Labouvie-Vief, *University of Geneva, Geneva, Switzerland*

Empathy is a complex emotion that continually develops with aging. Affective and cognitive empathy are traditionally dissociated: the affective component being concerned with resonating with another's emotional state and the cognitive component focusing on one's understanding of another's mental state as different from one's own. Recent studies have suggested that cognitive, but not affective, empathy may be impaired with normal aging. The present study explored the neural correlates of affective (automatic) and cognitive (controlled) empathy for pain from adolescence to old adulthood. 48 participants (aged from 11 to 88) watched stimuli depicting hands in painful or non painful situations and performed (1) a pain judgment task that required attention to pain cues in the stimuli (controlled empathy for pain) or (2) a counting task withdrawing their attention from these cues (automatic empathy for pain). As expected, behavioral results showed that older adults are slower and less accurate than adolescents and younger adults when attending to pain, indicating more difficulties in the controlled component. No age-related differences were found in the counting task suggesting a stability of automatic empathy between age groups. ERPs results showed an early automatic component similar across age groups and a late controlled component revealing predicted differences between adolescents, younger adults and older adults.

### UNCONSTRUCTIVE REPETITIVE THOUGHTS ARE ASSOCIATED WITH PROLONGED NEGATIVE MOOD IN YOUNGER BUT NOT OLDER ADULTS

E. Munoz[1], J. Mogle[1], J. Smyth[2], M. Sliwinski[1], *1. The Pennsylvania State University, University Park, Pennsylvania, 2. Syracuse University, Syracuse, New York*

Unconstructive repetitive thinking (URT) is associated with poor psychological and physical health (Watkins, 2008). One pathway by which URT may lead to adverse health outcomes is by amplifying and prolonging negative emotional states. The current study examines how URTs relate to negative affect and how this may differ according to age. Because older adults have difficulty inhibiting unwanted thoughts (Hasher & Zacks, 1998), we examined whether URT would be more strongly related to negative mood states in older compared to younger adults. An experience sampling study was conducted in which participants (age range 20-78 years, 53% female) reported on their negative affect and frequency of unconstructive repetitive thinking (URT) at 5 randomly determined times during the day and once in the evening on 7 consecutive days. Hierarchical mixed models indicated that the experience of URT was related to both the level and time course of negative mood. Individuals who reported experiencing URTs more often experienced higher levels of negative affect, as well as prolonged negative mood states throughout the day ($p<.05$). Contrary to expectations, this latter relationship was attenuated among older adults ($p<.05$). Negative affect was also prolonged on days when an individual experienced more URTs than usual ($p<.05$); this effect was also attenuated for older adults ($p<.05$). These results demonstrate an association between repetitive thought and the durability of negative mood, but also suggest that this association is attenuated in older compared to younger adults. Implications for developmental theories of emotion regulation are discussed.

### EMOTION REGULATION IN THE CONTEXT OF DAILY STRESS ACROSS THE ADULT LIFESPAN

H. Chui, M.K. Diehl, *Human Development and Family Studies, Colorado State University, Fort Collins, Colorado*

This research used data from a study on daily emotion experience in adulthood to examine the associations between daily stress, self-concept incoherence (Block, 1967), age, and regulation of positive and negative affect. Emotion regulation was assessed using dynamical systems modeling (Boker & Laurenceau, 2006), which described the frequency of oscillation and whether affect showed reduced amplitude of oscillation. Findings revealed that the regulation of positive affect and the regulation of negative affect were two separate systems. Changes in one affect system did not influence changes in the other. For both positive and negative affect, the frequency and damping coefficients were statistically significant. This indicated that positive and negative affect showed a systematic pattern of oscillation and the amplitude of oscillation decreased over time. When self-concept incoherence and age were added into the models, these variables did not predict the regulation of either positive or negative affect. In contrast, daily stress was a significant predictor of regulation of positive affect, such that positive affect moved back toward equilibrium more quickly than usual when individuals experienced daily stress. However, there was no evidence that daily stress influenced the regulation of negative affect. These findings support the conceptualization of positive and negative affect as two independent systems (Watson, Clark, & Tellegen, 1988). Overall, these findings contribute to the ongoing discussion on how adults regulate positive and negative affect in the context of daily stress.

## FORGET ABOUT IT: ARE THERE AGE DIFFERENCES IN THE ABILITY TO SUPPRESS MEMORY FOR EMOTIONAL EVENTS?

T. Elliott, T.M. Hess, *Department of Psychology, NCSU, Raleigh, North Carolina*

An important memory skill involves the ability to intentionally forget information that is unwanted or no longer useful. Although younger adults are relatively effective at doing so, recent research has suggested that this ability is impeded when attempting to forget negative emotional material. Given the adaptive nature of suppressing undesirable memories, it is important to determine if older adults have similar difficulties. Since older adults have specific problems with inhibitory functions, they may experience even more disruption than younger adults. Research has also suggested, however, that emotion regulation skills are maintained or even improve in later adulthood. Thus, an alternative prediction would be that older adults will experience less disruption in directed forgetting due to their increased ability to control their responses to negative information. In this study, we examined how age differences in intentional forgetting are affected by the emotional content of the to-be-forgotten materials. Using a standard directed-forgetting procedure, young and older adults (N=128) studied two pairs of word lists. The pairs of word lists were either all negative words, all neutral words, or both negative and neutral words. In contrast to younger adults, older adults exhibited directed forgetting (i.e., low recall for material they were instructed to forget) in every condition, supporting the idea that enhanced regulatory skills in later life facilitate suppression of negative memories. The importance of emotion regulation was also illustrated in the finding that directed forgetting was most efficient in those older adults who are better at down regulating their negative affect.

## WHEN ENOUGH IS ENOUGH: CHRONIC STRESSORS MAKE AGE DIFFERENCES IN AFFECTIVE REACTIVITY DISAPPEAR

G. Luong[1], S.T. Charles[1], D. Almeida[2], *1. University of California, Irvine, Irvine, California, 2. Pennsylvania State University, University Park, Pennsylvania*

Older adults often report higher levels of emotional well-being than younger adults, and researchers have attributed this finding largely to the way older adults navigate their social relationships (Blanchard-Fields, 2007). Older adults use more disengagement strategies to avoid arguments with social partners, thereby reducing affective reactivity associated with interpersonal tensions (Charles, Piazza, Luong, & Almeida, 2009). According to Strength and Vulnerability Integration (SAVI), this age-related advantage may disappear when older adults are subjected to chronic stressors for which their emotion regulation strategies are no longer effective (Charles & Piazza, 2009). The present study used data from the National Study of Daily Experiences (NSDE) to test whether older adults would continue to show less affective reactivity in response to chronic or repeated interpersonal tensions when they use disengagement strategies. Results showed that older age was only related to less affective reactivity when the avoided argument was not reported multiple times in the 8-day study period (continuation) ($\beta = -.01$, SE = .00, $p < .01$) or coded as a chronic stressor in the person's life (ongoing)($\beta = -.01$, SE = .00, $p < .05$). When interpersonal tensions were a continuation or ongoing stressor, older adults no longer reported less affective reactivity in response to the avoided argument. These findings give initial support to SAVI and point to future areas of research in aging and emotion regulation.

## AGE AND SUBJECTIVE WELL-BEING

T. Hansen, *Norwegian Social Research (NOVA), Oslo, Norway*

It is a widely held assumption, also by older persons themselves, that SWB declines with age. Indeed, this expectation seems well-founded in light of the many losses and declines (or threats thereof) that may accompany old age, in terms of roles, abilities, energy, social contacts, partner, and health (including pain and disability). However, growing old entails both gains and losses, and these changes may leave different footprints on disparate aspects of SWB. This assumption is explored using recent data from the Norwegian NorLAG study (N=10,887). Indeed, most people in the second half of life report high SWB, and age is associated simultaneously with gains and losses in SWB. Campell et al.'s (1976) conclusion that, with age, cognitive well-being improves and affective well-being deteriorates, although oversimplified, fits quite well with the NorLAG results. Whereas well-being measured with cognitive constructs such as life satisfaction and domain satisfactions increases with higher age, well-being decreases when measured by affective measures such as positive affect, depression, and loneliness. Affective age patterns in well-being are not all bad, however, since negative affect also falls with age, at least till about age 70. The most troublesome aspect of well-being in old age is the high prevalence of depressive symptoms and loneliness (women). Importantly also, SWB tends to be distinctly poorer in the groups of older people not included here, namely the very old, the frail living at home, and those living in assisted living environments and nursing homes.

## AGE DIFFERENCES IN ATTRIBUTION OF POSITIVE AND NEGATIVE ATTRIBUTES TO SELF AND OTHERS

A. Gilet[1], J. Studer[1], K. Iglesias[1], D. Grühn[2], G. Labouvie-Vief[1], *1. University of Geneva, Geneva, Switzerland, 2. North Carolina State University, Raleigh, North Carolina*

Attributing positive and negative attributes to self or others is a highly context-dependent process: valence of attributes, but also degree of self-relevance, level of activation and/or social distance between self and other play an important role. In order to investigate age differences in the integration of positive and negative attributes for the self or others, 174 participants from 20 to 88 years-old were asked to judge how well positive and negative attributes describe themselves, a specific close other person, and a specific distant other person. Data were analyzed using multilevel modeling which has the unique advantage of including both item and participant information in a single statistical model. Analysis yielded main effects of Age, Valence, and Arousal, as well as a significant Age x Arousal x Distance interaction: with increasing age, whatever their level of arousal, attributes are less strongly attributed to self and close others. In contrast, whereas the attribution of low arousing attributes to distant others does not change with age, the attribution of high arousing attributes decreases from the age of 60. Analysis also yielded a significant Age x Valence x Arousal interaction, indicating that attribution of high arousing positive attributes decreases with age. Personal variables such as attachment styles also were found to affect the attribution of positive and negative attributes to self and others. Findings highlight the role of context-dependent influences, such as arousal and social distance which becomes a more important factor with age and how the use of attributions changes over the lifespan.

### THE RELATIONSHIP AMONG AFFECT, ENVIRONMENTAL CONTEXT, AND GENERAL HEALTH

R.C. Intrieri, P. Goodwin, *Psychology, Western Illinois University, Macomb, Illinois*

One hundred six community-dwelling older adults participated in a study examining daily context, affective experience, and general health. The sample of 106 included 72 women and 34 men with an average age of 67.68 (SD = 9.19). Participants completed a modified version of the Day Reconstruction Method (DRM). The DRM is a stepwise procedure which asks participants to recall the previous day through construction of a short diary consisting of a sequence of episodes. For each episode, participants provided information regarding the objective situation (activity, location, companion) as well as their subjective state. In addition to the diary, participants completed a measure of overall health (the SF-12). Coefficients representing mean ratings for both positive affect and negative affect were calculated for each participant. The present analysis used multilevel random coefficients modeling using HLM 6.08 to evaluate the effects among variables representing context and positive or negative affect (level 1). We also estimated the extent to which level 1 variables varied as a function of general health (as assessed using the SF-12). For Positive Affect, statistically significant coefficients were obtained for the objective context (coefficients ranging from $b = -2.335$ to $b = 3.034$). The coefficient for general health on level 2 was also significant ($b = 1.764$; $p < .0001$). Comparable results were obtained for Negative Affect with statistically significant coefficients for contextual variables (ranging from $b = -.664$ to $b = 1.760$). The coefficient for general health on level 2 was also significant ($b = 0.574$; $p < .01$).

### AGING AND THE MALLEABILITY OF EMOTION RECOGNITION: THE ROLE OF CONTEXT

S. Noh[1,2], D. Isaacowitz[1,2], *1. Brandeis University, Waltham, Massachusetts, 2. Volen National Center for Complex Systems, Waltham, Massachusetts*

Recent evidence suggests that identifying emotion from facial expressions can be affected by the context in which the face is embedded (Aviezer et al., 2008). For example, disgusted faces are likely to be mis-categorized as expressing the context emotion when they appear in an anger context, or vice versa. We examined age differences in the role of affective context in emotion recognition. While their eye movements were monitored, participants viewed a series of face images in a self-paced manner to categorize the emotion that each face expressed. Target faces expressing anger or disgust appeared in one of three contextual conditions: congruent (e.g., disgusted face in a disgust context), incongruent (e.g., disgusted face in an angry context), or neutral (e.g., disgusted face in a neutral context). First, older showed better accuracy when identifying disgusted faces in a neutral context than did younger adults. Second, when faces appeared in a congruent context, there were no age differences in recognition accuracy for either facial expression. When faces appeared in an incongruent context, however, older adults showed a greater contextual effect in emotion recognition than did younger adults. Older adults' accuracy decreased to a larger extent regardless of the emotion expressed, as they were highly prone to identify the faces as conveying the contextually suggested emotion rather than the facially expressed emotion. Our data suggest that the role of context in emotion recognition may increase with aging. The eye movement data further suggest that age differences in the recognition of emotion can be explained by visual scanning patterns for faces.

### AFRICAN AMERICANS' EMOTIONAL HEALTH MAY BE LINKED WITH VIEWS ABOUT MAINTAINING COGNITIVE HEALTH

J.N. Laditka, J. Warren-Findlow, S.B. Laditka, *Public Health Sciences, University of North Carolina at Charlotte, Charlotte, North Carolina*

Older adults are concerned about cognitive health. Beliefs that cognitive decline is inevitable may affect emotional health negatively. Beliefs that cognitive health can be maintained may affect emotional health positively. There are few studies of beliefs about maintaining cognitive health among African Americans. Using a sample of middle aged and older African Americans, we examined associations between individuals' beliefs about their ability to maintain cognitive health and their emotional health. Data were from the 2005-2006 Milwaukee African American oversample of the second Midlife Development in the United States (MIDUS II) study (n=563). The outcome was self-reported emotional health (SREH). A 9-item self-efficacy scale measured views about ability to maintain cognitive health. Logistic regression identified the association between self-efficacy and emotional health, adjusted for current cognitive status. Controls included: demographic characteristics, income, education, self-rated memory; health conditions associated with reduced cognitive health (e.g., diabetes, hypertension, obesity); and factors that may promote cognitive health (e.g., reading, playing games, using computers). In adjusted results, each self-efficacy increase was associated with substantially higher odds of reporting better SREH (odds ratio, OR 1.59, 95% confidence interval, CI 1.16-2.17). Among controls, having poor/fair memory was associated with substantially lower odds of better SREH (OR 0.24, CI 0.13-0.46); more reading (OR 1.25, CI 1.01-1.55) or computer use (OR 1.27, CI 1.05-1.53) were associated with better SREH. Findings suggest that self-efficacy regarding cognitive health may be related to emotional health among African Americans. Health promotion efforts to maintain cognitive health among African Americans may also improve emotional health.

### DAILY FLUCTUATIONS OF MOOD AND MEMORY: A WITHIN-PERSON APPROACH TO MOOD CONGRUENCE IN YOUNGER AND OLDER ADULTS

A. Brose[1], F. Schmiedek[2,1], U. Lindenberger[1], *1. Center for Lifespan Psychology, Max Planck Institute for Human Development, Berlin, Germany, 2. German Institute für International Educational Reseach (DIPF), Frankfurt, Germany*

Emotional states such as joy and sadness may affect judgment or memory. While mood congruence (i.e., the facilitation of processing of material that is congruent with the prevailing mood) is a robust finding in mood induction studies, relatively little is known (1) on whether natural fluctuations in mood have an impact on memory processes and (2) on changes of mood congruence across the adult life span. Therefore, the first aim of this study was to investigate mood congruent memory as a consequence of daily fluctuations in mood. The second aim was to compare mood congruence in younger and older adults. We hypothesized mood congruence to be reduced in older adults because of their potentially stable preference to process positive as compared to negative material. In a microlongitudinal design, 101 younger (20-31) and 103 older (65-80) adults were tested for 100 daily sessions. Each day, participants rated their mood and worked on a verbal episodic memory task, i. e., a word memory task consisting of two word lists with positive, negative and neutral words. Results showed the presence of mood congruence for positive and mood incongruence for negative material in younger, but not in older adults. Thus, in younger adults, elevated mood was associated with better memory for both, positive and negative words, speaking for an unspecific memory-enhancing effect of positive mood. It will be analyzed and discussed whether motivation may explain the findings in younger adults, and whether motivation may play a role for the identified age group differences.

### AGE INFLUENCES GENETIC CONTRIBUTIONS TO EMOTIONAL EXPERIENCE IN DAILY LIFE

S. Gibbs[1], B. Turan[2], J. Hallmayer[1], L. Carstensen[1], *1. Department of Psychology, Stanford University, Stanford, California, 2. University of California, San Francisco, San Francisco, California*

Socioemotional selectivity theory is a lifespan theory of development postulating that, as we age, our perceived time left in life typically decreases. As a consequence of shifting time horizons, older adults are motivated to invest resources in emotionally meaningful goals and experiences (Carstensen 1993; Carstensen, Isaacowitz & Charles 1999.) In laboratory studies, older adults have been shown to allocate relatively greater attention to positive material than negative material in comparison with younger adults (i.e. a "positivity effect" on attention.) The attentional biases in older adults require cognitive control and depend on intact prefrontal cortex function (Mather & Knight, 2005.) Similar patterns of relative positivity have been found in an experience-sampling study across the lifespan (Carstensen et al 2000.) However, biological factors which may explain these lifespan differences remain poorly understood. The serotonin transporter polymorphism (5HTTLPR) is one candidate mechanism associated with the number of serotonin transporters as well as structural and functional differences in the limbic system. In younger people, the short allele confers increased risk for emotion dysregulation (e.g. Gotlib et al 2008, Canli & Lesch 2007.) Few studies have examined gene-environment interactions in older adults, though some reports suggest these interactions may be reduced with age (see Uher & McGuffin 2008 for review.) Here we investigated the contribution of the serotonin transporter polymorphism to positivity in daily emotional experience across the lifespan. A community sample of adults who participated in a 10-year longitudinal study of daily emotional experience (Carstensen et al 2000) were invited for a follow-up study to provide saliva samples for genetic analysis. Forty two volunteers (age 35-95) agreed to participate. They also completed questionnaire measures of positive and negative emotion during the follow-up assessment. As expected from prior studies, the older adults tended to report greater relative positivity in emotional experience during the emotion sampling than did younger adults (r44=0.25, p=0.09.) Participants with two long alleles (LL) reported significantly greater relative positivity in daily experience than individuals with one or two copies of the risk-conferring short allele (SS/SL) [t40=2.62, p=0.01.] However, this effect was stronger for younger participants (age 35-59: t19=-2.24 p=0.04) than for older participants (age 60-95: t19=1.14 p=0.26.) These results support the hypothesis that genetic contributions to relative positivity decline with age, in favor of cognitive or behavioral strategies optimizing emotion regulation.

### AGE DIFFERENCES IN EMOTIONAL REACTIONS: AROUSAL AND AGE-RELEVANCE MATTER

B. Streubel, U. Kunzmann, *Department of Psychology I, Life-Span Developmental Psychology, University of Leipzig, Leipzig, Germany*

Positivity effects in older adults' affective information processing are evident in task involving attention and memory. The present study examined positivity effects on the level of subjective experiences in response to pleasant and unpleasant pictures differing in arousal and age-relevance. Younger and older adults (N = 52, respectively) rated their emotional reactions to pictures from the International Affective Picture System (N = 138) in terms of pleasantness, arousal, and the intensity of sadness (i.e., an emotion highly relevant to older adults) and anger (i.e., an emotion highly relevant to younger adults). Positivity effects - defined as smaller negative emotional reactions to unpleasant pictures and greater positive emotional reactions to pleasant pictures in older as compared with younger adults - were found only for low-arousing pictures and pictures with little age-relevance (i.e., pictures eliciting anger rather than sadness). Initial analyses suggest that these findings are largely replicable in a second study that assessed emotional reactivity more objectively by means of peripherphysiological measures like heart rate and skin conductance. Together, the present evidence strongly suggests that positivity effects in old age are the result of motivationally-driven resource-demanding processes.

## SESSION 830 (POSTER)

## GRANDPARENTING

### HOW DO THE GRANDCHILDREN FEEL? ATTITUDES AND CONCERNS OF CHILDREN RAISED BY GRANDPARENTS

C. Cox, *Fordham University, New York, New York*

In the last few years there has been an abundance of studies about the concerns and issues confronting custodial grandparents. At the same time, there is a dearth of information about the needs and feelings of the children they are raising. Yet, understanding the issues encountered by the grandchildren can be important for increasing the functioning and well-being of these families. This paper presents findings from surveys completed by 23 grandchildren living in the household of a grandparent. Ages ranged from 6-18 years with the average age of 13. The children were asked to complete simple questionnaires in which among other questions, they were what they liked most and least about their living situation, if and how they would like their grandparent to change, what could improve their lives with their grandparents, what their grandparents do not know about them, and how they felt about talking with their grandparents. It is important to note that good communication was stressed as really needed. They were also asked what their grandparents need to know about them. The responses to the questions provide important insight into the lives of these grandchildren and should contribute to any program working with these families.

### GRANDPARENTS' ASSISTANCE TO ADULT DAUGHTERS: GRANDCHILDREN'S NEEDS AND GRANDPARENTAL RESOURCES

M. Monserud, P. Uhlenberg, *University of North Carolina At Chapel Hill, Chapel Hill, North Carolina*

Using data from Wave 2 of the National Survey of Families and Households, this paper examines whether grandchildren's needs and grandparental resources are predictive of grandparents' help to adult daughters which can potentially decrease inequality between advantaged and disadvantaged grandchildren. This study considers grandparent' instrumental assistance (e.g., help with household tasks, errands, and day care) and emotional support (e.g., advice) to grandchildren's mother. This paper assesses such grandparents' resources as education, health, marital status, and financial circumstances. Grandchildren's needs are defined in terms of three possible advantages available in their families – mother's marital status, mother's education, and family income. First, we investigate whether grandparent resources potentially available to grandchildren are related to their needs. Findings from cross-tabulations indicate that disadvantaged grandchildren have grandparents with fewest resources, whereas advantaged grandchildren have grandparents with most resources. Second, factors affecting level of grandparent's assistance to grandchild's mother are examined using logit regression analysis. Controlling for other variables, there is no evidence that grandparents are more likely to provide support to the grandchild's mother in disadvantaged families. More specifically, findings demonstrate that the most disadvantaged families (i.e., those in which the mother is single, not a college graduate, and poor) are the least likely to receive support from grandparents. Furthermore, grandparents with fewer resources in terms of education and marital status are less likely to assist their adult daughters. Overall, this paper suggests that grandparents do not equalize the gap between advantaged and disadvantaged children.

### HEALTH STATUS OF GRANDPARENTS CARING FOR GRANDCHILDREN IN TAIWAN

L.E. Ku, S.C. Stearns, *University of North Carolina (UNC), Chapel Hill, North Carolina*

Background: Following traditional Chinese culture, grandparents in Taiwan commonly help to care for grandchildren in three-generational families, and evidence suggests a growing trend of grandparent caregiving following Taiwan's industrialization. However, little is known about the health impact of caregiving on Taiwanese grandparents. Although research in the US has found negative health effects on grandparent caregivers, the impacts of caregiving are likely to differ in Taiwan, considering differences between the Eastern and Western family culture. Methods: Data came from 3,353 grandparent respondents in the Survey of Health and Living Status of the Elderly in Taiwan, a nationally representative survey of older adults from 1993 to 2003. Descriptive and multivariate analyses were used to estimate the national prevalence and identify main characteristics of grandparent caregivers. Results: More than 22% of all grandparents aged 57 and above reported caring for grandchildren in 2003. Among grandparent caregivers, 63% lived in multi-generational households, 25% in skipped-generational households, and 12% provided non-resident baby-sitting care. At the average age of 66, caregivers were 7 years younger and had significantly better self-rated health comparing to the non-caregivers. Conclusions: Longitudinal data from a less studied population can increase our understanding of whether caring for grandchildren has a positive health impact on grandparents of Chinese culture.

### ACCULTURATION, COMMUNICATION LEVEL, AND GRANDPARENT-GRANDCHILD RELATIONSHIPS IN CHINESE IMMIGRANT FAMILIES IN LOS ANGELES

L. Xu[1], I. Chi[2], *1. USC, Monterey Park, California, 2. USC, Los Angeles, California*

Being a grandparent is an important social role for a Chinese older adult. However, due to the acculturation of both grandparent and grandchild and thus changed communication patterns between them, close relationships between grandparent and grandchild may be different in immigrant Chinese families. A mixed method was used in this study which combined qualitative method of focus groups and quantitative method of survey. Four focus groups of Chinese immigrant older persons (aged 65 or above) residing in Los Angeles who have grandchildren under 25 years old were conducted in 2008, followed by short survey of each participant. Data were collected using a standardized discussion guide and survey questionnaire. Videotaped sessions were transcribed and independently coded by investigators and crosschecked to enhance coding validity. The results of the qualitative analysis showed that there were some communication barriers between grandparent and grandchild even though they admitted good grandparent-grandchild relationships. Most grandparents dealt with this by adjusting themselves, either through behavior or through expectation. The results of the quantitative analysis showed that grandparents reported very good relationship with their grandchild (mean= 4.5, S.D=.82, ranging from 2 to 5). Grandparent had a relative lower communication level with their grandchild through chat, call or discussion. The regression model showed that grandchildren's level of acculturation (t=-3.52, p=.004), discussion important issues with grandchild (t=2.48, p=.029), and calling each other (t=2.60, p=.023) were associated with better grandparent-grandchild relationship. The model explained 56% variance of the grandparent-grandchild relationship.

### THE RELATION BETWEEN GRANDPARENT ROLE AND PSYCHOLOGICAL WELL-BEING OF YOUNG-OLDS IN JAPAN

J. Nakahara, *Osaka University, Suita, Osaka, Japan*

This study aims to explore (1) the influence of the self-process of grandparents on frequency of contact with grandchildren and grandparent satisfaction, and (2) the influence of the self-process, frequency of contact, and grandparent satisfaction on psychological well-being. A mail survey was conducted for randomly selected people between 65–74 years of age (n = 226) living in a local city. The analysis revealed that grandparent centrality and grandparent identity influenced frequency of contact. Further, frequency of contact influenced the grandparent satisfaction of only grandfathers and grandparent identity influenced only grandmothers. In addition, only grandparent satisfaction influenced psychological well-being. The findings suggest that the influence of frequency of contact on psychological well-being brings about the grandparent satisfaction of grandfathers, while grandparent identity contributes to the psychological well-being of grandmothers.

### THE EFFECT OF GRANDPARENT'S LIVING ARRANGEMENTS ON PROSPECTIVE AGING AMONG YOUNG ADULTS

S.J. Kohn, M.M. Wood, H.P. Harrison, *Psychology, Valdosta State University, Valdosta, Georgia*

Prospective or projective aging concerns the hypothesized perceptions that people hold about their own aging in the future. In this study, we focused on the impact that social and environmental source variables such as family structure and living arrangements may have on young adult's personal views of their own aging experience in the distant future. The participants were 411 undergraduates (M-Age=23.17). Data were gathered with a self-administered questionnaire containing items on optimism and pessimism about aging, ageism, family role models, and living arrangements regarding grandparents. We were most interested in how the general makeup of the household in which participants had been raised (along with grandparents' living arrangements) might have impacted these young adult's perceptions about the aging process and older adulthood. Results showed that the young adult participants who reported significantly greater optimistic perceptions about their future as older adults; and lower ageism scores were those that were raised in either a multigenerational (beanpole) household, a custodial grandparent (skipped generation) household, or a household in which a grandparent(s) was institutionalized (e.g., in a nursing home). The lowest measures of optimism about their future as older adults came from the participants raised in household in which a grandparent(s) with a medical impairment (e.g., Alzheimer's) was a full-time family care recipient. These participants also reported that their greatest future concern (fear) about their life in old age was being burdensome (a "bother") to their family. This finding is consistent with observations of normative stress and stigma among generations of family caregivers.

## SESSION 835 (SYMPOSIUM)

### HEALTHY AGING AMONG HISPANICS IN THE SOUTHWEST: PERSPECTIVES ACROSS THE SOCIO-ECOLOGICAL MODEL OF PUBLIC HEALTH

Chair: *A.P. Herrera, Geriatric Psychiatry, UCSD, La Jolla, California*
Co-Chair: *M.L. Smith, Texas A&M School of Rural Public Health, College Station, Texas*
Discussant: *T. Prohaska, UIC School of Public Health, Chicago, Illinois*

Older Hispanics are projected to become the largest minority senior population in the U.S. by 2030. Ensuring the capacity of public health systems to respond to the disproportionate burden of chronic disease in this group is critical to promoting healthy aging, with broader implications on health policy, preventive services, and costs. The socio-ecological model of public health provides a comprehensive framework for evaluating correlates of chronic disease risk and uses a multi-pronged approach across several interlocking layers. Salinas et al's epidemiologic study reveals regional differences and heterogeneity in the biological risk factors associated with chronic disease between older Hispanics residing near the U.S.-Mexico border and those residing in other areas of the country. Smith et al investigated the influence of sexuality on older Hispanic women's perceptions of successful aging, which exemplifies the significance of expanding preconceived notions of healthy aging to include social and cultural constructs. Mier et al assessed the potential of community health centers to increase preventive health service utilization among older, impoverished, foreign-born Hispanics with diabetes. Salazar et al investigated geospacial aspects of program delivery and outcomes associated with the evidence-based Chronic Disease Self-Management Program among community-dwelling older Hispanics. These studies examine the multi-dimensional nature of Hispanic aging issues that influence public health practices contextualized by personal, cultural, and external influences on healthy aging. Drs. Thomas Prohaska and Marcia Ory, will discuss the implications of this research for the advancement of coordinated strategies and policies that promote healthy aging among Hispanics in the Southwest region.

### BIOLOGICAL RISK FACTORS IN MEXICAN ORIGIN ADULTS LIVING IN THE TEXAS-MEXICO BORDER REGION: OLD AGE DISEASES IN YOUNGER ADULTS: IMPLICATIONS FOR LONGEVITY OF FUTURE GENERATIONS

J.J. Salinas, *Epidemiology and Disease Control, UT School of Public Health, Brownsville, Texas*

The Cameron County Hispanic Cohort (CCHC) study is compared to National Health and Nutrition Examination Survey (NHANES 2003-2006) data to determine the relative disease risk in US-Mexico border residing Mexican Americans. A compilation score of biological risk was created using nine biomarkers associated with chronic disease. Regression analysis was conducted to predict biological risk factors by immigration and socioeconomic status controlling for covariates. Results indicate that at every age group US-Mexico border residing Mexican Americans have on average one biological risk factor more than the NHANES sample. Although an immigrant advantage exists at younger (18-29) and older age (70+), immigrants living in the border region have greater on average biological risk factors than the NHANES sample. The results from this study demonstrate the need for regional comparisons of the biological process of aging for Mexican Americans in order to bring to light health disparities that exist within this ethnic group.

### EXAMINING RELATIONSHIPS BETWEEN SEXUALITY AND SUCCESSFUL AGING AMONG HISPANIC/LATINO POST-MENOPAUSAL WOMEN

M.L. Smith[1], A.P. Herrera[2], M. Ory[1], D. Jeste[2], *1. School of Rural Public Health, Texas A&M Health Science Center, College Station, Texas, 2. University of California - San Diego, San Diego, California*

Little is known about sexuality and aging among Hispanics. Objective: Examine the influence of sexuality on perceived successful aging and quality of life (QOL) among older post-menopausal Hispanic women. Methods: 121 Hispanic women (mean age=69.9 years) from the San Diego Women's Health Initiative/Successful Aging study were examined. Descriptive, bivariate, and logistic regression analyses were conducted. Results: 44% of Hispanics reported having intercourse in the previous year; 25.9% in the last week. Women perceiving themselves to be aging most successfully were significantly more satisfied with their QOL and sexual activity and desired sex a lot of the time. Women satisfied with their QOL were significantly more likely to have sex weekly and be satisfied with their sexual activity some of the time. Conclusion: Perceptions of successful aging and QOL are associated with sexuality. More investigation is needed to identify factors contributing to the frequency and satisfaction of sexual practices among Hispanics.

### GEOSPATIAL INFLUENCE ON PARTICIPATION AND SUCCESS IN A CHRONIC DISEASE PROGRAM IN SOUTH TEXAS

C.I. Salazar[1], M.L. Smith[2], M. Ory[2], A. Wilson[2], S. Ahn[2], *1. Clinical Outcomes and Program Evaluation, Univeristy Center for Community Healht/University Health System, San Antonio, Texas, 2. School of Rural Public Health, Texas A&M Health Science Center, College Station, Texas*

Despite documented health benefits of evidence-based disease management programming, less is known about factors influencing program participation and success for Hispanics. To assess the impact of geospatial and social characteristics in predicting ethnic differences in CDSMP participation and success. Baseline and 6-month follow-up data were examined from CDSMP offered in Bexar County, Texas (n=464). Geocoded data were derived from participant and site Zip codes and analyzed utilizing logistic regression. Most participants were Hispanic/Latino (58%) with a completion rate of 66%. Hispanic participants were younger, less educated, and resided in less affluent areas than their non-Hispanic white counterparts. Predictors of attendance included miles traveled and type of CDSMP host site. Participant outcomes included reduced usual activity interference. Program delivery location can influence health outcomes and eliminate attendance barriers. For Hispanics, offering CDSMP close to home with specific community partners will increase program access and utilization.

### CORRELATES OF HEALTHCARE UTILIZATION AMONG BORDER MEXICAN AMERICAN SENIORS WITH DIABETES

N. Mier[1], X. Wang[3], M.L. Smith[2], E. Villarreal[1], M. Alen[1], M. Ory[2], *1. Texas A&M School of Rural Public Health, McAllen, Texas, 2. Texas A&M School of Rural Public Health, College Station, Texas, 3. UT Panam, Edinburg, Texas*

Access to healthcare is important for managing diabetes; however, little is known about predictors of healthcare utilization among minorities. Objective: To determine personal and social correlates to healthcare utilization among border Hispanic seniors with diabetes. Methods: A community assessment survey (n=249) was conducted. Descriptive and multiple regression analyses were applied. Recruitment settings included a clinic, senior centers, and colonias. Results: Older Hispanics with diabetes residing in a colonia and uninsured had less access to healthcare than their counterparts. Significant correlates to physician utilization were gender, physician visits in Mexico, nativity, insurance, physician fees, obesity, colonia residency, and marital status. Significant correlates to emergency room visits (ER) were age, insurance, heart attack history, and retinopathy. Conclusions: Border older Hispanics may be relying on community clinics and ERs to treat their diabetes. Public health policies are needed to promote diabetes self-management among this population.

## SESSION 840 (PAPER)

## IMPACT OF DEMENTIA

### THE IMPACT OF DEVELOPING DEMENTIA ON THE SELF

L.S. Caddell, L. Clare, *Psychology, Bangor University, Bangor, United Kingdom*

Past research has concentrated on aspects of self and identity in people with dementia, but little research has focussed specifically on the personal experience of how developing dementia impacts upon self and identity, despite the implications for communication, support and care for people with dementia and their carers. The aim of this study was to explore in depth how people with dementia feel about the impact of the illness on their sense of self and their identity. Ten people in the early stages of dementia were interviewed separately, and transcripts were analysed using Interpretative Phenomenological Analysis. A number of themes emerged regarding the maintenance or changes in the self that participants were experiencing following the onset of dementia. These included the conflicting themes of, 'I'm still the same person' and 'an inevitable change', in addition to reflections on the future, captured by the themes 'that will never change' and 'what will be in front is another thing'. These results suggest a tension between acknowledging changes in the present and possible changes in the future, whilst maintaining that overall there is a sense of continuity in the experience of self, and the expectation that this will not change over time despite the effects of dementia. These results provide a useful foundation for thinking about what type of support might be helpful for people in the early stages of dementia with respect to supporting personhood and well-being.

### MAKING SENSE OF NON-SENSE: NARRATIVES OF MILD COGNITIVE IMPAIRMENT

R.L. Beard, T.M. Neary, *Department of Sociology & Anthropology, College of the Holy Cross, Worcester, Massachusetts*

As the number of seniors continues to rise, we find ourselves in the midst of an aging society with various economic, cultural, and political challenges. While medical innovations and improved disease prevention have certainly enhanced the overall quality of life for older people, Alzheimer's disease (AD) remains stigmatized and is assumed to be a death sentence for those diagnosed. Consequently, people with Alzheimer's are often deemed incapable (and perhaps unworthy) of contributing to the social discourse surrounding their illness experience. This study analyzed qualitative interview data from 18 people diagnosed with the potential preclinical phase of AD known as amnestic mild cognitive impairment (MCI). Using grounded theory methods, analysis revealed common themes of uncertainty and misinformation concerning definitions of memory loss, MCI, and AD as well as distinctions between normal aging and dementia. The interactional tensions resulting from this confusion over the terminology and prognosis mirror the lack of scientific consensus about the nosology and appropriate treatment regimen for MCI. Such ambiguity creates social and psychological difficulties in the lives of diagnosed individuals. The implications of these findings for research and practice are noteworthy as it is crucial to understand the perspectives of those most intimately affected, including how they interpret the news they are given and the effects the condition has on their health practices, social interactions, and everyday lives. In order to inform interventions, improve clinical encounters and quality of life for diagnosed individuals, and provide appropriate services and treatment options, narratives of MCI must be widely surveyed.

### THE RELATIONSHIPS AMONG PERCEIVED STIGMA AND QUALITY OF LIFE OUTCOMES OF PERSONS WITH DEMENTIA

S.C. Burgener[1], K.C. Buckwalter[2], R. Riley[2], M. Liu[2], C.J. Einhorn[1], *1. Biobehavioral Health Nursing, University of Illinois College of Nursing, Urbana, Illinois, 2. The University of Iowa College of Nursing, Iowa City, Iowa*

Progressive neurological diseases, such as Alzheimer's Dementia (AD), are prevalent conditions that involve manifestations believed to elicit stigma, such as changes in behavior and competence. Previous studies support the susceptibility to and impact of stigma on persons with dementia (PwD) including: awareness of responses of others, mental changes associated with dementia, negative self-attributes of persons in early stage dementia, and anecdotal accounts of experienced stigma in PwD. Currently, a longitudinal study (4 assessment points over18 months) is being conducted to examine the: 1) 'natural history' of perceived stigma in the early stages of AD, vascular, or mixed dementia; 2) relationships among background variables, perceived stigma, and quality of life (QoL) outcomes (depression, self-esteem, health, activity participation, behavioral symptoms) in PwD; and 3) effects of the primary caregiver's perceived stigma on QoL outcomes in PwD. The study sample represents a typical population of PwD, with a mean age of 80 (range 63-105), mean education of 13.3 years, and mean length of diagnosis of 14 months. Findings from a subsample (n=33) of the total sample of PwD (N=60) reveal significant relationships among perceived stigma of PwD and physical health (r= -.47), self-esteem (r= -.37), anxiety related to dementia (r= .64), and social support (r= -.42). Moreover, the family caregivers' perceived stigma was found to be related to anxiety in the PwD (r= -.39). Findings from the total sample for the initial (T1) assessment will be presented. Findings to date increase our understanding of the significance of perceived stigma to outcomes in PwD.

### THE FIRST TRANSITION IN DEMENTIA CARE: THE INTERFACE BETWEEN COPING STRATEGIES AMONG OLDER ADULTS WITH MEMORY PROBLEMS AND EXPERIENCE OF NATIONAL HEALTH SERVICE (NHS) MEMORY SERVICES

M. Downs[1], E. Argyle[1], P.C. Baldwin[1], R. Fortinsky[2], *1. University of Bradford, Bradford, United Kingdom, 2. Connecticut Centre on Aging, Farmington, Connecticut*

Background: People respond to living with memory problems in different ways, with some predominantly relying on self-maintaining and some on self-adjusting coping strategies. England's National Dementia Strategy strongly encourages people with memory problems to seek early diagnosis and effective intervention, primarily through locally-available memory services. In the recently-emergent literature on memory services' user experiences, no research has compared self-reported experiences based on type of coping strategies. Accordingly, we examined the association between type of coping strategies and expectations and benefits of memory service use over time, from the perspective of service users. Methods: Qualitative interviews were conducted at three points in time with 19 service users: immediately preceding; immediately after; and 6 weeks after the first appointment. Results: Unlike service users with self adjusting coping strategies, service users with self maintaining coping strategies did not expect to benefit from the memory service. Neither group knew what to expect from the initial appointment, leading to anxiety and apprehension. After the first appointment, both groups reported greater awareness of memory problems and reassurance and relief, although most had had a negative experience of the testing process. After the second appointment both groups reported a lack of satisfaction with the service. Implications: Implications for policy, practice and research are discussed.

## SESSION 845 (PAPER)

## LENGTHS OF LIFE

### MARITAL STATUS DIFFERENTIALS IN ACTIVE LIFE EXPECTANCY IN THE UNITED STATES

M. Hidajat[1,2], M. Hardy[1], M. Hayward[3], *1. Pennsylvania State University, University Park, Pennsylvania, 2. University of Utah, Salt Lake City, Utah, 3. University of Texas at Austin, Austin, Texas*

Although the profound implications of marriage on health and mortality is well known, less is known about the lifetime consequences of marital status on both health and mortality at the population level. In this paper, we use multistate life table models to calculate active life expectancy by marital status. This approach allows us to examine how marital status operates on the onset of significant health problems, improvements in health, and whether marital status continues to affect health—especially mortality—once poor health has ensued. In substantive terms, this study assesses whether married person are able to delay the onset of health problems, get better faster, and also delay mortality after health problems have occurred. We use data from the AHEAD cohort of the Health and Retirement Study (HRS), a nationally representative longitudinal survey of Americans who were born before 1924 and followed from 1995 to 2007. Using ADLs to measure functional limitations, we define active life expectancy as having no difficulty performing one or more ADL activities, such as walking across a room, dressing, bathing, eating, getting in and out of bed, and using the toilet. Our core hypothesis is that marriage exerts a persistent effect throughout adulthood such that married persons' lengthier lives reflect a postponement of poor health and a compression of the years lived in poor health. The ways in which these processes are gendered are theoretically ambiguous, and empirical work will provide a much needed foundation for future theoretical developments.

### THE ROLE OF HEALTH AND HEALTH BEHAVIORS IN DETERMINING SURVIVORSHIP AMONG THE U.S. OLDEST OLD

H. Beltran-Sanchez, J.A. Ailshire, *Ethel Percy Andrus Gerontology Center, University of Southern California, Los Angeles, California*

Despite increasing numbers of people reaching old age, little is known about the factors that determine survivorship into oldest-old age (90+ years) among those who have survived to old age (65+ years). Research on the oldest-old has typically focused on national level studies of mortality and survivorship based on vital statistics records. However, individual-level factors play a crucial role in understanding the health dynamics of the oldest-old population, particularly in relation to survivorship. In this paper we examine how socioeconomic status, demographic characteristics, health status, and health behaviors are associated with oldest-old mortality and survivorship among people who have survived to old age. We analyzed data on 16,521 adults aged 65 years and older from the 1990 and 1991 National Health Interview Survey with mortality follow-up through December 2002. Results from a proportional hazard model controlling for age, sex, education, activity limitation, and exercise habits show that there remains a gradient in the hazard of death by educational level, and that activity limitation and exercise status play an important role in mortality at older ages. People with less than high school and those with high school education experienced about 24% and 19% higher hazard of death, respectively, relative to those who completed college or more. Having some activity limitation increased the hazard of death by about 56%, while exercising reduced it by about 22%. Using estimates from this model we constructed life tables to determine average life expectancy associated with different combinations of sociodemographic and health characteristics.

### SIMILARITIES AND DIFFERENCES IN HEALTH EXPECTANCIES ACROSS THE LIFECOURSE IN EUROPE

C. Jagger[1,2], C. Gillies[2], J. Robine[3], *1. Institute for Ageing and Health, Newcastle University, Newcastle upon Tyne, United Kingdom, 2. University of Leicester, Leicester, United Kingdom, 3. INSERM/CERMES, Paris, France*

European life expectancy is increasing though not uniformly throughout all 27 EU countries. Moreover healthy life expectancy, as measured by the new EU structural indicator Healthy Life Years (HLY), is even more variable. In 2005 the range in HLY at age 65 was 9.7 years for men, from 3.4 years (Estonia) to 13.1 years (Denmark), and 10.7 years for women, from 3.4 years (Estonia) to 14.1 years (Denmark), wider than the total remaining years of life at age 65 of 12.5 years (Latvia) to 17.7 years (France) for men and 4.9 years for women, from 17.2 years (Latvia) to 22.0 years (France). However it is not clear whether the gaps are at younger or older ages or both, and whether similar results hold for other health measures than the Global Activity Limitation Indicator (GALI) on which the HLY is built. In this paper we calculate partial life expectancies for ages 16-34, 35-54 and 55-74 and the associated health expectancies from the three health measures (GALI, chronic morbidity and self-rated health) in the Statistics of Income and Living Conditions (SILC) over the period 2005-2007. We then use cluster analysis to explore similarities and differences in the profiles of health expectancies over the lifecourse between the 25 countries of the European Union.

### SELECTIVE MORTALITY AND LIFE COURSE RESEARCH: CONSEQUENCES, AND SOLUTIONS

S.M. Lynch, *Sociology, Princeton University, Princeton, New Jersey*

Rates of mortality vary substantially across individuals, so that members of a birth cohort who survive to be interviewed in a survey become an increasingly select subgroup of their original birth cohort as the cohort ages. The result is that estimates of even fixed characteristics for the cohort change across age, as do regression coefficients. These consequences are particularly pronounced when the variable of interest is related to the propensity to die. Some of the consequences of "selective mortality" have been well-known for at least three decades, but outside of demography and health research, relatively little attention has been paid to the issue. Yet, selective mortality may affect results of studies in a wide variety of substantive areas, especially when a life course hypothesis is investigated. In this paper, (1) I present evidence that selective mortality occurs, (2) I show the consequences of selective mortality in terms of influencing parameter estimates and conclusions regarding hypotheses, (3) I assess the usefulness of remedies that have been proposed and used in the literature, and (4) I develop a new approach to handling selective mortality.

# SESSION 850 (PAPER)

## LIFE HISTORY'S EFFECT ON COGNITION

### HISTORY OF SEXUAL ASSAULT IS ASSOCIATED WITH EARLIER DECLINES IN EXECUTIVE FUNCTIONING IN OLDER ADULTS WITH APOE-4

A. Petkus[1], J. Wetherell[2,4], M.B. Stein[2,3], L. Liu[3], E. Barrett-Connor[3], *1. San Diego State University / University of California, San Diego Joint Doctoral Program in Clinical Psychology, San Diego, California, 2. Department of Psychiatry, University of California, San Diego, San Diego, California, 3. Department of Family and Preventive Medicine, University of California, San Diego, San Diego, California, 4. VA San Diego Healthcare System, San Diego, California*

Experiencing a sexual assault (SA) has been associated with deficits in executive functioning (EF) in younger adults, although the long-term effects of SA on EF in older adulthood are not known. APOE ε4 genotype is also associated with increased risk for deficits in EF. Although both SA and APOE ε4 genotype may be associated with declines in EF, no studies have investigated how these risk factors may interact over time. Over an interval of 12 years, 1,383 older adults were assessed at approximately 3-year intervals. APOE ε4 data were available for a subsample of 846. Assessments included Trails-B and verbal fluency tests of EF, as well as a question about past history of sexual assault. Mixed-effects models were used to first examine the relationship between SA and EF over time. A second mixed-effects regression examined whether APOE ε4 genotype moderates the relationship between SA and EF over time. SA by itself was not associated with more or earlier decline in EF over time. For Trails B, there was a significant interaction between SA exposure and APOE ε4 genotype, in that those who experienced both a SA and had the APOE ε4 genotype experienced greater declines in performance earlier in life. Having both SA and APOE ε4 appears to be associated with faster decline on the attention, visuotracking and psychomotor speed components of EF. Explanations as well as clinical implications of these findings are discussed.

### PSYCHIATRIC HISTORY AND COGNITION TRAJECTORIES IN LATER LIFE: THREE COMPONENTS OF COGNITION

M. Brown, *Syracuse University, Syracuse, New York*

Advocates of the life course perspective suggest that cumulative inequality affects later-life cognitive function, and that a history of psychiatric problems may be detrimental to cognition among individuals at risk of experiencing cumulative disadvantage. Psychiatric conditions are more prevalent among disadvantaged groups, who may also be at risk of experiencing cognitive decline in later life. Therefore, it is important to explore the relationships between sex, race/ethnicity, childhood disadvantage, psychiatric history, and cognitive function. This study addresses the following hypotheses: 1. Individuals with a history of psychiatric problems will have lower cognitive function and/or a unique trajectory of cognitive function with age, for three different components of cognition – total recall, fluid intelligence, and crystallized intelligence. 2. This relationship will differ based on the component in question and on an individual's ascribed and early life characteristics. This study uses six waves of Health and Retirement Study data to examine influences on three components of cognitive function. Data are analyzed using growth curve models, controlling for demographic, health behavior and health status variables. Psychiatric history is significantly related to each of the three components of cognitive function, but is not related to decline in all components. Each component also has different relationships with sex and race/ethnicity and childhood disadvantage. These effects are partially mediated by demographic and health characteristics. These findings demonstrate that cumulative disadvantage and psychiatric history interact to shape different aspects of later life cognition, and can enhance our understanding of cognitive decline experienced in later life by disadvantaged groups.

### MINI-MENTAL STATE EXAMINATION IN MEXICAN ELDERLY. THE EFFECT OF AGE, SEX AND EDUCATIONAL LEVEL

E. ArIas-Merino[1], G.G. Ortiz[2], R.M. Meda-Lara[1], M.J. Arias-Merino[1], N.M. Mendoza-Ruvalcaba[1], J. Cueva Contreras[1], *1. Universidad de Guadalajara, CUCS, Depto. Salud Pública, Guadalajara, Jalisco, Mexico, 2. Centro de Investigaciones Biomédicas de Occidente, IMSS, Guadalajara, Jalisco, Mexico*

Introduction. For the MMSE is documented that age and low education level, are associated with poor execution of the test. In Mexico, there are no reference population normative values for the MMSE. Objective. To show normative values in relation to age, gender and education level of MMSE score in Mexican elderly. Materials and Methods Based on the Prevalence of Dementia Project in Jalisco (CONACYT-9997), MMSE score was calculated by percentiles ranked by age, education and gender. We excluded 162 subjects with a dementia diagnosis, cerebral vascular disease and severe sensory issues. Results. The study included 2409 subjects, age 60-110 years old, 61.1% female, 26.6% no education. Correlation between MMSE score: age (r=0.345, p=0.01), gender (r=0.043, p=0.05) and education (r=0.536, p=0.01). Percentiles are presented by educational level, age group and sex (M men and W women). Percentile 10: No education, 60-69(M19/W17), 70-79(M17/W16), 80-110(M15/ W14). Education level: 1-4 years, 60-69(M23/W21), 70-79(M20/W19), 80-110(M15/ W16). Education level: 5-8 years, 60-69(25), 70-79(22), 80-110(19). Education level: 9 and more years, 60-69(27), 70-79(24), 80-110(23). Conclusions: MMSE total score declines as age increases, increases with higher levels of education. Higher scores were observed in men.

### IMPACT OF INDIVIDUAL AND SPOUSAL PERSONALITY CHARACTERISTICS ON MEMORY

J. Blaskewicz Boron[1], L. Ryan[2], *1. Psychology, Youngstown State University, Youngstown, Ohio, 2. University of Michigan, Ann Arbor, Michigan*

Much research has documented relationships between individuals' personality and cognitive ability. Extraversion, conscientiousness, and openness have all been positively associated with memory in older adults, while neuroticism has demonstrated a negative relationship. Prior research has also suggested older adults may benefit on memory tasks by collaborating, such as with a spouse. However, the impact of spousal personality on cognition has not been investigated. The current study sought to examine the interaction of individual and spousal personality characteristics on memory in a large sample of married couples (N=1924 couples; age range: 30-96 years; mean age=65) from the 2006 wave of the Health and Retirement Study using Actor-Partner Interdependence models with SAS PROC MIXED. Results indicated that individual ($p<0.001$) and spousal pessimism ($p<0.01$), individual openness ($p<0.001$), and the interactions of individual pessimism and spousal openness ($p<0.05$), and individual conscientiousness and spousal pessimism ($p<0.01$), were significant predictors of memory after controlling for age, education and health. The individual pessimism, spousal openness interaction revealed low pessimism individuals scored higher on verbal memory, regardless of spousal openness. High pessimism individuals with high openness spouses scored lower on memory than those individuals with spouses low on openness. For the individual conscientiousness, spousal pessimism interaction, low spousal pessimism appeared to positively impact memory, regardless of individual conscientiousness. However, high spousal pessimism was especially detrimental to those individuals low on conscientiousness. Thus, although some individual personality characteristics may negate spousal personality influences on memory, the interaction of individual and spousal personality characteristics can impact memory in adulthood.

## SESSION 855 (SYMPOSIUM)

### MIXED METHODS RESEARCH ON HEALTH SELF-MANAGEMENT IN A MULTI-ETHNIC POPULATION OF OLDER RURAL ADULTS

Chair: *S. Quandt, Public Health Sciences, Wake Forest University School of Medicine, Winston-Salem, North Carolina*
Co-Chair: *T.A. Arcury, Public Health Sciences, Wake Forest University School of Medicine, Winston-Salem, North Carolina*

This session focuses on studies from rural North Carolina on the health self-management practices of older adults. Most older adults have been diagnosed with at least one chronic condition, and many have multiple diagnoses. They deal with symptoms of these chronic conditions, as well as occasional acute conditions, on a regular basis, drawing on medical care and self-care, with input from informal and formal supports. The papers in this session focus on self-management practices of adults in a population that includes significant numbers of minority (African American and American Indian) elders and in which many older adults have incomes below the poverty line. The session's overall goal is to illustrate the role of qualitative data for developing innovative research designs for the study of health self-management in older populations. The first two papers come from a study of the place of complementary therapies in health self-management. The first paper illustrates how herb use, with both traditional and contemporary characteristics, is integrated into health self-management, while the second paper shows how a daily diary study was implemented to capture the subtleties of self-management. The last three papers focus on diabetes, with one drawing on qualitative data to demonstrate how older adults' perceptions of their self-management skills differ from biomedical standards and another highlighting the role of fear of consequences in displacing older adults' concerns for their self-management. The final paper shows how older adults' discourse about diabetes is used to construct a tool for measuring holistic belief systems about diabetes.

### THE PLACE OF HERB USE IN HEALTH SELF-MANAGEMENT AMONG RURAL OLDER ADULTS

K.P. Altizer, S. Quandt, J.G. Grzywacz, R.A. Bell, E.P. Stoller, T.A. Arcury, *Wake Forest University School of Medicine, Winston-Salem, North Carolina*

This study provides a conceptually-based analysis of the role of traditional and contemporary herbs in older adults' health self-management. 62 African American and white older adults completed qualitative interviews describing the forms of herbs used, sources of information about herbs, interpretations of health that lead to herbs use, and the initiation and suspension of herb use in response to symptoms or chronic conditions. Traditional herbs are native to the region or have been traditionally cultivated; most often taken raw or boiled to produce a tea; and used for treating acute, mild symptoms. Contemporary herbs are prepared as pills, extracts, or teas; purchased at local stores or ordered by catalog or internet; and used for health promotion, illness prevention or treatment of chronic conditions. Herbs are widely used among older adults; we differentiate the types of herbs they use and their reasons for herbs use. Grant R01-AT003635

### USING DAILY DIARIES TO DOCUMENT USE OF COMPLEMENTARY AND OTHER THERAPIES FOR SPECIFIC SYMPTOMS AMONG RURAL OLDER ADULTS: STUDY DESIGN AND ILLUSTRATIVE RESULTS

T.A. Arcury, R. Neiberg, K.P. Altizer, R.A. Bell, W. Lang, H. Nguyen, S. Quandt, *Dept of Family and Community Medicine, Wake Forest University School of Medicine, Winston-Salem, North Carolina*

Older adults use complementary therapies (CTs), yet few studies document daily CT use for treating specific symptoms. We describe the design of a daily diary study that delineates CT use for common symptoms. We recruited 200 community dwelling older adults, including African American and white men and women. Participants completed a baseline interview and up to six sets of monthly interviews for three consecutive days that addressed the presence and treatment of 40 common symptoms. Participants provided data for 3,070 days. This presentation focuses on four symptoms: Join Pain, Indigestion, Low Energy, and Sort Throat. CT use varied by symptom; e.g., home remedies were used for 0.2% of the days on which low energy was reported but on 20.5% of days when sort throat was reported. A daily diary approach implemented with older adults provides detailed data of the purposes for which CTs are used. Grant R01-AT003635.

### DIABETES SELF-MANAGEMENT AMONG RURAL OLDER ADULTS: PERCEIVED MASTERY AND ACTUAL BEHAVIOR

T. Kohrman[1], C. Chapman[1], T.A. Arcury[2], S. Quandt[1], *1. Public Health Sciences, Wake Forest University School of Medicine, Winston-Salem, North Carolina, 2. Wake Forest University School of Medicine, Winston-Salem, North Carolina*

This study examines diabetes management experiences of 74 African American, American Indian, and white older adults in rural North Carolina. Data from in-depth interviews indicate that most participants believe they have mastered skills to manage diabetes effectively. However, the data suggest that these individuals over-estimate their self-management. Most describe efforts to eat properly, but few have specific diet plans, and they discuss vague notions of what to do. Some dietary practices contrast sharply with biomedical self-management approaches (e.g., consuming sour foods to “cancel out” elevated blood sugar). While a handful take advantage of local fitness centers or take long walks, most fail to engage in regular, sustained physical activity. Although most use medications as directed, some report taking additional medication to compensate for excessive eating. Others stop and start medications according to the symptoms experienced. This analysis suggests that many older rural adults have not mastered self-management skills. Funding: AG17587

### WHAT OLDER RURAL ADULTS FEAR THE MOST ABOUT DIABETES: IMPLICATIONS FOR SELF-MANAGEMENT

C. Chapman[1], T.A. Arcury[2], S. Quandt[1], *1. Wake Forest University School of Medicne, Winston Salem, North Carolina, 2. Wake Forest University Department of Family Medicine, Winston Salem, North Carolina*

This paper is based on 74 in-depth interviews conducted with African American, Native American and white adults, 60 and older who live in rural counties and have had diabetes for at least two years. When asked what they fear the most about diabetes, responses focused on major complications that could limit their ability to carry out normal activities, such as amputation or blindness. These fears dictated their self-management activities, as they focused specifically on actions that they believed would prevent their fears being realized, including examining their feet daily or having an annual eye examination. They attributed less importance to those self-management activities recommended by physicians to control blood. This paper explores the origins of fears, whether elders’ daily activities will prevent the feared complications, and the disconnection between elders’ self management practices and the management of their disease as a whole. Funding: AG17587

### IDENTIFYING COMMON SENSE MODELS OF DIABETES IN A MULTI-ETHNIC SAMPLE OF RURAL OLDER ADULTS

S. Quandt, J.G. Grzywacz, E. Ip, C. Chapman, J. Kirk, R.A. Bell, S. Saldana, T.A. Arcury, *Public Health Sciences, Wake Forest University School of Medicine, Winston-Salem, North Carolina*

This study was designed to identify “common sense models” (CSMs) of diabetes in a multi-ethnic (African American, American Indian, white) population of older rural adults. CSMs incorporate beliefs and knowledge about an illness, and shape illness-related behavior. However, no instruments exist to allow holistic measures of CSMs. Ninety-four belief statements concerning diabetes were extracted from a series of 74 qualitative interviews. A separate sample of 600 from the same population rated their agreement with each statement, and provided a blood sample to assess glycemic control (A1C). Latent Class Analysis was used to first identify within-domain (e.g., diabetes etiology) latent classes. These were then subjected to a second, categorical version of LCA. Coherent CSMs of diabetes emerged, allowing individuals to be classified according to their belief structure and the association of A1C with belief structure to be demonstrated. Such an approach may be useful in promoting effective disease self-management. Funding: AG17587.

## SESSION 860 (PAPER)

## MOTHER/DAUGHTER RELATIONSHOPS

### HOW THE QUALITY OF INTERGENERATIONAL RELATIONSHIPS MODERATES VALUE TRANSMISSION BETWEEN PARENTS AND THEIR ADULT CHILDREN OVER THE LIFE COURSE

J. Min, M. Silverstein, *Davis School of Gerontology, University of Southern California, Los Angeles, California*

Literature consistently shows that parental values influence children’s values but less is known about the persistence of value transmission over the life course and the role of family dynamics in the process. This research examined how the quality of intergenerational relationships in adulthood moderates the transmission of two different value orientations: religious attitudes and gender role ideology. We hypothesized that intimacy in mother-child relationships would enhance value transmission between the generations. We addressed our research question using 1971 and 2000 waves of the Longitudinal Study of Generations (LSOG). The sample consisted of 268 mother-child dyads, where mothers were measured in 1971 and their children were measured in 2000. Mothers averaged 43 years old and their offspring averaged 48 years old at measurement, roughly equating their ages. We found statistically significant intergenerational transmission with regard to both values. Parents contributed more to their children’s religious attitudes ($R2=.22$) than to their gender role ideology ($R2=.05$). Quality of the mother-child relationship strengthened the transmission of gender role ideology ($t=2.397$, $P<.05$) but not of religious attitudes. Results suggest that the long-term strength of intergenerational value transmission and the role of intimacy as a facilitator of transmission vary according to type of value considered. We discuss the central role of parents on their children’s value orientations as a relational and a life course process.

### SUPPORT BETWEEN ADULT DAUGHTERS AND THEIR MOTHERS, RELATIONSHIP QUALITY, AND LIFE SATISFACTION

M. Friedlmeier, W. Friedlmeier, *Grand Valley State University, Allendale, Michigan*

Due to increased life expectancy in industrialized countries, parents and children share more time together. Irrespective of the existence of a social security system, the exchange of support remains important in the parent-child relationship throughout the whole life (Arber & Attias-Donfut, 2000). This intergenerational exchange is comprised of emotional, instrumental, and financial support, and represents a major aspect of the model of intergenerational functional solidarity developed by Bengtson and colleagues (e.g. Bengtson & Roberts, 1991). The main goal of this study was to test one assumption of this model, namely that a balance between support provided and received will increase the quality of the parent-child relationship (Bengtson & Roberts, 1991), and may also be relevant for well-being, especially among the older generation. Eighty three dyads of middle aged women (M = 45.17 years, SD = 5.68) and their mothers (M = 67.92 years, SD = 6.00) from a large city in the Midwest were interviewed. Cross-sectional self report data with respect to the extent of different forms of support they give and receive, relationship quality, and life satisfaction were assessed. Preliminary analyses show that a reciprocally balanced perception of the give-and-take between adult daughters and their mothers led to greater intimacy and fewer conflicts between them. Also, the results suggest that receiving support per se is not always beneficial for the recipient. The findings will be discussed within the framework of parent-child relationship in later life.

### THE DEVELOPMENT OF THE MOTHER-IN-LAW STYLES INDICATOR (MILSI)©

M. Turner, W.C. Bailey, *Human Development and Family Sciences, University of Arkansas, Fayetteville, Arkansas*

Women are the kinkeepers in the family. One key dimension of this role is the development of quality relationships between the mother-in-law (MiL) and her daughter-in-law (DiL). Yet few measures have been developed to assess the unique style of relating between MiLs and DiLs. The current research indicates the style and quality of this relationship can vary considerably. The MiLSI is a self-assessment of a MiL's perception of her style of relating to her DiL. Using surveymonkey.com, data were collected from 254 MiLs who had a mean age of 57.6.years. There were 50 items on the initial questionnaire with five possible responses ranging from "never like me" to "always like me." The items were reduced to 35 following exploratory factor analysis. Five factors were found with eigenvalues higher than 2.0, explaining 50.6% of variance. The resulting factors were labeled Utilitarian, Combative, Traditionalist, Harmonizer, and Engager. For example, a Utilitarian MiL remains aloof and seldom interacts with her Dil. The Engager perceives her DiL as capable of making contributions to her well-being, is open with, and inclusive of her DiL. Each respondent's style was determined by adding 7 items together creating 5 style scores ranging from 7 to 35. Using the highest style score, MiLs were assigned a primary style. A secondary style was assigned using the second highest score. Additional research using MiLSI© is needed with a random sample of different populations. The instrument is available for others to use for research.

### IS MARRIAGE ALWAYS GREEDY? THE EFFECTS OF IN-LAW RELATIONSHIP QUALITY ON MOTHER—ADULT CHILD RELATIONS

J. Suitor[1], J. Sechrist[1], S. Kim[1], K. Pillemer[2], *1. Purdue University, West Lafayette, Indiana, 2. Cornell University, Ithaca, New York*

Both classic and contemporary scholars have identified marriage as a "greedy institution" in which adult children reduce intergenerational ties due to the demands of marriage. However, studies have not considered how parents' relationships with their children-in-law influence the parent-adult child relationship. We suggest that the degree of "greediness" of marriage (i.e. reduced closeness and contact with married children) will be higher in cases where there is high conflict with the child-in-law. Using reports on 2,143 adult-children from 566 mothers from the Within-Family Differences Study, we extend the study of in-law relationships to examine the influence that these relationships have on relations between mothers and their adult children. Multi-level models indicate that high in-law conflict is related to lower closeness and less frequent interaction between mothers and adult children when compared to unmarried children. In contrast, when there is low tension and conflict in the in-law relationship, mother-adult child relations are actually closer compared to relations between unmarried children and their mothers. These findings indicate that marriage is greedy only when there is conflict between mothers and children-in-law; whereas positive in-law relationships are actually related to stronger mother-child ties.

## SESSION 865 (SYMPOSIUM)

### NONPHARMACOLOGIC VERSUS PHARMACOLOGIC INTERVENTIONS FOR BEHAVIORAL AND PSYCHIATRIC SYMPTOMS IN DEMENTIA: TRANSITIONS IN CARE PRACTICES

Chair: *C. Camp, Hearthstone Alzheimer Care, Woburn, Massachusetts*
Co-Chair: *A. Snow, Cntr for Mental Health & Aging/Psychology, University of Alabama/Tuscaloosa VAMC, Tuscaloosa, Alabama*

Behavioral and psychiatric symptoms (BPS) associated with dementia are highly prevalent and affect quality of life. Traditionally, pharmacologic treatments have received more emphasis and use for BPS, but there in now strong evidence that these treatments have only modest efficacy and significant risk. An important transition occurring in the delivery of quality care to individuals with dementia is the transition from a traditionally pharmacologic-focused approach to the use of non-pharmacologic treatments. This symposium will begin with a sociological view, examining why pharmacologic approaches have been popular and ways in which societal knowledge might popularize non-pharmacologic approaches. Moving to an epidemiologic view, we will present findings of a longitudinal study of the development of aggression and how the identification of antecedents of aggression have empirically informed the development of an intervention to prevent aggression. The clinical perspective will be represented by discussing: a) the proper role of pharmacologic treatments as important, but adjuvant, interventions for BPS will be discussed; b) preliminary results from a randomized controlled trial providing therapeutic activities for persons with dementia and associated agitated behaviors using Montessori activities; c) results from a study of spaced retrieval techniques to prevent agitation in persons with dementia by providing skills that enhance feelings of autonomy and safety. Finally, implications of methodologic approaches to measuring outcomes in nonpharmacologic versus pharmacologic intervention studies will be examined.

### PREVENTING DEVELOPMENT OF AGGRESSION IN DEMENTIA: EPIDEMIOLOGICAL INTERVENTION DEVELOPMENT

M.E. Kunik, *1. VA Center of Excellence, Michael E. DeBakey VA Medical Ctr., Houston, Texas, 2. Baylor College of Medicine, Houston, Texas*

Preventing Development of Aggression in Dementia: Epidemiological Intervention Development Mark Kunik, mkunik@bcm.edu Historically, aggression has been pharmacologically treated without regard to specific causes. I will present results from our recent longitudinal study that identifies the incidence and important potential contributions to the development of aggression, including patient factors (pain and depression) and caregiver factors (burden and relationship quality) that predict development of aggression. Furthermore, the study finds that pharmacologic interventions are common; and non-pharmacologic interventions are nearly absent in routine clinical practice. The limitations of past pharmacologic interventions and the appropriate use of pharmacologic interventions as a co-treatment with non-pharmacologic interventions will be discussed. The implications of this study for the development of future interventions will be explored, and the pilot phase of a new treatment in development based on these study results will be presented.

### PRELIMINARY FINDINGS OF A CROSS-OVER TRIAL ON PERSONALISED, ONE-TO-ONE INTERACTION USING MONTESSORI-TYPE ACTIVITIES AS A TREATMENT OF AGITATION IN INDIVIDUALS WITH DEMENTIA

E. van der Ploeg, D. O'Connor, *Aged Mental Health Research Unit, Monash University, Cheltenham, Victoria, Australia*

Background This cross-over trial compares personalised one-to-one interaction to a relevant control condition in terms of reducing agitation and increasing positive engagement in persons with dementia. Methods 16 nursing home residents in Melbourne were exposed to two interventions; Montessori (attuned to their capacity and interests) and control (general conversation) activities. Number of agitated behaviours and type of engagement were noted before, during and after intervention time (30 min. per period). Results Outside intervention time residents on average displayed behaviours during 17 (out of 30) minutes. Both interventions were successful in reducing this agitation, with the Montessori intervention doing slightly better than the control intervention (respectively 9 min. vs. 11 min. with behaviours). Furthermore, residents were more constructively engaged, meaning that they participated more actively, during the Montessori intervention compared to the control intervention ($p<.01$). Discussion Whereas both non-pharmacological interventions reduce agitation significantly, the Montessori intervention elicits more active participation.

### TRANSITIONS IN COMPETENCE: A COMPARISON OF COGNITIVE STIMULATION AND SPACED RETRIEVAL IN A COMMUNITY-DWELLING SAMPLE WITH PROBABLE DEMENTIA

M. Luszcz, C. Materne, *Flinders University, Adelaide, South Australia, Australia*

Spaced retrieval (SR) has been shown to be successful in assisting people with moderate to severe dementia learn and remember personally relevant information. Previous research has predominantly focussed on intensive, sometimes daily, training schedules with residents in long-term care. An experiment was implemented with a mixed 'probable' dementia sample, drawn from the general community. SR was compared to a control condition of comparable length involving cognitively stimulating activities. SR training was designed to facilitate remembering of strategies to enhance day-to-day functioning by supporting remembering of important information. The protocol covered 9 weekly sessions, comprising 2 baseline, then 6 experimental, sessions. Baseline and the first follow-up session assessed memory self-efficacy in people with dementia (and their carers) and a spectrum of cognitive abilities. Initial SR results indicate that its benefits can be maintained over considerable intervals. Its implications for memory self-efficacy and generalization to other functions will also be presented.

### "TREATMENT" VERSUS "CARE": EFFECTS OF LABELS USED FOR INTERVENTIONS FOR PERSONS WITH DEMENTIA

J. Zeisel, *Hearthstone Alzheimer Care, Woburn, Massachusetts*

The "social facts" that sociologists study do not exist without formal organizations or informal interest groups "labeling" them and without the public embracing those labels. This presentation will explore how labeling in dementia has lead to popular acceptance of Alzheimer's as an "illness" rather than a "disability," medication as the only available "treatment," and nonpharmacologic approaches to reducing symptoms as "care" rather than "treatment." This latter label has lead to limited degrees of acceptance, funding and implementation. The implications of these labels will be explored with emphasis on the emergence and effects of the relatively recent "treatment" label attached to nonpharmacologic approaches, such as physical environment, the arts, and Montessori-based activity programming, as well as the "symptom" labels attached to the behaviors of "wandering," "sundowning," and "elopement." Analogies will be drawn with the historic labeling of "anxiety disorders" and "depression" as illnesses and the resulting treatments developed.

### COMPARING APPLES AND AARDVARKS: THE NEED TO DEVELOP COMMON METRICS WHEN COMPARING PHARMACOLIC AND NONPHARMACOLOGIC INTERVENTIONS FOR PERSONS WITH DEMENTIA

C. Camp, *Research & Development, Hearthstone Alzheimer Care, Woburn, Massachusetts*

A transition from an emphasis on Alzheimer's disease and associated disorders from a terminal illness to a chronic illness, and a corresponding transition of viewing both pharmacologic and nonpharmacologic interventions as treatments for symptoms associated with dementia, will be accelerated once common metrics are utilized in these two approaches. For a variety of reasons, there has been little effort to create common standards for determining the efficacy and effectiveness of these two approaches to symptom treatment. These include emphasis on diagnosis versus treatment, emphasis on recovery of function versus circumvention of deficits, regulatory emphases on acceptability of specific measures (e.g. FDA standards; use of MDS data), as well as historical and cultural trends within different research disciplines. Current NIH funding initiatives, as well as potentially useful opportunities for collaborative efforts involving utilization of both approaches to intervention for dementia, will be presented as possible means to alleviate this situation.

## SESSION 870 (POSTER)

## OLDER PARENTS/ADULT CHILDREN

### THE INFLUENCE OF RELIGIOSITY AND MARITAL STATUS ON SUPPORT GIVEN TO PARENTS

N.N. Flanigan, *Family and Child Sciences, Florida State University, Tallahassee, Florida*

Recent demographic trends such as high divorce rates and increased life expectancy will likely lead to an increase in the number of divorced and widowed older adults in the future. With the absence of a spouse, these adults are likely to rely on adult children for social support. In continuously married families, religious adult children exchange more support with parents. In divorced families, however, religiosity is negatively associated with exchanges of support. The link between religiosity and social support has not been compared in divorced and widowed families. The purpose of the present study was to determine the influence of religiosity and parent's marital status on the amount of social support that adult children give to widowed and divorced parents using data from 1193 parent-adult child dyads from Wave 2 of the National Survey of Families and Households. Measures of religiosity included adult child's religious preference, adult child's public religiosity, and congruence in public religiosity between adult children and their parents. Social support consisted of emotional (e.g., giving advice) and instrumental (e.g., help with shopping) support. Adult children with higher levels of public religiosity gave more support to parents than did those with lower levels of public religiosity. Religious preference and congruence in public religiosity did not affect support given to parents. Adult children with widowed parents gave more support to parents than did adult children with divorced parents. None of the interactions between religiosity and parent's marital status were significant.

### GIVING AND RECEIVING THE "RIGHT" HELP: EVALUATIONS OF AGING PARENTS AND THEIR MIDDLE-AGED CHILDREN ON HELP GIVEN AND RECEIVED

K. Kim[1], S.H. Zarit[1], K.S. Birditt[2], K. Fingerman[3], *1. Department of Human Development and Family Studies, Pennsylvania State University, University Park, Pennsylvania, 2. Institute for Social Research, University of Michigan, Ann Arbor, Michigan, 3. Department of Child Development and Family Studies, Purdue University, West Lafayette, Indiana*

Research on intergenerational support has mainly focused on the types and amount of support exchanged between generations. We know relatively little about how each generation feels about the support that they give and receive, and whether they view this support as adequate. This study examines how aging parents (G1) and their adult children (G2) evaluate the amount of support that they give and receive from each other, using 337 parent–child dyads. Each person independently reported the amount of help given and received from the other, and whether they perceived the amount of support to be more or less than they needed, or the right amount. Most participants reported the amount of support exchanged was the right amount or that it was less than they preferred. In addition, appraisals of the rewards and stresses of giving help and relationship quality are associated with perceptions of adequacy of support exchanged for both G1 and G2, even after controlling actual amount of support. These findings suggest a complexity in how support is perceived within a parent-child dyad. Although a majority of dyads agree about the appropriateness of the amount of support, a significant minority believe that they are giving and receiving too little. Not surprisingly, these differences are associated with general tensions in the relationship, as well as appraisals regarding the stresses and rewards of support exchange.

### DISCLOSURE OF WORRIES IN THE PARENT AND ADULT OFFSPRING DYAD

J. Lee[1], K.E. Cichy[2], E.S. Lefkowitz[1], S.H. Zarit[1], K. Fingerman[3], *1. Human Development and Family Studies, Penn State University, University Park, Pennsylvania, 2. Kent State University, Kent, Ohio, 3. Purdue University, West Lafayette, Indiana*

Studies have shown that adults and their parents commonly worry about each other. Yet, most research has relied on self-reports rather than behavioral observations. Little is known about worry disclosure between parents and adult offspring and its association with both parties' emotional states. The present study investigates: (1) generational differences in worry disclosure (2) gender differences in worry disclosure, and (3) associations between worry disclosure and (a) offspring's/parents' own emotional state and (b) the other party's (parents/offspring)'s emotional state. The present study investigates the following questions: (1) Which generation is more willing to disclose their worries about each other? (2) What are gender differences in disclosing worries? (3) What is the association between worry disclosure and (a) offspring's/parents' own emotional state and (b) the other party (parents/offspring)'s emotional state? Participants from the Adult Family Study included 158 offspring (51.9% female, aged 22 to 49), their mothers, and their fathers (N=474). Trained coders rated videotaped discussions between parents and offspring discussing what worries them about each other. Mothers and fathers disclosed their worries more than offspring did. As expected, mothers and daughters disclosed their worries more than fathers and adult sons. Using Actor Partner Interdependence Model (APIM) analysis, we also tested whether self disclosure of worries would be associated with one's emotional state and further with the other party's emotional state. For mothers, fathers, and offspring, how much they disclosed their own worries was associated with their own negative emotional states, such as worry and sadness. Adult offspring's worries, however, were also associated with mothers' emotional state. Findings underscore the importance of worry disclosure in research on emotional complexities in the parent-adult offspring relationship.

### FATHERS' TRADITIONAL ATTITUDES: THEIR ROLE IN THE FLOW OF SUPPORT FROM ADULT CHILDREN

M.W. Steinhour[1], J. Suitor[1], K. Pillemer[2], *1. Sociology, Purdue University, West Lafayette, Indiana, 2. Cornell University, Ithaca, New York*

The study of exchanges between parents and adult child has been a focus of research on intergenerational relations across the past half century. Studies have found substantial differences in the flow of support from children to mothers and fathers, but few differences in the predictors of these divergent patterns. We contend that there is one important predictor of support from children to fathers that has received no attention in the literature: fathers' traditionalism. In this paper, we explore the role fathers' traditionalism plays in their receipt of support from their children, using quantitative and qualitative data from older fathers collected as part of the National Survey of Families and Households and the Within-Family Differences Study. Specifically, we test the hypothesis that fathers who hold more traditional attitudes are less likely to receive both expressive and instrumental support from their adult children. Preliminary analyses suggest that the more traditional values fathers hold, particularly regarding gender, the less likely they are to receive support from their adult children. Examination of the qualitative data suggests that this pattern occurs because traditional fathers are less likely to solicit support or accept it when it is offered by their children.

### LONGITUDINAL ASSOCIATIONS AMONG PARENTAL EMOTIONAL SUPPORT, SLEEP, AND DEPRESSION OVER 3 DECADES

C. Poon, B.G. Knight, M. Silverstein, *University of Southern California, Los Angeles, California*

Background: Symptoms of sleep disturbances are reported by nearly a third of the adult population. Sleep problems can start in childhood and continue into later years. Early in life, adverse family experiences are associated with sleep problems. This study examined whether lower parental emotional support in late adolescence and young adulthood predicted sleep disturbances across a 35-year period, when depressive symptoms were taken into consideration. Method: Regression analysis was performed on 189 participants from the Longitudinal Study of Generations (LSOG) that included 8 waves of data from 1971 to 2005. Participants in the current analysis were under 21 (Mean = 17.66, SD = 1.31) and living with their parents in 1971. Of these, 128 remained in the study in 2005. Subjective evaluation of parent-child emotional closeness was reported in 1971. Non-somatic depressive symptoms and restless sleep were reported 7 times between 1985 and 2005. Results: Over 58% reported restless sleep 3 to 7 days a week in at least one wave of data collection. From 1985 to 2005, endorsement of restless sleep increased from 16% to 34%. Controlling for age, gender, and negative affect in 1971, lower parental emotional support significantly predicted more frequent endorsement of restless sleep between 1985 and 2005. The association remained significant after controlling for other non-somatic depressive symptoms in the same period. Conclusion: The influence of early parental emotional support on sleep and depressive symptoms persists into later adulthood.

### YOUNG ADULT OFFSPRING'S SUPPORT OF MIDDLE-AGED PARENTS

Y. Cheng[1], K.S. Birditt[2], S.H. Zarit[3], K. Fingerman[1], *1. Purdue University, West Lafayette, Indiana, 2. University of Michigan, Ann Arbor, Michigan, 3. Penn State University, University Park, Pennsylvania*

Research has documented the support middle-aged parents provide to grown children, but there has been less attention to support they receive from offspring. The first purpose of this study was to document how much support adults aged 18 to 30 provide their parents. The second purpose was to examine predictors of support to parents. Adult offspring from the Family Exchanges Study (269 women, 246 men; Mean age = 22.34, SD = 3.43) indicated how often they provide and receive support with each middle-aged parent (590 mothers, 571 fathers). They also responded to questions about relationship quality with parents, parental problems or crises in the past two years, and parental health status. On average, offspring reported providing support to parents once a month. Around 30% of offspring provided support several times a month or more frequently, while 38% helped only every few months or less often. Offspring's receipt of support was higher than their provision of support. Separate hierarchical regressions by parent gender examined whether support provided was explained by support received from parents, relationship quality, parental problems, or parental health controlling for offspring characteristics. Greater support received from parents, relationship quality, and parental problems predicted greater offspring support to parents. In sum, although young adult children provide less support than they receive, there was considerable variability in support from young adults to their parents. Young adult offspring who provide support to parents do so in the context of reciprocal support, affectual solidarity (or better relationship quality), and parental needs.

### PATTERNS OF FAMILY COMMUNICATION: A LOOK INSIDE AN ASSISTED LIVING FACILITY

C.L. Vair, S.H. Qualls, M.A. Doffing, M.D. Williams, *Psychology, University of Colorado, Colorado Springs, Colorado*

Families of older adults maintain regular and meaningful communication with elders, but placement in a facility (e.g., Assisted Living/AL) may disrupt the frequency or meaning of such ties. An intervention designed to foster communication between family members and AL residents offers an opportunity to examine patterns of communication in such families. Links between communication and well-being may be important as AL residents are known to be at risk of depression and loneliness. This study assesses the impact of the Family Connection Service (FCS), designed to facilitate communication between AL residents and families. The FCS allows residents to send text or photos from a one-touch digital mailbox with staff assistance to family emails. This poster describes the resident population, characteristics of one AL facility, and patterns of use of the FCS. A sample of 24 residents (67% of population) was recruited from a small, home-like Medicaid-funded facility (age range 48 to 94 years, M = 67.43, SD = 13.34). Initial resident usage was high for 40% of residents, with 60% rarely using the service. Interviews collected information about perceived frequency of communication, network membership and closeness, and resident well-being. The same measures were also completed by primary family members (reporting on the elder) electronically. The present study examines resident and network members' patterns of use, network size (range 2 to 13, M = 5.0, SD = 2.55), and measures of well-being. Findings are interpreted as demonstrating the acceptability and ease of use of the technology and value to residents and families.

### THE SUPPORTIVE ACTIONS FOR YOUNGER GENERATIONS AND PSYCHOLOGICAL WELL-BEING IN ELDERLY PEOPLE

M. Tabuchi[1,2], Y. Gondo[1], *1. Osaka University, Osaka, Japan, 2. Japan Society for the Promotion of Science, Tokyo, Japan*

In Japan, the role of elderly people in guiding and supporting next generations has been emphasized. The supportive actions for next generations are motivated by 'generativity', suggested by E.H. Erikson. These actions have an important effect on psychological well-being for not only young people but also elderly people. However, the conflicts between younger and older generations within the activities become a problem in some cases. In this study, we hypothesized that these actions would not lead to psychological well-being unless elderly people are received to be valued and get respect by the next generations. 150 Japanese elderly people responded to measures of generative concern, generative actions, perceived respect, and emotional psychological well-being. Structural equation modeling showed that generative actions had a direct impact on positive emotional well-being. In contrast, structural equation modeling showed that the effect of generative actions on negative emotional well-being was mediated by perceived respect. These results suggested that the supportive actions for next generations directly heightened positive emotional well-being. On the other hand, to reduce negative emotional well-being, elderly people have to receive the positive-feedback from the young people. In order to promote the supportive actions for next generations, positive-feedback system is needed for elderly people.

### A QUALITATIVE STUDY OF ELDERLY CHINESE IMMIGRANTS' MANAGEMENT OF CHRONIC ILLNESS, USE OF MEDICINES, AND HEALTHCARE DECISION-MAKING: THE ROLE OF ADULT CHILDREN

R.M. Mirza, *Pharmaceutical Sciences, University of Toronto, Toronto, Ontario, Canada*

Research on Chinese families documents the cultural importance of the family in providing health support and caregiving to elderly members. While research reveals that the onset of a parent's chronic illness sometimes requires adult children to play a greater role in managing a parent's health within the home and clinical setting, a dearth of empirical research exists regarding the ways in which caregivers and family members make healthcare decisions around the utilization of various health services and the use of various types of drugs. With an interest in collaboration between care providers (formal/ informal), the purpose of this study was to describe and develop an understanding of the experiences of adult Chinese-Canadians who help their elderly parent(s) manage a chronic illness. A qualitative research design was used. In-depth and follow-up interviews were conducted with participants (n=30), and case studies of familial healthcare decision-making (n=2). Health behavior was discussed within the context of the caregivers' relationships with family and community members, as well as with their commitment to/ rejection of particular views of health, various health care providers and practices. Treatment decisions were not always negotiated with the elderly parent or discussed with others, suggesting that caregivers are active in managing the health and health-care needs of their parents. This research was theorized around the notion of the caregiver as a decision-maker, and the findings challenge the view that caregivers and older family members always share the same health beliefs, treatment goals and orientations towards medicines as conceptualized in health research.

### FAMILIAL DISENFRANCHISEMENT: MIDDLE-AGED ADULTS LACK OF SUPPORT TO OFFSPRING

W. Chan[1], K.S. Birditt[2], S.H. Zarit[3], K. Fingerman[1], *1. Child Development & Family Studies, Purdue University, West Lafayette, Indiana, 2. University of Michigan, Ann Arbor, Michigan, 3. Pennsylvania State University, University Park, Pennsylvania*

Relationships between middle-aged adults and their offspring are often characterized by regular exchanges of support in areas such as emotional, practical, and financial support, socializing, talking about daily life, and giving advice. There has been scant attention, however, to situations where middle-aged adults provide little help to offspring. In this study, lack of support to offspring is defined as disenfranchisement, and is operationalized as providing offspring with help only yearly or even less. We examined predictors (parent characteristics, offspring characteristics) for disenfranchisement from parents to offspring. Adults aged 40 to 60 (N = 633) from The Family Exchanges Study reported how often they provided 6 kinds of support to each of their grown offspring (n =1384). The findings showed that more than 10% of participants (n = 73) reported disenfranchising 8.02% of grown children (n = 111). Logistic regression revealed that poorer relationship quality and low frequency of contact were associated with greater likelihood of offspring being disenfranchised. Additionally, disenfranchisement was associated with the perception that parents received low support from children. Other social structural variables were relatively unimportant in predicting disenfranchisement (e.g., parental marital status, ethnicity, and income). Social exchange theory helped to explain why parent disenfranchised offspring probably because they could minimize the cost by withdrawing their support on those offspring who did not provide help in return. Solidarity theoretical perspectives were adopted to illustrate that less positive relationship quality and low frequency of contact were associated with disenfranchisement.

## ORGANIZATIONAL LEADERS' PERCEPTIONS OF THE BENEFITS OF INTERGENERATIONAL COMMUNITY PROGRAMS

M.C. Janke, T. Young, *School of Aging Studies, University of South Florida, Tampa, Florida*

Participation in intergenerational programs has been associated with many positive benefits to older adults. Establishing intergenerational programs requires a collaborative effort in communities, yet little research has focused on the perceptions of intergenerational programs from the community service providers' point of view. This study examines the views of community organizations involved in The Linking Intergenerational Networks in Communities (LINC) Project (N = 32), a statewide, collaborative program offered in seven communities in South Carolina. Bivariate correlations and analyses of variance with post hoc tests were used to analyze the data. Our findings suggest that the type of organization involved in the project influenced perceptions of how well resources provided by LINC partners were efficiently used, with governmental agencies noting a significantly less effective use of resources than all other types of organizations. Reports of greater levels of overall satisfaction with the LINC project was associated with greater perceived benefits of the program to their constituents' needs, greater levels of collaboration between organizations in the community providing LINC, and a stronger belief that LINC enhanced the organizations' ability to serve their constituents. No significant differences were evident in outcomes based on whether the community organization was an aging service provider. Findings from this study are discussed in terms of implications for sustainability of intergenerational programs and suggestions enhancing aging service providers' experiences in intergenerational programs.

## MORTALITY RISK OVER MARITAL DISSOLUTION: THE ROLE OF RELATIONSHIP QUALITY

J. Bulanda, J. Brown, T. Yamashita, *Miami University, Oxford, OH*

Although a number of studies find that married adults are healthier and have longer lives than those who are unmarried or who experience marital dissolution (e.g., Dupre, Beck, & Meadows, 2009; Manzoli, Villari, Pirone, & Boccia, 2007), few examine the role of marital quality and almost none have utilized prospective, longitudinal data to assess how marital quality might moderate the relationship between union dissolution and mortality. Whereas the dissolution of a happy marriage may be associated with a higher risk of mortality, it is possible that the dissolution of an unhappy marriage may be better than remaining in the low-quality relationship. In this study, we extend the literature by examining not just mortality over the transition to divorce or widowhood, but rather if the risk is different based on the quality of the relationship. We also consider potential gender variation in the relationship; previous research indicates that the association between marital quality and mortality may be particularly strong for women (Rohrbaugh, Shoham, & Coyne, 2006), but that divorce may be particularly consequential for men's mortality (e.g., Brockmann & Klein, 2004; Kalediene, Petrauskiene, & Starkuviene, 2007). With data from over 7,000 married adults aged 50 and over from the 1992-2008 waves of the Health and Retirement Study (HRS), we compare the mortality outcomes of those who divorce or become widowed to those who remain married based on initial marital quality.

## FEMINIZATION OF POVERTY AND THE "INTERLOCKING SYSTEM OF OPPRESSION"—GENDERED POWER RELATIONSHIP AMONG CHINESE RURAL FAMILIES WITH MIGRATED CHILDREN

B. Luo, *Western Washington University, Bellingham, Washington*

Feminization is a world-wide phenomenon. This phenomenon may be more serious in rural China than other places in the world. Studies have consistent shown that compared to their urban elders and rural male elders, Chinese elderly women in rural areas are in the very bottom of the society and are the "poorest of the poor" due to China's ongoing history of patriarchy (including patrilineality, and patrilocality) compounding with current economic transformation. Using the theoretical model of Political Economy of Aging (PEA), this study delves into the phenomenon of feminization of poverty among rural elders with migrated adult children. A quantitative analysis was conducted based upon data from a rural household survey collected by gerontologists in Renming University in 2004 from three in-land migrant-exporting provinces. This study reveals that Chinese rural women's disadvantaged social, economic, and health conditions are a product of their longtime subordination due to the patriarchal family system, gendered social policies, the social transformation of rural-urban migration, and the state. These structural factors form an interlocking system of oppression in which gender, class, the state, and ideology interact with each other in shaping rural elderly women's lives.

## MOTHER-IN-LAW—DAUGHTER-IN-LAW RELATIONSHIP SATISFACTION: WHAT HELPS? WHAT HINDERS?

R.C. Jones, M. Turner, *Human Development and Family Sciences, University of Arkansas, Fayetteville, Arkansas*

The role of family kinkeeper is significantly impacted by the quality of the Mother-in-Law (MiL) and Daughter-in-Law (DiL) relationship. Understanding the factors contributing to the quality of this relationship is critical in order to assure intergenerational family solidarity. Research suggests that women in these two roles relate differently to their MiL/DiL than they do to any other family member (Turner, Young & Black, 2006). The current study compared factors contributing to DiL/MiL relationship satisfaction among 571 DiLs and 156 unrelated MiLs. The study assessed relationship styles derived from self-reported responses to a 35 item scale that factors into 5 subscales of the respondent's perception of how she relates to her DiL/MiL . Regression analysis indicated similarities and differences in the role of perceived styles of relating, age, length of marriage, level of education and satisfaction with their husband/son relationships predicted satisfaction with their DiL/MiL. For MiLs, the only style related to satisfaction with her DiL was Engager. The only other predictor for MiLs was satisfaction with her relationship with her son ($r^2$= .73, p=.000). For DiLs, two of the five scales, Utilitarian and Combative, were negatively related while the Engager subscale was positively related to DiLs' satisfaction with their MiL. Other factors predictive of satisfaction included DiL's age, length of marriage, and the DiLs' satisfaction with their relationships with their husbands ($r^2$=.78, p=.000). MiL and DiL styles of relating, factors related to relationship satisfaction, and the implications for strengthening intergenerational families will be discussed.

## A DECADE OF LOVE AND HATE: PATTERNS OF INTERGENERATIONAL AMBIVALENCE EXPERIENCED BY TWO COHORTS OF OLDER PARENTS AND ADULT CHILDREN

J. Lendon, M. Silverstein, *University of Southern California, Los Angeles, California*

The coexistence of affection and conflict or mixed feelings towards an older parent or adult child, known as intergenerational ambivalence, has sparked great interest in the study of aging families. Researchers have demonstrated that families experience more intimate than conflicted relationships, but it is also important to understand the contradictions within families. Studies have investigated many social, familial, and individual characteristics associated with ambivalence. However, we know little about how families experience ambivalence over the life course. This research used five waves of the Longitudinal Study of Generations from 1988 to 2000. Intergenerational ambivalence was assessed using an indirect measurement combining both positive (closeness and getting along) and negative (conflict and criticism) aspects of the relationships. We analyzed two sets of parent-child dyads (N=848) to compare patterns of ambivalence by familial perspective (parent versus child) and birth cohort using latent growth models. Average ambivalence scores indicated little to moderate levels of ambivalence. Fathers had slightly higher levels of ambivalence towards their child than mothers; children experienced greater ambivalence than parents. Cohort differences suggest greater ambivalence among baby-boomer parents and their children than older dyads. Significant decline in ambivalence for parents and children in both birth cohorts indicated the influence of later life on intergenerational relationships. The oldest cohort of parents experienced the lowest levels of ambivalence and the youngest cohort of children experienced the greatest levels of ambivalence. Significant individual variations in ambivalent feelings, with cohort differences, suggest different influences on ambivalence within aging families over the life course.

### EXCHANGES IN FINANCIAL AND NON-FINANCIAL SUPPORT BETWEEN ELDERLY PARENTS AND ADULT CHILDREN IN JAPAN

E. Kobayashi[1], T. Fukaya[1], H. Akiyama[2], M. Naoi[3], J. Liang[4], *1. Tokyo Metropolitan Institute of Gerontology, Tokyo, Japan, 2. Institute of Gerontology, University of Tokyo, Tokyo, Japan, 3. Tokyo Gakugei University, Tokyo, Japan, 4. School of Public Health and Institute of Gerontology, University of Michigan, Ann Arbor, Michigan*

Japanese tradition dictates that the eldest son and his wife should live with his parents to provide old age support. Yet, today less than one half of older Japanese live with their children, reflecting a significant change in family relationships. This study examined (a) exchanges of instrumental support including financial and non-financial types between elderly Japanese parents and their adult children, and (b) key predictors of such exchanges. Data came from the National Survey of the Japanese Elderly conducted in 2006. Parents aged 77 or over responded to a face-to-face interview, whereas their children (aged 54 on average) were reached through a mailed questionnaire survey, resulting in 685 parent-child pairs. Relative to non-financial support (e.g., doing housework, ADL care), financial support is less prevalent. Only 20% of the children provided 60,000 Yen ($ 650) or more to their parents in the past 12 months, even less than those who received the same support from their parents. After controlling for parental needs, children's resources, and the travel distance from parents, logistic regression analyses showed little effect of being the eldest son and filial obligation on providing support to their parents. Reciprocity of different resources was observed. Namely children who received money from their parents were more likely to reciprocate with non-financial support, while those who received non-financial support from their parents were more likely to provide their parents with financial support. Emotional support from parents increased financial support only among daughters, suggesting gender differences in social exchanges.

### OLDER PARENTS ASSISTING THEIR ADULT CHILDREN IN CHILDCARE: DOES IT PAY OFF IN LATER LIFE?

T. Geurts[1], T. Van Tilburg[1], A. Poortman[2,3], *1. VU University, Amsterdam, Netherlands, 2. Utrecht University, Utrecht, Netherlands, 3. ICS, Utrecht, Netherlands*

The current study examines whether past grandparental childcare provision is related to present support from adult children. Based on social exchange theory and reciprocity, we expect that past childcare provision to children creates a debt that is repaid in the form of support from children later in life. Grandparental childcare provision was assessed in 1992. Support received from children was assessed at a follow-up observation in the Longitudinal Aging Study Amsterdam conducted between 1998 and 2009 (349 parents and 812 adult children). Our results indicate childcare provision to children increases likelihood of receiving support from children later in life. Other kinds of past instrumental support, such as help with daily chores, are not related to current support from children. The current study suggests that grandparental childcare provision can be conceived of as a relation-specific investment in children that leads to greater support from children in later life. The study supports the idea of long-term reciprocity in parent – child relationships.

## SESSION 875 (SYMPOSIUM)

### RECENT DIRECTIONS IN CRITICAL GERONTOLOGY

Chair: *T. Calasanti, Virginia Tech, Blacksburg, Virginia*
Discussant: *S. Katz, Trent University, Peterborough, Ontario, Canada*

Critical gerontology emerged in the 1980s, partly as a challenge to the dominant, individual-level approaches to aging, and typically focused on policies and practices that influence such issues as poverty and the creation of dependence among elders. Since then, critical approaches to aging have continued to evolve, in light of social changes including the demands of diverse populations, who challenge the emphasis on power relations based on class alone, and globalization. This symposium examines some of this recent work and its implications for future critical gerontological research. Leading off, Torres explains the importance of going beyond discussions of globalization and international migration to consider transnational communities, outlining a research agenda and giving examples of how an awareness of transnationalism can shape critical gerontology. Next, Scharf and his colleagues reflect on their use of participatory research in a project that promotes social engagement among disadvantaged elders. They discuss implications for social change and future research. The next two papers focus on the ways that discourses in relation to old age shape this time of life. Grenier explores the different discourses concerning health and illness and how these influences aging experiences, particularly in relation to the challenges that late life can pose. Calasanti, King, and Sorensen examine the ways that gendered, anti-aging discourse is reflected in the embodied beliefs and behaviors of middle-aged adults. Finally, Katz comments on the implications of these papers for late life experiences and for critical gerontology.

### TRANSNATIONALISM AS POINT OF DEPARTURE FOR THE EXPANSION OF THE SOCIAL GERONTOLOGICAL IMAGINATION

S. Torres, *NISAL, Linkoping University, Norrkoping, Sweden*

Although globalization and international migration are phenomena that have received some attention in critical gerontology, transnationalism has yet to engage the social gerontological community. This paper will define what transnationalism means, describe what characterizes transnational communities and present some of the research findings that transnational studies in other fields have brought to fore in attempt to extract the implications that this phenomena has for gerontology. The paper aims namely to delineate a research agenda for critical gerontology that is transnationalism-aware by discussing some of the concrete implications that this phenomenon has for the study of key gerontological issues, such as, for example, old age identity and intergenerational solidarity. Hence that the paper argues that transnationalism could expand the gerontological imagination even though transnational communities pose a challenge to gerontological policy and practice.

### FROM EXCLUSION TO INCLUSION? CRITICAL REFLECTIONS ON PARTICIPATORY ACTION RESEARCH WITH OLDER PEOPLE

T. Scharf[1], F. Ziegler[2], R. Beech[2], S. Maslin-Prothero[2], M. Murray[2], J. Bailey[2], A. Crummett[2], S. Middling[2], *1. National University Ireland Galway, Galway, Ireland, 2. Keele University, Keele, United Kingdom*

According to Phillipson and Walker (1987), critical gerontology reflects "a more value-committed approach to social gerontology – a commitment not just to understand the social construction of ageing but to change it" (p.12). Participatory designs that engage older people in key aspects of the research process are of increasing importance in providing evidence that can facilitate such change. Drawing on a conceptual framework that identifies older people's potential vulnerability to different dimensions of social exclusion, this paper reflects critically on the challenges associated with adopting a participatory action research design within the context the CALL-ME study – an empirical project supported by the UK research councils' New Dynamics of Ageing programme. CALL-ME aims to develop strategies for promoting social engagement among older people in disadvantaged communities of Manchester, England. The paper reviews the CALL-ME experience, developing implications for critical gerontology and suggesting ways in which researchers might develop future empirical studies.

### AGE RELATIONS IN LATE LIFE: RECONSIDERING DISCURSIVE DIFFERENCES

A.M. Grenier, *School of Social Work, McGill University, Montreal, Quebec, Canada*

Despite the prevalence of research on longevity, 'frailty' and risk in gerontological research, critical perspectives have yet to fully consider the implications of 'age-relations' in late life that are conceptualised primarily in relation to decline. Rooted in critical gerontology, this paper reflects on the polarisation of discourses of health and illness that appear within public policy, organisational practices, and lived experiences of older people. It will present evidence of the differential discourses used to shape expectations and behaviours at different points in 'old age' and the contradictions created through such practices. Discussion will turn to the conceptual challenges for research, policy and practice as it relates to late life (the so-called '4th age'). In doing so, it will renew the importance of considering 'late life relations' and the questions of age/decline-based targeting and what appears to be a growing separation from the issues and emotions of late life.

### THE ANTI-AGING INDUSTRY, GENDER, AND EMBODIED EXPERIENCES OF AGING

T. Calasanti, N. King, A. Sorensen, *Virginia Tech, Blacksburg, Virginia*

Scholarship on ageism makes clear that age relations exclude old people from full participation in society. Bodies serve as critical markers of age; thus people are motivated to present their bodies as "not old." The regulation of bodies and thus claims to full citizenship occurs in the context of an anti-aging industry that markets goods and services that promise to help people keep their bodies from aging. We examine pilot data gathered through in-depth interviews with 20 women and men aged 43-61 first, to determine the extent to which ageist discourse apparent in advertisements for the anti-aging industry are reflected in respondents' views of their aging bodies. Second, our exploration is sensitive to the gendered content of these messages, and we consider men's and women's anti-aging behaviors in light of these issues.

## SESSION 880 (SYMPOSIUM)

### SWEDISH RESEARCH ON LINKS BETWEEN HOUSING FOR AND CARE OF OLDER PEOPLE

Chair: *C. Nord, Linköping university, Norrköping, Sweden*
Discussant: *J. Hagberg, Linköping university, Norrköping, Sweden*

This Symposium Aims to Present Swedish Social Scientific Research About the Relationship Between Older People's Housing and Care. The Authors Are Members of the Nordic Research Network on Older People's Housing. The Symposium Reflects Various Dimensions of the Multi-faceted Concept of Care, Including Informal and Formal Care, and Self-care. The Authors Cover a Range of Housing Types That Include Senior Housing for Older People Living Independently, as Well as Residential Care Facilities for Those in Need of Extensive Support for Daily Living. The Encouragement of Independence, Involvement and Self-care is Stressed by All Authors, Even Regarding Older Individuals Who Might Be in Need of Substantial Formal Support. One Important Link Between Housing and Care That is Highlighted, is the Social and Gendered Aspects of Care and How Co-habitation and Social Interaction Between Older People Can Improve Self-care. Policy and Implementation Issues Are Raised by Some Presenters. The Respect for the Individual in Formal Care Situations is Explored Both in Terms of Social Policy and How the Physical Environment Can Contribute to Individual Care, for Example Through Design Guidelines for People with Dementia. Among Those Architectural Factors Which Influence the Well-being of the Frail and Old, Are Size and Organization of a Care Unit and Its Interior Design Qualities. The Authors Represent Various Methodological Fields. Qualitative as Well as Quantitative Research Are Presented.

### ARCHITECTURAL DESIGN FOR CARE OF THE MOST FRAIL AND OLD IN ASSISTED LIVING IN SWEDEN

C. Nord, *Linköping university, Norrköping, Sweden*

This is a Presentation of an 18-month Ethnographic Research Project in an Assisted Living Facility in Sweden. Results Showed That the Residents' Private Bedrooms Have Increased in Importance Since the Residents Stay 15 Hours or More in These Rooms Daily, Due to Frailty and Long-term Conditions. Swedish Laws State That Care of Older People Should Be Individualized. It is Desirable That Care is to Some Extent Located in the Persons' Private Bedrooms in Order to Adapt to the Frail Individual's Needs and Abilities. Assisted Living in Sweden is Legally on a Par with Ordinary Housing. From This Follows That Care Should Contribute to a Full Life of the Individual. Private Bedrooms in Assisted Living in Sweden Are Often Small and Dull. This Presentation Aims to Discuss What Architectural Qualities a Private Bedroom Should Preferably Have in Order to Make a Meaningful Day Possible for the Most Frail and Old People.

### THERE IS NO ESCAPE FROM GETTING OLD; ELDERS' EXPERIENCES OF ENVIRONMENTAL CHANGE IN RESIDENTIAL CARE

H. Falk, *University of Gothenburg, Health and Care Sciences, Gothenburg, Sweden*

The aim of this study was to achieve a comprehensive understanding of how environmental changes affect quality of life (QoL), wellbeing in frail elderly and how place attachment is created in residential care. Results show that interior design features alone have little importance to care climate, disruptions caused by refurbishments have negative effects on QoL, relocation has adverse effects for those able to self-report, preparatory programs are missing, and a sense of home is created through active strategies and psychosocial processes. There is a need for further research in order to avoid oversimplification in which a physical environment with an aesthetic appearance of a home becomes the general standard for good residential care. The quality of life of older persons may be improved by acknowledging the fundamental human need for a home, being a prerequisite for wise and supportive interventions aimed to improve the wellbeing and QoL in residential care.

### DISCOURSES OF USER AND USER INFLUENCE WITHIN THE ELDERLY CARE: A MATTER OF OPPORTUNITY-HORIZONS

K. Lundkvist Martinson, *Department of Social Studies, Institution of Social Work, Karlstad, Sweden*

The Concepts of User and User Influence are Highly Present in the Social Policy Debate on Elderly Care. They are Described as Vague, Problematic and Context-Dependant. Nevertheless, They are Rarely Problematized from the Elderly Care-Perspective. With this Paper, through a Discourse-Analytic Approach, I am Raising the Issue of Various Discourses of Elderly Users and Their Influence within the Elderly Care, as They Appear in Texts by Different Senders. Participants in this Activity will Hereafter be Able to Identify how the Elderly Users Can be Described and Who and What is Included and Excluded Respectively. I am Highlighting Tensions that Can be Found Within and Between these Discourses. Henceforth the Gathered Participants Will be Able to Discuss how this Can Contribute to the Views of Elderly Individuals on Their Possibilities and Limitations to Practice and to Have Influence on Their Everyday Life; Discourses as a Part of Elderly Individuals Perceived Opportunity-Horizons.

### ELDERLY RESIDENTS' NETWORKS AS A CARING RESOURCE: FOR WHOM AND WHEN?

C. Krekula, *Dept of Social Studies, Social care, Karlstad, Sweden*

Even though Research Emphasizes that Subjective Experiences of Old Age Depend upon the Resources elderly Individuals have access to, little Attention has been given to Residents' Networks and how these can Contribute to create Engendered Experiences of old Age. Departing from 12 qualitative Interviews with Women and Men between the ages of 72 and 89, all living in the Stockholm region of Sweden, I illustrate how Housing Arrangements can provide Resources such as Informal Care for the Elderly. I also reveal how Norms and Institutionalized Practices in these Housing Communities Contribute to Residents being able to take advantage of available Residential Resources to different extents. Thereby apparently homogeneous Housing Arrangements have different meanings for their Residents. In such way they also Create Engendered Experiences of old Age.

### NATIONAL GUIDELINES FOR CARING FOR PERSONS WITH DEMENTIA THE PHYSICAL AND PSYCHOSOCIAL ENVIRONMENT

H. Wijk, *Sahlgrenska Academy, Institution of Health and Care Sciences, Gothenburg, Sweden*

Dementia is an Incurable Disease but Evidence-Based Strategies Can Support Quality of Life and Well-Being. The National Guidelines Conforms Recommendations Considering Assessment and Treatment As Well As How to Arrange The Physical and Psychosocial Environment in Order to Support Orientation, Activities for Daily Living and Well-Being. An Important Principle is that The Care Should be Person Centred, Meaning that The Care and Environment Should Be Planned and Arranged For Out From an Individual Perspective. The Guidelines Concerning the Physical Environment Includes Recommendations Considering Architecture, Design and Size of The Dementia Care Unit, Aspects of Sound, Smell, Colour Scheme and Illumination as Well as The Outdoor Environment. Based on The National Guidelines, Quality Indicators are Stated in Order to Accomplish The Possibility to Assess and Follow The Quality of Dementia Care in The Communities. Keywords: Dementia, physical and psychosocial environment, national guidelines

## SESSION 885 (PAPER)

## TRANSITIONS TO RETIREMENT

### THE EFFECTS OF RETIREMENT TRANSITION ON DAILY WELL-BEING

J.D. Wong, D. Almeida, *Human Development and Family Studies, The Pennsylvania State University, University Park, Pennsylvania*

The transition into retirement represents unique challenges and opportunities that affect psychological well-being. The current study assesses the ways in which retirement transition predicts daily well-being across a 10-year span. Using data from the first and second waves of the National Survey of Midlife Development in the United States (MIDUS) and the National Study of Daily Experiences (NSDE), this study is comprised of 202 men and women between 55 and 74 years of age. Participants completed telephone interviews about daily time use, stressors, physical symptoms, and psychological distress over eight consecutive days. A series of hierarchical regression models were used to estimate the effects of retirement transitions, age, gender, marital status, education, and pension access as well as their interactions, on daily time use, psychological distress, and stressors. Controlling for household income and chronic health conditions, results showed that experiencing a retirement transition was associated with time spent giving emotional support and sleeping. These associations were moderated by gender, marital status, and education. Employment transitions also were associated with aspects of the daily stress processes. In the area of stressor severity, individuals who remained working reported greater stressor severity than those who transitioned into retirement. Findings from this study suggest the importance of examining retirement as a transition process in understanding how daily experiences are shaped.

### THE INFLUENCE OF WORK-RELATED FACTORS ON THE RETIREMENT DECISION MAKING PROCESS

H. Van Solinge*, Social Demography, NIDI, The Hague, Netherlands*

Decisions about retirement are not formed in a social vacuum but are shaped by the context in which individuals live. An aspect of this context that has received little attention are work-related factors and the workplace itself. This is remarkable, given that retirement is an occupational career transition. Retirement is one of several forms of organizational withdrawal that individuals may use to avoid dissatisfying work situations. In this investigation, we examined to what extent job characteristics (positive and negative working conditions; work-life balance arrangements) and organizational context (support for working longer by supervisor and organization) contribute to the propensity of employees aged 50 and over to continue working. Participants are 1.678 Dutch working adults (50-64 years) who are followed over a period of 6 years. Survival analysis suggests that remaining longer in the workforce is associated with positive job conditions and supervisor support for working longer. The availability of work-life balance arrangements (partial retirement) rather seems to speed-up retirement.This suggests that the effectiveness of flexible working arrangements as a tool in postponing the retirement age should be re-examined.

### ON BEING WORK-DISABLED: THE SOCIAL CONSTRUCTION OF HEALTH-MANDATED LABOR FORCE EXITS

D.F. Warner[1,2], J. Kelley-Moore[1], M. Stone[1], *1. Sociology, Case Western Reserve University, Cleveland, Ohio, 2. Bowling Green State University, Bowling Green, Ohio*

Health-mandated labor force exits are often defined by receipt of Social Security Disability Insurance (SSDI), but few studies have explored how the social constructions of age, disability, and retirement interact. For instance, early retirement, for those who can afford it, creates a socially-rewarded identity that allows mounting functional declines or debilitating chronic conditions to remain privatized and undocumented. For other workers, Social Security Retirement eligibility at age 62 allows one to receive a state-sponsored pension without needing to claim impairment, also rendering health-mandated exits invisible. Given racial/ethnic socioeconomic stratification in U.S. society, the prevalence of health-mandated exits is likely underestimated for all groups, particularly White adults. We examined how alternate definitions of work-disability affect our understanding of health-mandated labor force exits among 50-75 year olds using the 1992-2006 Health and Retirement Study. While 22% of older adults indicate that a health condition limits their ability to work (inability), only 10% identify as disabled and just 6% receive SSDI. Discrete-time hazard models in a competing-risks framework showed that while White older workers had higher risks of exiting via retirement than work-disability under all three alternate definitions, these differences were smaller when inability and largest when SSDI was the defining criterion. Income, wealth, and pension-eligibility significantly differentiated whether older workers exited via work-disability when defined in terms of identity or SSDI. Overall, our results support the conclusion that because work-disability is socially constructed, a considerable number of health-mandated exits among Whites are invisible, and largely reflective of their more privileged socioeconomic status.

### THE IMPACT OF WORK, HEALTH, AND FAMILY HISTORY ON MEN'S INTENDED AND ACTUAL RETIREMENT TIMING

M. Damman[1], K. Henkens[1,2], M. Kalmijn[2], *1. Netherlands Interdisciplinary Demographic Institute (NIDI), The Hague, Netherlands, 2. Tilburg University, Department of Sociology, Tilburg, Netherlands*

Previous studies on retirement timing have predominantly focused on proximal precursors of the retirement transition, such as the health and wealth situation of older workers. Preceding life histories have often been neglected or remained implicit. However, it is both scientifically and policy relevant to achieve a more explicit understanding of the relationships between these distal life experiences and retirement timing. This study aims to improve this understanding by (1) simultaneously studying the impact of earlier life experiences in different life spheres on (2) both retirement timing intentions and actual behavior, and thereby (3) theoretically and empirically distinguishing financial pathways from other pathways that link life histories with (intended) retirement timing. Panel data containing life history information, which were collected in 2001 and 2007 among older Dutch men (N=1229), were analyzed to reach this aim. In general, our results suggest that instability in work and family careers decreases the likelihood of (intended) early retirement. Mid-life experiences of dismissal and employer change, as well as having children relatively late and being recently divorced, decrease the intention to retire early. Severe health problems during midlife increase the intention to retire early. The work history relationships run mainly via the preretirement financial opportunity structure. For health and family history there are significant life course effects net of the financial situation. Only some of the life history predictors of retirement intentions are also related to actual retirement behavior, which might point to external forces inhibiting older workers to realize their preferred timing of retirement.

## SESSION 890 (PAPER)

## ADDRESSING FALLS AND MOBILITY IN THE 21ST CENTURY

### TASK-SPECIFIC TRAINING DECREASES LABORATORY-INDUCED FALLS BY OLDER WOMEN

M.D. Grabiner, M.L. Bareither, S. Gatts, J. Marone, K. Troy, *Kinesiology and Nutrition, University of Illinois at Chicago, Chicago, Illinois*

Task-specific training, also known as repetitive functional task practice and task-related training, and used in physical and occupational therapies, involves practicing context-specific motor skills and some form of performance-relevant feedback. We used a task-specific training protocol, simulating a forward trip, to improve the ability of older women to perform successful compensatory stepping responses. We hypothesized that older women who participated in the training protocol (n= 32) would have fewer falls following a laboratory-induced trip than a control group that received no training (n =31). The training protocol consisted of four non-consecutive sessions over a two week period. During each session the subjects, protected from a fall by a safety harness, stood on a custom motorized platform that delivered precise, displacement and velocity-driven postural disturbances (up to 50 per session) causing the subject to lose her balance and, consequently, to require a series of stepping responses to avoid falling. At least one week following the last training session, subjects participated in the induced-tripping protocol. The induced-trip caused 36% of untrained women to fall. In contrast, only one of the trained women (<5 percent) fell following the induced-trip. Consistent with our previous work, discriminant analysis correctly classified 84 percent of the trip-related falls and recoveries based on two trip-specific biomechanical variables, both of which were significantly improved by the training. The cost per "fall prevented was about $450. These results strongly suggest that the task-specific approach may be effective at reducing falls by older women at a reasonable cost of implementation.

### MIDLIFE WORK ABILITY AMONG WHITE- AND BLUE-COLLAR EMPLOYEES PREDICTS LATE-LIFE MOBILITY LIMITATION

M. von Bonsdorff[1], T. Rantanen[1], J. Seitsamo[2], C. Nygård[3], M. von Bonsdorff[2,1], J. Ilmarinen[2], *1. Gerontology Research Centre, University of Jyväskylä, Jyväskylä, Finland, 2. Finnish Institute of Occupational Health, Helsinki, Finland, 3. Tampere School of Public Health, University of Tampere, Tampere, Finland*

Objectives The aim of this study was to investigate whether midlife work ability predicted late-life mobility limitation among white-collar and blue-collar employees. Methods The 28-year prospective study on ageing municipal employees was conducted at the Finnish Institute of Occupational Health in 1981-2009. Baseline information was collected among 6257 municipal employees aged 44-58 years in 1981. Work ability was inquired as subjective assessment of present work ability and categorized into excellent, moderate and poor work ability. At the fifth data collection wave in 2009, 3092(73% of the survivors) answered the postal questionnaire. Perceived difficulty in advanced mobility was inquired from the 72-86-year-old participants with a question on the ability to walk 2 km (0=able to manage without difficulty to 4=unable to manage even with help), which was dichotomized into 0=no difficulties and 1= at least some difficulties. Analyses were performed with logistic regression models and adjusted for age, gender and number of physician-diagnosed chronic diseases. Results Among white-collar employees, the adjusted odds ratio (OR) for mobility limitations 28 years later was 1.81 (95% confidence interval 1.45-2.25) for those with moderate and 2.40 (1.74-3.31) for those with poor workability compared to those with excellent work ability in midlife (reference). Similarly, among blue-collar employees the odds ratios for mobility limitation were 2.11 (1.52-2.94), 2.27 (1.75-2.93) and 3.92 (2.79-5.51) for those with excellent, moderate, and poor work ability in midlife, respectively. Conclusions This prospective study showed that work ability in midlife predicted mobility limitations 28-years later. The risks were similar for both occupational groups.

### ADDED BENEFITS OF USING VIRTUAL REALITY FOR IMPROVING GAIT AND REDUCING FALL RISK IN PARKINSON'S DISEASE

J.M. Hausdorff[1,2,3], A. Mirelman[1,2], I. Maidan[2], N. Giladi[2,3], *1. Harvard Medical School, Boston, Massachusetts, 2. Tel Aviv Sourasky Medical Center, Tel Aviv, Israel, 3. Tel Aviv University, Tel Aviv, Israel*

Background: Traditional gait training approaches are limited in their ability to challenge patients and reduce fall risk. Virtual reality (VR) delivers an exciting and enjoyable training modaility that involves both motor and cognitive challenges and also allows for real-time modification of task difficulty based on performance. In this study, we evaluated, for the first time, the feasibility of using VR to improve usual-walking, dual-tasking and obstacle negotiation in patents with Parkinson's disease (PD). Methods: 20 patients with PD (age: 66.8±6.21 yrs; disease duration 9.6±5.4 yrs; Hoehn&Yahr stage 2) completed 18 training sessions (3 times/week x 6 weeks) that included walking on a treadmill with virtual obstacles. Outcome measures included gait, balance, and PD symptoms. Results: Usual-walking gait speed improved from 1.12±0.23 m/s to 1.26±0.29 m/s (p=0.004), and the distance walked in

6 minutes increased by 57.7 meters (p=0.03). Stride length and gait variability obstacle negotiation over-ground improved and the dual-task decrement was reduced (p<0.05). Parkinsonian symptoms (p=0.02) and performance-based measures of dynamic stability (p=0.02) also improved. Training effects were maintained at 1 month post-training. Conclusions: To our knowledge, this is the first time that VR has been used for gait training in PD. The results support the idea that treadmill training with VR positively impacts on many fall risk factors including usual-walking, obstacle negotiation and dual-tasking, likely via "motor learning." Since PD mirrors many of the effects of "exacerbated" aging, the present findings suggest that VR might be a novel way of reducing fall risk among older adults.

### EFFECTS OF MULTIMEDIA FALL PREVENTION TRAINING ON PERSONS WITH PARKINSON'S DISEASE

V. Panzer[1,3], J. Burleson[2], F. Into[1,3], *1. Univ of Connecticut Health Center, Neurology, Farmington, Connecticut, 2. Univ of Connecticut Health Center, Community Medicine & Health Care, Farmington, Connecticut, 3. Brookside Research & Development, North Salem, New York*

Purpose: To examine the influence of multimedia (MM) fall prevention training on recognition of personal predisposing factors or fall 'threats' in seniors with Parkinson's disease (PD) or other impairments. Methods: In a randomized, double-blind trial, 279 Seniors (60-96 years, mean=79, SD=7 had fall history and lifestyle interviews, were trained to keep daily logs and telephoned weekly by independent research associates. Participants completed Usual or MM (Usual +1-2 MM sessions) treatment. Sessions included interactively viewing vignettes emphasizing key fall threats which were 'Customized' to the individual or 'Standardized'. One month later, ten novel scenes (not part of MM training) were viewed by all participants and the number of fall threats recognized were recorded by research associates who did not conduct MM training. Univariate, sequential multiple linear regression analysis with Gender, Age, Parkinson's disease/Impairment (whether or not assistance with ADLs was required), MM Training and Customization included all main and 2-way interaction effects. Results: Main effects of participant Gender (p=.001, females Adjusted Mean(SD) M=30.5(9), n=190; males M=27.8(9), n=89) and Age (p=.028, older participants recognized fewer fall threats) influenced fall threat recognition. Participants with PD recognized still fewer fall threats than those without PD who needed assistance with ADLs (p=.053, PD-M=25.9(8), n=22; Non-PD Impaired-M=31.2(10), n=33). MM training was highly influential (p=.001, M=30.2(8), n=169; Usual training M=26.9(10), n=110). Customization of the content further increased MM effectiveness (p< .001, Customized M=34.1(8), n=73; Standardized M=26.6(7), n=96). Conclusion: Multimedia fall prevention training is less successful in increasing fall threat recognition in participants with PD. Since the effects of customization are pronounced, creating MM content appropriate to the unique characteristics of PD may improve results.

## SESSION 895 (SYMPOSIUM)

### DEMENTIA AND END-OF-LIFE CARE: FORGET TO FORGIVE AND SIMPLY FORGETTING

Chair: *G. Gambassi, Geriatrics, Università Cattolica, Rome, Italy, Alpert's Medical School Brown University, Providence, Rhode Island*
Discussant: *V. Mor, Alpert's Medical School Brown University, Providence, Rhode Island*

Dementia is now a leading cause of death in the United States, with projection estimates of 16 million individuals having dementia by 2050. However, dementia is underrecognized as a terminal illness and the lack of information characterizing the final stage of dementia may impede the quality of care provided to these patients. The final disease trajectory of dementia is characterized by severe functional impairment, eating problems, malnutrition, and recurrent infections. More than one-third of nursing home residents with advanced dementia have a feeding tube inserted despite conclusive evidence that does not improve survival, prevent aspiration pneumonia, heal or prevent decubitus ulcers, or improve other clinical outcomes. Recurrent infections and febrile episodes typically occur during advanced dementia. Therefore, nursing home residents with advanced dementia are at high risk for exposure to antimicrobial agents. However, it is unclear whether treatment of infections confers any life-prolonging or symptomatic benefit in this population. At the same time, administration of antimicrobials to frail older patients who are near the end of life is also a potentially burdensome intervention. Pain is highly prevalent in these patients but it is dramatically underassessed and undertreated. Palliative care-a form of treatment that strives to match care to patient goals, relieve pain, and improve quality of life for people with chronic or life-threatening illnesses-should be the standard of practice for all elderly dementia patients in nursing homes, regardless of prognosis. The symposium will illustrate that dementia is indeed a terminal illness and will further knowledge about the clinical complications characterizing its final stage. Furthermore, the symposium will highlight the unnecessary suffering imposed on these patients by prescribing and procedures with no prognostic impact, and will emphasize the potential benefit of palliative care

### NATURAL HISTORY OF ADVANCED DEMENTIA

G. Gambassi, *Geriatrics, Università Cattolica, Rome, Italy*

Dementia is a leading cause of death in the United States but is underrecognized as a terminal illness. Advanced dementia is associated with a life expectancy similar to that for more commonly recognized end-of-life conditions, such as metastatic breast cancer and stage IV congestive heart failure. Nonetheless, the clinical course of advanced dementia has not been described in a rigorous, prospective manner. The incidence of clinical complications, the extent of physical suffering, and the use of burdensome interventions are not well understood. Prospective studies now show that pneumonia, febrile episodes, and eating problems are frequent complications in patients with advanced dementia, and these complications are associated with high 6-month mortality rates. Distressing symptoms and burdensome interventions are also common among such patients. The lack of information characterizing the final stage of dementia may impede the quality of care provided to these patients. A better understanding of the clinical trajectory of end-stage dementia is a critical step toward improving the care of patients with this condition.

### EATING PROBLEMS AND TUBE FEEDING IN ADVANCED DEMENTIA

J.M. Teno, *Alpert's Medical School Brown University, Providence, Rhode Island*

Over 5 million Americans have dementia, of whom 70% will receive terminal care in nursing homes (NH). Eating problems commonly present during the final stage of dementia. Nationwide, 33% of NH residents with advanced dementia are tube fed, despite no demonstrable benefits in this population in terms of key outcomes such as prolonged survival or improved nutritional markers. Marked variation in tube feeding exists across states and among NHs within states. Large database studies identified factors associated with tube feeding in advanced cognitive impairment, including individual patient characteristics, NH features, state laws, Medicaid payment, and health care transitions. The reasons for these associations are not easily explained using secondary analyses of large databases. In this session, it will be reviewed the existing data regarding decision making and outcomes of feeding tube insertion. Additionally, it will be proposed a new order Comfort Feeding Only to facilitate physician-caregiver communication regarding feeding tube insertion.

### FEBRILE EPISODES AND ANTIBIOTICS IN ADVANCED DEMENTIA

S. Mitchell, *Harvard Medical School, Boston, Massachusetts*

Infectious episodes are hallmarks of advanced dementia. However, it remains unclear as to whether antimicrobial treatment confers any life-prolonging or symptomatic benefit in these terminally ill patients, for whom the goal of care is often palliation. The widespread antimicrobial use in advanced dementia raises serious concerns not only from the perspective of individual benefits and burdens near the end-of-life, but also from a public health standpoint with respect to the emergence and spread of antimicrobial- resistant bacteria. The objectives of this presentation are discuss the following with respect to the infectious episodes in advanced dementia: 1. Epidemiology and natural history, 2. Evidence regarding the treatment options for infectious episodes, and 3. An approach to decision-making.

### THE ROLE OF PALLIATIVE CARE FOR PEOPLE WITH DEMENTIA

S.R. Morrison, *Mount Sinai School of Medicine, New York, New York*

The management of dementia is becoming a major national and international public health concern because increased longevity places more individuals at risk of developing this disease. Furthermore, a systematic review of trials investigating the efficacy of palliative care for older people with dementia, concluded that there is now unequivocal evidence of the efficacy for a palliative model of care in dementia. This presentation will reinforce the importance of providing appropriate palliative care to individuals suffering from end-stage dementia and some of the barriers to extending such specialist palliative care provision. These include concerns that such an expansion might lead to skills and funding shortages and, in turn, compromise the ability of existing specialist palliative-care teams to provide care to cancer patients. Clinicians and patient groups caring for patients with advanced dementia must work together with specialist palliative-care services and health commissioners to develop, fund and evaluate appropriate cost-effective services which meet patient and family needs. If this is achieved these improvements have the potential to increase quality of life, reduce hospital length of stay and the use of non-beneficial resources. Last and most importantly, terminally ill patients suffering from dementia will therefore not be subjected to protracted, potentially uncomfortable and undignified deaths.

## SESSION 900 (SYMPOSIUM)

### FELLOWSHIP SYMPOSIUM: AN INTERDISCIPLINARY PERSPECTIVE OF HEALTHY AGING

Chair: *W. Ladiges, Comparative Medicine, University of Washington, Seattle, Washington*

Co-Chair: *D.L. Morris, Case Western Reserve University, Cleveland, Ohio*

If we assume aging is a medically controllable health risk, then healthy aging is a collective right as well as an individual responsibility. But before we can successfully implement healthy aging programs and individual efforts, we must have a better understanding of what constitutes healthy aging. There is currently no well accepted definition of healthy aging, nor has its biological basis been fully determined. This symposium is designed to define healthy aging based on biological, clinical, behavioral and social, and policy and practice perspectives. Four speakers, each a Fellow representing either Biological Sciences, Health Sciences, Behavioral and Social Sciences, or Social Research, Policy and Practice Sections, will provide a detailed description of healthy aging and how their working definition broadly integrates with the other section disciplines. The objective of this interdisciplinary approach will be to provide for the audience an opportunity to see the relationship and integration of healthy aging based on focused perspectives. A second objective will be to obtain a broad overlapping definition of healthy aging that should be useful in efforts to establish healthy aging guidelines for increased support for biological and clinical research, geriatric care, and social and public health programs. It is concluded that the future of successful aging will depend on the combined efforts of basic and translational research, clinical care and social support.

### A BIOLOGIST'S VIEW OF HEALTHY AGING

G. Martin, *Comparative Medicine, University of Washington, Seattle, Washington*

Nature (genes that are inherited), Nurture (environmental factors) and Chance (stochastic events) all interact to modulate the degrees to which a life course can be characterized as "healthy aging". This presentation will consider examples of impacts of both "good" and "bad" varieties of genes, environment and luck in order to better understand why some of us do well, while others do poorly. Our goal as biologists is to understand underlying mechanisms in sufficient detail so that rational interventions can be used to move us in the direction of healthy aging – the maintenance of relatively robust structure and function throughout most of the life course – up to that period which might be characterized as "terminal decline". A deeper understanding of biological, medical, psychological, sociological, economic, political and ethical aspects of variations in the durations and patterns of such terminal declines will require much more research. That research needs to be interdisciplinary.

### BUILDING RESILIENCE FOR SUCCESSFUL AGING

B. Resnick, *University of Maryland, Baltimore, Maryland*

Resilience is a dynamic process of adaptation to adversity and is conceptualized to reflect an effective response to some type of adversity or challenge, whether this be physical, psychological, economic, political, environmental, or social. Resilience is thus central to understanding successful aging because adversity is inevitable at points throughout the lifespan and certainly as we age. It is those who are resilient who have the motivation, determination and impetus to engage in regular exercise activities, volunteer in the community, to optimize function and recovery following acute events such as a stroke or hip fracture, regardless of underlying physical challenges, pain, or fear, and to age successfully. Resilience can be strengthened, improved and called upon to establish, maintain or regain a state of physical, psychological or emotional equilibrium over time. This session will review interventions to stimulate and build resilience in older adults as a way to facilitate successful aging.

### EXPANDING HORIZONS FOR HEALTHY AGING: DIVERSE VIEWPOINTS FOR A DIVERSE SOCIETY

E. Kahana, *Sociology, Case Western Reserve, Cleveland, Ohio*

This paper offers perspectives on theoretical and empirical approaches to understanding healthy aging and, more broadly speaking, aging well in our rapidly changing society. Older adults are increasingly likely to pursue initiatives in health maintenance, and continue productive roles as they craft a meaningful old age that affords them a high quality of life. Research by members of the BSS section highlights both growing diversity among older adults, and alternative pathways elders find to achieve their goals of aging well. This paper explores a range of orientations to define and operationalize healthy aging, focusing on subjective evaluations of health, as well as more objective externally defined assessments. Mixed-methods designs will be discussed, as they can inform alternative conceptualizations of healthy aging. Emerging pathways to promote health in late life will be considered, ranging from technology use in searching for health information, to participation in health education and health promotion programs.

### PROMOTING HEALTHY AGING: A POLICY AND PRACTICE PERSPECTIVE

T. Wetle, *Public Health, Brown University, Providence, Rhode Island*

Objective: Participants will identify missed opportunities to promote healthy aging across the life span. They will recognize how Gerontological research provides the evidence-base for effective interventions to promote healthy behaviors and improved health services. The World Health Organization defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". Thus, efforts to promote healthy aging must address not only treatment or prevention of diseases common in older populations, but also social and emotional well-being. Contributions are made from research focused on the basic biology of aging and related disease interactions, on clinical geriatrics to prevent and treat disease and functional limitations, and on behavioral and social sciences to place the elder in context. Using a public health perspective, this presentation identifies missed opportunities for improving the health of aging populations, drawing upon evidence-based strategies. These include interventions to promote healthier behaviors among older persons, to improve clinical practice regarding screening and treatment, and community-based interventions that build healthier communities. Conclusions: Multi-disciplinary research provides the evidence-base for improving population health and optimizing the well-being of older persons.

## SESSION 905 (POSTER)

## FRAILTY AND END OF LIFE: FAMILY, FAITH, FRIENDSHIP AND FEELINGS

### THE LOSS FEELINGS OF THE ELDERS AFTER HIP FRACTURE IN TAIWAN

Y. Huang[2,1], S. Tang[3], L. Chen[4,1], H. Cheng[1], Y.L. Shyu[2], *1. Nursing, Chang-Gung institute of Technology, Tauyuan, Taiwan, 2. Chang Gung University, Taoyuan, Taiwan, 3. Ming Chuan University, Taoyuan, Taiwan, 4. YuanPei University, ShinChu, Taiwan*

Clinical and scientific significance. Hip fracture is one of the events that impaired functional activities of elders. Most elders recovered incompletely even after a long time. Previous researches showed some elders experienced depression after hip fracture. The other studies demonstrated the elders felt lost because of separation or disabilities. However, little studies explored the loss feelings of the elders after hip fracture, and the impact of hip fracture on their lives and health. Research Purposes. The research purpose is to explore (1) the loss feelings of the elders after hip fracture, and (2) the impact of hip fracture on their lives and health. Data and Methods. This is a qualitative follow-up study. Patients above 60 year- old with hip fracture were recruited at Chang Gung Medical Center in northern Taiwan. Interviews were conducted in 1st, 2nd, 3rd, 6th and 12th month after discharge by home visiting. Transcribed information was analyzed using content analysis technique described by Miles and Huberman. Results. Four males and seven females completed the interviews during Jun 2007 to Dec 2009. Two categories of loss feelings were identified, (1) Decrease vitality— incomplete recovery, and (2) Hard to control the future— troubles or diseases followed continuously, such as cancer, Parkinsonism and others. The elders regarded the hip fracture as an adversity which their health began to decline. Conclusion. All cases expressed loss feelings. Two of them felt depressive, the others felt lost sometimes, but could manage it. The feelings were different by their health status and functional abilities.

### FROM THE NHHS AND NHHCS DATASETS: TRENDS IN HOSPICE-PALLIATIVE CARE SERVICES IN LTC FROM 2004 TO 2007

C.A. Yeager[1], L. Hyer[2], R.C. Intrieri[3], *1. Institute for Mental Health Policy, Research, and Treatment, Essex County Hospital Center, Cedar Grove, New Jersey, 2. Georgia Neurosurgical Institute, Mercer University Medical School, Macon, Georgia, 3. Western Illinois University, Macomb, Illinois*

Objective: There is now good evidence that hospice and palliative care services (H/PC) provide better, more cost effective care than conventional care for individuals at end of life. However, H/PC has not been routinely assessed in long term care. We report on findings from two national CDC datasets, the 2004 National Nursing Home Survey (NHHS) and 2007 National Home Health and Hospice Care Survey (NHHCS) regarding H/PC services offered to nursing home residents at end-of-life. Method: Samples were derived from the 2004 NHHS and 2007 NHHCS, consisting of all individuals receiving H/PC in a skilled nursing facility at time of interview. The 2004 NNHS was conducted between August and December, 2004, and the NHHCS between August 2007 and November 2008. Systematic sampling of agencies produced over 1,000 nursing homes in 2004 and over 1,000 home health and hospice agencies in 2007, generating an unweighted sample of 306 and 1008 H/PC residents respectively. We compared services offered during the two time periods, including: symptom and pain management, grief counseling, ethics/legal counseling, etc. Results: Services utilized by hospice patients and families increased somewhat between 2004 and 2007. Specifically, social services, such as grief/spiritual/ethics counseling, were offered with greater frequency in 2007. Findings regarding mental healthcare utilization and psychiatric problems were less optimistic, however. 2007 data show that depression as a diagnosis, for example, was inconsistent with staff-rated depressive symptoms. Moreover, very few patients designated as depressed or anxious received mental health services. Implications of such findings in H/PC shall be elaborated.

### CHARACTERISTICS OF HOME CARE SUPPORTING CLINICS FOR HOME DEATH OF THE ELDERLY IN THE JAPANESE METROPOLITAN REGION

H. Mikami, A. Akiyama, *Division of Health Sciences, Osaka University Graduate School of Medicine, Suita City, Japan*

Aim: With the advent of an extremely aged society in Japan we are facing increasing challenges of the end-of-life home care for the frail elderly. The aim of this study was to examine the requisites of home care system for home death of the elderly in the metropolitan region. Methods: This study was an anonymous mailed survey of 998 home care supporting clinics in the 23 wards of Tokyo, Japan. We constructed a questionnaire including clinic's characteristics, collaboration with hospitals, other clinics, home visit nursing stations and care managers, the number of people who died at home, and home care self-assessments. Results: Seventy eight percent of home care supporting clinics provided home care and home death to ≥1 patients per year (mean±SD: 7.5±16.6, range: 0-161). The number of home death patients was 20.9±33.4 per year in the clinics managed by ≥ 5 physicians (15.0%), which was 5 times as many as that of the clinics managed by < 5 physicians. In stepwise multiple linear regression analysis of factors influencing home death as a dependent variable, significant influential factors were: the number of physicians in the clinic (β: 0.38), the number of nurses in the clinic (β: 0.27), and collaboration with hospitals (β: 0.24). Conclusions: These results suggest that sufficient manpower for home care along with close collaboration with hospitals is needed for the realization of home death of the elderly in such a highly populated area as the Tokyo metropolitan region.

## PREFERENCES FOR CARE NEAR THE END OF LIFE AMONG ELDERS WITH CHRONIC DISEASES IN KOREA

S. Yu[1], Y. Chae[2], *1. Dept.of Nursing, Sangji University, Wonju-si, Gangwon-do, Republic of Korea, 2. Gangwon University, Chuncheon-si, Gangwon-do, Republic of Korea*

Introduction : The purpose of this study was to define preferences for advance directives (ADs) and care near the end-of-life (PCEOL) of elders with chronic diseases in Korea. Methods and materials: One hundred five participants from a convenience sampling were recruited from two hospitals in Korea. All participants completed questionnaires including Korean version(Kim & Lee, 2009) of PCEOL-K which was originally developed by Gauthier and Froman (2001). PCEOL-K consisted of 5 dimensions; autonomous physiological decision making, decision making by health care professional, spirituality, family, and affective communication. Results: Nearly all participants (98.1%) indicated that they were not aware of ADs and means to make their end-of-life wishes. They preferred that their wife (28.6%) or their son/daughter (45.7%) make healthcare decisions when they could no longer make their wishes. Relatively positive preference for care near the end of life toward pain control, family, decision making by health care professional, spirituality and negative preference toward autonomous physiological decision making were explored. Conclusion: If we advertise properly, it is highly likely that a large number of elders with chronic disease would make their wills easily by ADs. So Nurses should engage their patients in an ongoing communication about the end-of-life and consider family, pain control, spirituality as important factors at the end-of-life care by culturally tailoring to Korean.

## FEASIBILITY OF USING A VALUES INVENTORY AS A DISCUSSION AID ABOUT END-OF-LIFE CARE

S. Menon[1], L.B. McCullough[3,1], D. Espadas[1], U. Braun[1,2,3], *1. Houston Center for Quality of Care and Utilization Studies, V A Medical Center, Houston, Houston, Texas, 2. Baylor College of Medicine, Department of Medicine, Section of Geriatrics, Houston, Texas, 3. Baylor College of Medicine, Center for Ethics and Health Policy, Houston, Texas*

Feasibility of Using a Values Inventory as a Discussion Aid about End-of-Life Care Background: Knowledge of seriously ill patients' values and preferences is critical for providing excellent end-of-life care and facilitating care transitions. Conversations to elicit such preferences can be difficult and time-consuming. A Values Inventory (VI) can be useful to facilitate conversations about end-of-life care. Objectives: To test the feasibility of using a VI as a discussion aid in primary care clinical setting. To evaluate the satisfaction of patients with using a VI. Methods: Twenty Physicians from an urban VA Medical Center and six seriously ill patients of each physician were recruited (total n=140). Patients were randomized into a usual care and a VI group. Patients in the VI group completed the one page instrument in the waiting room and were instructed to discuss it during the physician-patient encounter. All encounters were audio-taped, transcribed and qualitatively analyzed. Results: Despite a specific and targeted intervention, only eight of 60 patients asked the physician to go over the VI leading to a discussion about end-of-life care. No discussions about end-of-life care happened in the usual care group. Nonetheless, patients were very satisfied with the VI and interested to discuss it with family members. Discussion: Primary care clinic visits rather than acute hospitalizations for chronic serious illnesses have been promoted as ideal setting for discussing end-of-life care. However, the low effectiveness of our intervention questions how feasible such discussions are during short primary care visits that were dominated by medication refills.

## PATIENT AND FAMILY PERCEPTIONS OF PALLIATIVE CARE CONSULT SERVICE CONFERENCES

P. Housen[1], S. Enguidanos[2], N. Jauregui[3], B. Mejia[3], J. Miller[3], M. Penido[3], *1. Partners in Care Foundation, San Fernando, California, 2. University of Southern California, Los Angeles, California, 3. Huntington Hospital, Pasadena, California*

Purpose: Significant evidence attests to the ability of inpatient Palliative Care Consult Service (PCCS) programs to improve patient-level outcomes, decrease acute care service use, and produce cost savings. A key element of PCCS is the patient/family conference, which is commonly used to provide information and develop goals of care jointly. The purpose of this study was to elicit care recipients' perspectives of patient/family conferences, which few studies have examined. Design & Methods: Qualitative interviews were conducted with 26 patients/family members who participated in PCCS conferences at an urban medical center. Participants completed a brief demographic survey and their perceptions were elicited using a semi-structured interview protocol. Interviews were audiotaped/transcribed verbatim, and statements were coded using a modified set of conceptual themes pertaining to elements of ideal palliative care (Philip & Komesaroff, 2006). Results: Patients/families characterized the relationships and the quality of communication with the PCCS, citing the team's relaxed and approachable communication style. Additionally, respondents identified receipt of comprehensive information about the patient's overall health condition as useful in goal setting and care decision-making. Improved symptom control and pain management were also key factors associated with patient/family conferences. Obstacles to the receipt of ideal palliative care included timeliness of the conference, inconsistent or incomplete information, and patient/family resistance. Implications: Findings from this study provide PCCS teams and hospitals with information about the perceived value of patient/family conferences, and identify areas for improvement.

## A PREDICTION MODEL FOR CARE BURDEN AND LIFE SATISFACTION OF THE DEMENTIA ELDERS' CAREGIVERS

Y. Lee, J. Lim, *Nursing Department, Inha University, Incheon, Republic of Korea*

Purpose: This study is to investigate factors that may impact on caregivers' life satisfaction and care burden, and help to reduce stress of care givers by nursing intervention on such factors. Methods: Study was designed to construct a model that predicts the care burden and life satisfaction of the dementia elders' caregivers. The study was conducted using a convenient sampling method from 8 Dementia Day Care Center at Incheon, Korea. One hundred eighty family caregivers answered the questionnaires. Data were analyzed by descriptive statistics and correlational analysis using SAS 10.0 program. The Linear Structural Modeling (LISREL) 8.13 program was used to find the best fit model. Results: The overall fit of the hypothetical model to the data was good, with statistically significant expected chi-square value (GFI=.94, RMR=.17, RMSEA=.13, NNFI=.99, NFI=.99). Compared to the hypothetical model, the revised model has become parsimonious and had a better fit to the data, in terms of expected chi-square value(GFI=.98, RMR=.12, RMSEA=.06, NNFI=1.00, NFI=1.00). The predictable variables of dementia caregivers' life satisfaction were depression, fatigue, perceived health status and care burden. These variables explained 65% of life satisfaction of the dementia elders' caregiver. The predictable variables of dementia caregivers' burden were depression, fatigue and functional status of demented elders. These variables explained 69% of caregivers' burden in this model. Conclusion: From the above results, it is necessary to develop the intervention program that may help care givers depression and fatigue, which will reduce care burden and promoting the life satisfaction of care givers.

### CAREGIVER DISTRESS PRIOR TO A FAMILY MEMBER'S DEMENTIA DIAGNOSIS: GENDER AND GENERATIONAL CONTRASTS

N.J. Stewart[1], D.G. Morgan[2], D.A. Forbes[3], C. Karunanayake[2], J. Wickenhauser[2], *1. College of Nursing, University of Saskatchewan, Saskatoon, Saskatchewan, Canada, 2. Canadian Centre for Health and Safety in Agriculture, University of Saskatchewan, Saskatoon, Saskatchewan, Canada, 3. Faculty of Health Sciences, University of Western Ontario, London, Ontario, Canada*

The day of dementia diagnosis is an emotional transition for family members. In this study, we compared family caregivers according to gender (male vs. female) and relationship (spouse vs. child) on measures of burden, severity of distress and health (mental and physical) at the initial in-person visit to a rural and remote memory clinic for diagnosis of early dementia. Ethics approval was obtained and family members signed an informed consent form before completing three questionnaires about their caregiving experiences and health. Of 175 caregivers relevant to this analysis, there were 66 wives, 49 daughters, 42 husbands, and 18 sons. Caregiver data were collected prior to the end-of-day meeting when team members provided feedback to the patient and family about the diagnosis. Analysis of Variance was used in a factorial design to compare these four caregiver groups as two factors (gender x relationship) on each of four indicators of distress and health. We found that women (wives + daughters) reported significantly more caregiver burden ($p < .0001$), greater severity of distress ($p < .0001$), and lower mental health ($p < .01$) than men (husbands + sons). In the relationship analysis, spouses (wives + husbands) reported greater severity of distress ($p < .05$) and lower physical health ($p < .01$) than children (daughters + sons). There were no interaction effects between gender and relationship. These results suggest that differing needs for support exist based on type of caregiver. Differences in physical health between spouses and children may reflect age-related deterioration for spouses.

### FORMAL/INFORMAL CAREGIVER INTERACTIONS IN THREE DISTINCT MODELS OF CARE

B. Baney[1], J. Penrod[1], J.E. Muscat[2], *1. The School of Nursing, The Pennsylvania State University, University Park, Pennsylvania, 2. Penn State Milton S. Hershey Medical Center, Hershey, Pennsylvania*

Both health care providers and family caregivers are integral to the care of patients suffering life-limiting illnesses. Family (informal) caregivers often provide the majority of home care, interfacing with health care providers (formal caregivers) only during brief office visits across the trajectory of illness. Such clinic interactions are opportunities for health care providers to support their informal partners in care. This study investigated interactions between the formal/informal caregivers and the key characteristics of three distinct care delivery models: interdisciplinary team, cooperative network, and dominant provider. Data were collected in a larger ethnographic study in which the models of care delivery were identified. Observation of clinic visits (n=450) produced textual field notes that were re-coded for quantitative analysis in this study. Multivariate analysis tested hypotheses based on the ethnographic findings: interactions between the informal and formal caregivers were associated with characteristics of model of care delivery, the informal caregiver, and the care recipient. These findings support theoretical assertions being formulated in the ethnography and, ultimately, contribute to the integration of supportive care for informal caregivers in varied delivery settings.

### COMPARISON OF PHYSICAL, PSYCHOSOCIAL, AND ENVIRONMENTAL CHARACTERISTICS AMONG NOT-FRAIL, PRE-FRAIL, AND FRAIL ELDERLY IN KOREA

J. Song[1], G.S. Hong[2], M. Park[3], I. Shin[4], *1. College of Nursing, Korea University, Seoul, Republic of Korea, 2. Department of Nursing, Colleg of Medicine, Hanyang University, Seoul, Republic of Korea, 3. College of Nursing, Keimyung University, Daegu, Republic of Korea, 4. Department of Medical Statistics, School of Medicine, Catholic University of Daegu, Daegu, Republic of Korea*

Recently studies have suggested that frailty is a multidimensional concept resulting from physical, psychological, social, and environmental factors. However, little data is available to support such a multidimensional perspective of frailty. In the present study, a sample of 286 community dwelling Korean elderly with age of over 60 (Male 43.7%, Female 56.3%) was used to investigate differences of physical, psychosocial, and environmental characteristics among not-frail (NF) (n=62), pre-frail (PF) (n=116), and frail (F) (n=108) groups. For each group, subjects were conveniently selected from the random sample used for the 2008 national study of Korean elderly based on the five markers of frailty suggested by Fried et al. (2001). Three groups were compared according to: pulse rate, blood pressure, waist-hip ratio (WHR), Body Mass Index (BMI), maximal expiratory flow, balance, number of prescribed medication, experience of medication side effect, number of physical symptoms; ego-integrity, family function; and home environment. One way ANOVA and Chi-square tests were mainly used for data analyses. Significant ($p<.05$) group differences were found for most variables except for blood pressure, WHR, BMI, and home environment. Results of this study may be useful not only for understanding various aspects of frail Korean elderly, but also developing customized health promotion programs for pre-frail or frail elderly. However, interpretation and generalization of the findings should be tentative. Further studies with a larger sample and longitudinal study design would be of great value.

### FRAILTY IN MEXICAN AMERICANS: WHERE THEY LIVE MAKES A DIFFERENCE

S.E. Espinoza[1,3], H.P. Hazuda[2,3], *1. Medicine, Division of Geriatrics and Gerontology, University of Texas Health Science Center at San Antonio, San Antonio, Texas, 2. University of Texas Health Science Center at San Antonio - Medicine, Division of Clinical Epidemiology, San Antonio, Texas, 3. South Texas Veterans Health Care System, San Antonio, Texas*

Background: Previous studies have shown that frailty prevalence is higher in ethnic minority groups who often have lower socioeconomic status compared with European Americans (EAs). This study examined whether neighborhood differences are related to frailty prevalence among older (65+ years) Mexican Americans (MAs). Methods: Subjects were 371 MA participants in the San Antonio Longitudinal Study of Aging baseline examination sampled from three socio-culturally distinct neighborhoods: barrio (lower-income, predominantly MA), transitional (middle-income, equal proportion MAs and EAs), and suburban (upper-income, predominantly EA). Frailty was classified using standardized criteria, and odds of frailty in the transitional and barrio neighborhoods relative to the suburbs was estimated using multiple logistic regression with age, sex, education and household income as covariates. Results: Prevalence rates varied significantly across neighborhoods (barrio: 15.6%, transitional: 9.4%, suburban: 3.5%, $p=0.01$). Residence in the barrio neighborhood was associated with a five-fold increase in the odds of frailty after adjustment for age, sex, and education (OR=5.2, 95%CI: 1.5-17.4). After additional adjustment for household income, however, the odds ratio was attenuated and only marginally significant (OR=3.2, 95%CI: 0.9-11.6). Residence in the transitional neighborhood was associated with a three-fold increase in the odds of frailty but was not statistically significant (OR=2.9, 95%CI: 0.7-11.4). Conclusion: Living in the barrio was associated with five-times greater likelihood of frailty among older MAs. Income was a major contributor to this association but did not fully explain the neighborhood difference. Future studies are needed to identify additional aspects of barrio neighborhood contexts that contribute to increased risk of frailty.

### PLASMA HAPTOGLOBIN IN PRE-FRAIL OLDER ADULTS: A PILOT STUDY

S.E. Espinoza[1,2], A. Pierce[1,2], D. Halade[1,2], A. Richardson[1,2], *1. University of Texas Health Science Center at San Antonio - Barshop Institute for Longevity and Aging Studies, San Antonio, Texas, 2. South Texas Veterans Health Care System, San Antonio, Texas*

Background: Frailty is a common geriatric syndrome, which has been associated with hematologic system changes. A proteomics-based screen of plasma glycoproteins using 2-dimensional gel electrophoresis has shown that haptoglobin spot-intensity is elevated in pre-frail versus non-frail older adults. The purpose of this study was to determine if plasma levels, using enzyme-linked immunosorbent assay (ELISA), are elevated in pre-frailty. Methods: Frailty was assessed using established criteria in 33 community-dwelling older adults. Pre-frailty was defined as the presence of one or two of weak grip, slow walk, weight loss, exhaustion, or physical inactivity; non-frailty was defined as none of these. Plasma haptoglobin levels were determined with ELISA using a commercially-available kit (Genway). Difference in haptoglobin concentration between pre-frail and non-frail was determined with two-sample t-test. Results: 17 (51.5%) of the subjects were pre-frail, 21 (63.6%) were female, and the mean age was 79.5 ±5.6. Overall, haptoglobin concentration was 1.24 ±0.4 mg/mL. Haptoglobin concentrations were elevated in pre-frail (1.4 ±0.5) compared to non-frail older adults (1.1 ±0.4); however, this difference did not reach significance (p=.086). There was no significant association between haptoglobin and age or sex. Conclusion: Haptoglobin concentration was found to be higher in pre-frail compared to non-frail older adults. While these results are limited due to small sample size, these findings suggest that pre-frail older adults show differences in haptoglobin concentration, prior to the onset of overt clinically-recognizable frailty. Future studies should include larger examinations of this association and consider the potential usefulness of haptoglobin as a biomarker for frailty.

### HOW DOES DECREASED SKELETAL MUSCLE MASS AND HIGH BODY MASS INDEX INFLUENCE PHYSICAL FUNCTIONING AND IMPAIRMENTS?

M.E. Canon, E. Crimmins, *University of Southern California, Los Angeles, California*

Research has suggested that body composition changes with age, leading to a decrease in muscle mass, known as sarcopenia, and an increase in fat mass. In this study we examined the effect of both sarcopenia and obesity on physical functioning. We used the National Health and Nutrition Examination Survey (NHANES 2003-2004) to examine 1,694 male and female participants over the age of sixty. Physical functioning, body mass index (BMI), height, and appendicular skeletal muscle (ASM) were evaluated in each subject and ASM, BMI and Physical functioning were all measured as continuous variables. Physical functioning was assessed using eight self-report measures (e.g. standing up from an armless chair). ASM was measured by dual-energy x-ray absorptiometry (DXA) and the value was determined by summing the lean tissue mass from regions of the arms and legs, then dividing it by the square of the subject's height. Ordinary least squares regression was implemented controlling for age, gender, race/ethnicity, income and several conditions that respondents identified as related to reduced physical functioning (e.g. back problems, diabetes, and fractures). We found that ASM alone was not significant (p =0.16) in predicting physical functioning. However, when ASM was assessed with BMI, both variables were significantly related to differences in physical functioning ($\beta$ASM = -0.637; p<0.000, $\beta$BMI = 0.236; p<0.000). This finding underscores the importance of examining ASM and BMI together and suggests that, lower muscle mass and higher BMI increase the prevalence of physical disability among older adults.

### PREDICTORS OF REMAINING NON-FRAIL: A POSITIVE APPROACH TO AGING AMONG MEXICAN AMERICANS

R.A. Samper-Ternent, K. Gerst, L.A. Ray, A. Michaels-Obregon, *Sealy Center on Aging, University of Texas Medical Branch, Galveston, Texas*

Introduction: Despite the large percentage of older adults with debilitating medical conditions and disability, there is a considerable number that live independent and healthy lives. Little research has examined adults that remain non-frail and none have studied it in older minority populations. Data: Two waves of data from the Hispanic Established Population for the Epidemiologic Study of the Elderly (H-EPESE) Wave 2 (1994-5) and data from the Frailty sub-analysis 10 years later (2004-5) were used for this study. Participants: The baseline sample consisted of 660 community dwelling Mexican Americans aged 67 and older, designated non-frail according to the frailty index by Fried et. al (2001). Logistic regression was used to predict remaining non-frail 10 years later. Results: Of the 660 non-frail elders at baseline, 45% died over the next 10 years. However, 23% remained non-frail. Logistic regression results found that age was a significant predictor, younger individuals had higher odds of remaining non-frail (OR =.90). Also, females had significantly higher odds of remaining non-frail, compared to their male counterparts (OR=1.85). Diabetes was the only comorbidity significantly associated with the outcome at follow-up; persons without diabetes at baseline were more likely to remain non-frail (OR=.52). Conclusion: These findings suggest that additional factors are protecting older Mexican Americans from becoming frail. Diabetes education and close clinical control must be encouraged in this population group. Future studies need to analyze factors like social support and psychological well-being as protective factors against frailty in older Mexican Americans.

### SOCIAL SUPPORT PERCEPTIONS AND NEEDS OF OLDER LESBIANS

M. Gabrielson, M.J. Dyck, *Illinois State University, Normal, Illinois*

Previous research suggests that older lesbians have often not maintained close biologic family ties and mistrust and/or avoid conventional services for support for fears of discrimination. Lesbian elders have often focused their social lives around an informal support network of friends they deem critical to their health and well being. The importance of these networks is likely to increase as lesbians age (at a time when the networks may be more difficult to keep intact). In cases where their informal social networks are not intact, older lesbians may experience a disparity in support for their needs resulting potentially, in negative health outcomes. A consensus is growing regarding the health effects of social support on older adults. Findings from an ongoing internet based survey study of older lesbians in the Midwest exploring the participants' perceptions of their social networks, the social support given by them (and from whom) as well as factors associated with their perceptions are discussed. Results of the survey as well as practice implications that may be drawn from the analysis and future research directions will be presented. There has been an inadequate amount of research devoted to factors that impact the health of older lesbians. We must better understand their support needs to provide optimal care for and prevent health disparities among this vulnerable population.

### ADVANCE DIRECTIVES IN THE CONTEXT OF COGNITIVE IMPAIRMENT

L. Garand[1], J.H. Lingler[1], M. Dew[2], *1. Health & Community Systems, The University of Pittsburgh School of Nursing, Pittsburgh, Pennsylvania, 2. The University of Pittsburgh School of Medicine & Health Center, Pittsburgh, Pennsylvania*

Objective: Persons with mild cognitive impairment (MCI) and Alzheimer's disease (AD) are at heightened risk for future decisional incapacity. We sought to characterize advance care planning (ACP) rates over time in individuals who had no advance directives (living will or durable power of attorney) in place when they initially presented for a cognitive evaluation. Design: Secondary analysis of prospectively recorded clinical data. Setting: Alzheimer's Disease Research Center memory disorders clinic. Participants: Persons (N=127) with a diagnosis of MCI or early AD (n = 72) or moderate to severe AD (n = 55) and no advance directives upon initial presentation for a cognitive evaluation. Measurements: Extraction of responses to items pertaining to advance care planning assessed during annual semi-structured interviews. Results: By 5 years of follow-up, 39% of the sample had initiated ACP, with little difference by baseline diagnosis. Younger subjects (under 65 years old) were significantly more likely to initiate advance directives (43%) than were older subjects (37%). This age effect was more pronounced in men than women as well as in married subjects, those with a family history of dementia, no depressive disorder, and subjects with moderate to severe AD (versus those with MCI or early AD) at baseline. Conclusion: Only a minority of subjects initiated ACPs. The findings suggest the need for interventions aimed at enhancing ACP completion rates, particularly among older adults with MCI and early AD since these individuals may have a timed-limited opportunity to plan for future medical, financial, and other major life decisions.

### AN EXAMINATION OF COMMUNITY AND FAITH-BASED RESOURCES FOR PERSONS WITH DEMENTIA AND THEIR CAREGIVERS

R.S. Conner, L.S. Nemeth, E. Amella, *CON, MUSC, Charleston, South Carolina*

Background: The gap in the literature regarding the needs of persons with dementia (PWD) and their caregivers related to caregiver stress from the perspective of individuals that provide community and faith-based support services provided the basis for this study. Purpose: This explanatory study identified the perceptions of 13 key informants from the community regarding the challenges associated with caring for PWD, the unmet needs of PWD and their caregivers, and finally, the role that the faith community could play in providing assistance to PWD and their caregivers. Methods: Using a qualitative descriptive design approach with semi-structured interviews, content analysis was conducted to identify the key informants' perceptions. A snowball sampling method was used to obtain a variety of community and faith-based representatives. Findings: The results validated prior work showing that the principle challenge associated with caring for PWD is caregiver stress. Improved program, facility, and health care provider support was identified as the primary need for PWD and their caregivers. Religious support at the church/synagogue, as well as in the home was identified to be the key role for faith communities in providing assistance to PWD and their caregivers. Conclusion: Comprehensive education for PWD and their caregivers about dementia provided by health care professionals who are adequately trained about the disease, prognosis, and community resources in tandem with religious support in the home and on-site by the faith communities could alleviate some components of caregiver stress.

## SESSION 910 (PAPER)

## ISSUES IN LONG TERM CARE

### TRANSITIONS EXPERIENCED BY THE OLDEST OLD LIVING IN ENGLISH CARE HOMES

I.A. Eyers[1], E. Cope[1], R. Luff[2], S. Arber[2], *1. Faculty of Health and Medical Sciences, University of Surrey, Guildford, United Kingdom, 2. Department of Sociology, University of Surrey, Guildford, United Kingdom*

The transition into care home life for oldest old people is influenced by their need for support or assistance with everyday activities ranging from washing and dressing to experiencing a walk in the park. Despite the rhetoric surrounding personalised care the constraints of institutional living cause reality to present a diverging picture. Based on a mixed methods study undertaken in 10 English care homes this paper provides an insight into the everyday experiences of care home residents and staff. Data were collected from 183 male and female residents aged 65 – 100 (mean age 85-90). For two weeks diaries denoting residents' daily activities were maintained and interviews were conducted with staff (n=50). The findings exemplify how the 24 hour rhythm of the day reflects a medical model curtailing personalised care. Consequently failing to acknowledge individuality and that a care home is where older people live day in day out for months if not years. Choice of when and how someone is washed and dressed is restricted by staffing levels and the reality of a walk in the park is restricted by the availability of staff and the outcome of a health and safety policy guided risk assessment. There is a need to transform the delivery of care to ensure it addresses the actual needs and expectations of the older people experiencing care home life. This research is supported by the New Dynamics of Ageing initiative, a multidisciplinary research programme funded by AHRC, BBSRC, EPSRC, ESRC and MRC (RES-339-25-0009)

### POLICIES AND PRACTICES RELATED TO ORAL NUTRITION SUPPLEMENT USE IN LONG-TERM CARE FACILITIES

S. Johnson, *Faculty of Kinesiology and Health Studies, University of Regina, Regina, Saskatchewan, Canada*

For frail older adults living in LTC facilities, oral nutrition supplements (ONS) are associated with increased body weight. These supplements are typically ready-made, liquid, and energy-dense, containing both macro- and micronutrients; they can benefit those experiencing unintentional weight loss for which weight gain is a goal. The present study examined the policies and practices related to oral nutrition supplement (ONS) use in elderly individuals living in long-term care (LTC) facilities. Thirteen LTC facilities within a large regional health authority participated, and 17 people responsible for prescribing ONS in their facilities were interviewed, using a key informant telephone survey. In addition, the study included a retrospective chart audit. Oral nutrition supplements were primarily prescribed by nursing staff (59%), followed by physicians, registered dietitians, or other staff; ONS use was prescribed for decreased intake, unintentional weight loss, or wound healing. Various ONS products (e.g., Ensure, Boost, or Resource 2.0) were prescribed. Only 18% of respondents reported using alternative food options first to supplement nutritional intake, before introducing ONS. In terms of follow-up and evaluation, the measures of improvement included weight gain, wound healing, or improved well-being; reasons for discontinuation included weight gain, increased intake, or death. Within LTC settings, the prescription and monitoring of ONS vary considerably. Evidence-based guidelines for the prescription and monitoring of ONS and for the use of a food-first strategy should be developed, implemented, and evaluated to optimize the nutritional health of the elderly in LTC facilities.

### ORAL HEALTH IN THE NURSING HOME: A COMPARISON BETWEEN MDS 2.0 DATA AND ACTUAL OBSERVATIONS

R. Jablonski[1], C. Munro[2], M. Grap[2], M.B. Ligon[3], *1. School of Nursing, Penn State, University Park, Pennsylvania, 2. Virginai Commonwealth University, Richmond, Virginia, 3. York College, York, Pennsylvania*

The Minimum Data Set (MDS, 2.0) is an important tool that provides information about the required care and health of nursing home (NH) residents. As part of a larger study designed to measure the effect of an intervention on denture and dental plaque in NH residents, we compared data reported in the MDS, Section L (Oral/Dental Status) to actual observations. The study was conducted in two NHs that differed by geography, ownership, and reimbursement patterns. Thirty-four NH residents with dementia were enrolled: 69% female, 31% African-American, and 69% white. There were no differences between facilities in residents' functional status, level of cognitive impairment, or baseline plaque scores. The residents' mouths were examined and the number of decayed, missing, and filled teeth were recorded. Plaque scores were also obtained using the University of Mississippi Oral Hygiene Index, with 0 indicating the absence of plaque and 10 indicating that plaque covered all surfaces of all teeth or dentures. According to the MDS data, none of the residents were listed as having debris in their mouths; we determined that the 31 subjects with some natural dentition had mean plaque scores of 9.55 (SD=0.89). Per the MDS, 11% had loose, broken, or carious teeth; we found that 43% had decayed teeth. MDS 3.0 is replacing MDS 2.0 and contains significant revisions to Section L. While this is a step in the right direction, the MDS 3.0 data remains contingent upon actual assessments and the strength of these assessments by nurses in long-term care.

## SESSION 915 (PAPER)

## OUTCOMES OF CARDIOVASCULAR DISEASE IN OLDER ADULTS

### THE IMPACT OF COMORBIDITY ON MORTALITY AMONG OLDER PERSONS WITH ADVANCED HEART FAILURE

S. Ahluwalia[1], C.P. Gross[2], S. Chaudhry[2], T.R. Fried[2], *1. Veterans Administration Greater Los Angeles, Los Angeles, California, 2. Yale University, New Haven, Connecticut*

Background: Little is known about the contribution of comorbidity to mortality in advanced heart failure (AHF). Identifying the impact of comorbidity on mortality in AHF can help to identify patients at risk for increased mortality and facilitate informed decision-making. We sought to identify the mortality risk associated with a broad range of comorbid conditions among older adults with AHF Methods: Longitudinal cohort study of 18,322 Medicare beneficiaries with HF. AHF beneficiaries were matched to beneficiaries with non-advanced heart failure (NHF) by age and gender, and followed from match date (T0) to death/censorship (T1). We used Cox proportional hazards regression models to estimate the effect of comorbidity on mortality. Results: Comorbidity was significantly associated with increased risk of mortality, even among AHF beneficiaries. For example, AHF beneficiaries with 3-4 comorbidities were 22% [HR: 1.22; 95% CI: 1.13, 1.31] more likely to die than those with <2 comorbidities, while NHF beneficiaries with 3-4 comorbidities were 49% [HR: 1.49; 95% CI: 1.39, 1.59] more likely to die than their counterparts with <2 comorbidities. Most comorbidities were individually associated with increased mortality risk in both groups. For example, dementia was associated with a 1.50 [95% CI: 1.43, 1.60] hazard of dying among AHF beneficiaries, and a 2.19 [95% CI: 2.05, 2.34] hazard of dying among NHF beneficiaries. Conclusions: Comorbidity continues to confer a significant mortality risk among older adults with AHF. Interventions aimed at reducing mortality risk for this population may need to simultaneously target co-existing conditions as well as heart failure to be effective. Comorbidity information can be used to identify a population who may benefit from palliative services and to facilitate informed treatment decision-making at the end of life.

### EFFECTIVENESS OF ACEI/ARBS IN VA NURSING HOME RESIDENTS WITH HEART FAILURE

E. Hutt, M. Ho, L. Pointer, E. Shahan, *Medicine, Denver VAMC, University of Colorado Denver, Denver, Colorado*

Objective: Clinical trials have demonstrated the efficacy of angiotensin converting enzyme inhibitors and angiotensin receptor blockers (ACEI/ARB) for heart failure (HF). Whether the same benefits accrue for HF patients in nursing homes, given their comorbidity burden, is unknown. We therefore assessed the association between ACEI/ARB prescription and subsequent mortality and rehospitalization in a national sample of VA nursing home (community living center – CLC) residents with HF. Methods: A national cohort of 13,147 veterans with diagnosed HF residing in CLCs during 2003-4 was identified from the VA's Medical SAS and Minimum Data Set files. Demographics, baseline function, biochemical markers, comorbidity, facility characteristics, and medications for subjects who experienced a subsequent hospitalization or death were compared to those who did not. Predictive logistic regression models for mortality and rehospitalization were developed. Propensity to be prescribed ACEI/ARB was derived using nonparsimonious logistic regression. Time to event was analyzed for the propensity-matched subjects (survival cohort n=7182; rehospitalization cohort n=7508) adjusting for covariates. Results: Annual mortality was 27.6% and rehospitalization 30%. Fifty percent had any advance directive; 58% had been prescribed ACEI/ARB. After adjustment, subjects who were prescribed ACEI/ARB had a 0.677 odds of dying (95% CI: 0.614 - 0.746). Time to death and rehospitalization were significantly longer ($p<.001$) in propensity-matched subjects taking ACEI/ARB. Conclusions: Prescribing an ACEI/ARB to VA CLC subjects with HF was associated with better survival and prolonged time to rehospitalization. Improving rates of ACEI/ARB prescription in this population may reduce morbidity and mortality.

### GERIATRIC FEATURES OF OLDER PATIENTS WITH ACUTE MYOCARDIAL INFARCTION: THE AMI-FLORENCE 2 REGISTRY

M. Di Bari[1], D. Balzi[2], A. Barchielli[2], F. Orso[1], S. Fracchia[1], C. Baroncini[1], G. Gensini[1], N. Marchionni[1], *1. Critical Care Medicine and Surgery, University of Florence, Florence, Italy, 2. Unit of Epidemiology, Local Health Unit, Florence, Italy*

Purpose. To investigate whether geriatric characteristics influence the choice of immediate treatment and long-term outcome of older patients with ST- and non-ST-elevation myocardial infarction (STEMI, NSTEMI). Methods. From April 2008 through April 2009, all acute coronary syndromes admitted to hospitals in the Florence area (Italy) entered the AMI-Florence 2 Registry. In randomly selected patients aged 65+ years, a succinct multidimensional geriatric assessment questionnaire investigated geriatric characteristics, such as living in a long-term care facility, functional limitations, memory disorders, sight or hearing impairments, previous hospitalizations, use of home care services, and use of 5+ drugs prior to admission. A summation score (SS) was calculated. Study outcomes were application of percutaneous coronary intervention (PCI) and 6-month mortality. Results. In 372 randomly selected participants (162 STEMI, 210 NSTEMI), application of PCI was systematically less frequent in the presence than in the absence of each mentioned geriatric feature. PCI was applied in 43% and 56% of participants with an SS above and below 4, respectively (OR 0.48, 95% CI 0.25-0.94, p=0.032, adjusting for age, diagnosis of STEMI vs. NSTEMI, history of heart failure, hypertension, diabetes, coronary heart disease, cancer and other comorbidities, and for hemodynamic status on admission). Older patients with an above threshold SS had a substantially higher adjusted risk of dying in 6 months (HR 2.25, 95% CI 1.01-5.01, p=0.047). Conclusions. In unselected older STEMI/NSTEMI patients, application of PCI is dependent on specific geriatric characteristics, detectable with a multidimensional geriatric assessment approach, which independently contribute also to long-term mortality.

### A LONGITUDINAL ANALYSIS OF COMORBIDITY BURDEN AMONG OLDER ADULTS WITH HEART FAILURE

S. Ahluwalia[1], C.P. Gross[2], S. Chaudhry[2], T.R. Fried[2], *1. Veterans Administration Greater Los Angeles, Los Angeles, California, 2. Yale University, New Haven, Connecticut*

Background: Older adults with heart failure (HF) often have several comorbidities that can increase care complexity and pose a challenge to the cost-effective and patient-oriented care of this population. Our knowledge of comorbidity burden among older adults with HF remains limited, particularly how it changes over time.Thus, the purpose of this study was to describe the change prevalence of a broad range of cardiac and non-cardiac comorbidities over 6 years among older adults with HF. Methods: Retrospective, longitudinal cohort study of 201,130 Medicare beneficiaries > 65 years of age with HF, drawn from the Chronic Conditions Warehouse (CCW). We calculated annual overall prevalence of each condition within our study population from the baseline year 2001 through 2006. We also calculated annual age-stratified condition prevalence for three age cohorts (66-75 years, 76-85 years, and 86+ years). Results: 60% of HF beneficiaries had 5+ comorbidities at baseline. The prevalence of all comorbidities increased over time, with non-cardiac disease accumulating faster than cardiac disease. Non-cardiac conditions were considerably more prevalent among the oldest beneficiaries than the youngest beneficiaries. Most notably, dementia was four times more prevalent and hip fracture five times more prevalent among beneficiaries aged 86+ years, than among beneficiaries aged 66-75 years. Conclusions: The burden of comorbidity among older adults with HF increases over time; however, the profile of comorbidity changes with increasing age, with an accumulation of non-cardiac conditions among those who survive to oldest age. Findings from this study can help inform a patient-centric approach to care that focuses on managing the physical and cognitive impairments associated with age-related conditions, and to guide future service planning and cost containment efforts as the over-65 HF population ages.

## SESSION 920 (SYMPOSIUM)

### ESPO/HS SYMPOSIUM: EMERGING SCHOLARS IN HEALTH AND AGING RESEARCH

Chair: *B.D. James, Medicine, Rush Alzheimer's Disease Center, Chicago, Illinois*
Co-Chair: *B. Resnick, University of Maryland School of Nursing, Baltimore, Maryland*
Discussant: *C. Alessi, UCLA School of Medicine, Los Angeles, California*

Fostering the development of the next generation of researchers in gerontology is one of the missions of GSA. The Health Science (HS) section is proud to support this mission and to provide avenues for emerging clinical researchers and health professionals to gain experience in presenting their work to the scientific community. To that end, the HS section and the Emerging Scholars and Professionals Organization (ESPO) have sponsored this symposium, in which a multidisciplinary group of emerging HS scholars will have the opportunity to present their research and receive feedback from a panel of experienced HS board members. This impressive group of students in gerontology, nursing, and clinical psychology will present on a diverse array of topics at the forefront of research in health and aging: 1) risk factors for progression of knee osteoarthritis, 2) health and disability among cancer survivors in the Health and Retirement Study, 3) socioeconomic status and grip strength, 4) testing a function focused care intervention in nurses, and 5) neighborhood socioeconomic position and cognitive function.

### OBESITY AS A RISK FACTOR FOR PROGRESSION OF KNEE OSTEOARTHRITIS

S. O'Connor, M. Hochberg, *University of Maryland, Baltimore, Baltimore, Maryland*

Osteoarthritis (OA), a prevalent type of arthritis among older adults, is a degenerative disease in which joint cartilage deteriorates, often leading to pain, stiffness, swelling, and decreased mobility in the affected joint. Osteoarthritis of the knee is the most common type of OA, and one of the leading causes of disability among older adults. Previous literature indicates that obesity may be a causal factor in the development and progression of knee osteoarthritis, although few longitudinal studies have been cited. This study examines data from the Osteoarthritis Initiative (OAI), a prospective, longitudinal cohort study sponsored by the NIH, which aims to increase understanding of the progression and development of knee osteoarthritis. Findings of this study indicate that obesity may exacerbate the progression of knee OA, due to increased load. This study has implications for the development of public health interventions for preventing knee OA.

### DISPARITIES IN CANCER SURVIVAL AND MORTALITY AMONG OLDER AMERICANS: FINDINGS FROM THE HEALTH AND RETIREMENT STUDY

K. Garcia, E. Crimmins, *University of Southern California, Los Angeles, California*

From 2002-2006, over 75 percent of cancer (all sites) diagnoses and deaths in the United States were among adults 55 years of age and over, however, relatively little is known about the sociodemographic characteristics of older cancer survivors and the extent to which these characteristics modify the risk of cancer-specific mortality. In this study we examine cancer-specific survival over a 14-year follow-up period, using data from over 9,000 respondents in the Health and Retirement Study, aged 51 to 61 in 1992, with mortality follow-up across seven biannual survey waves through 2006. The Cox proportional hazard model and multivariate analyses are used to calculate the association between the respondent's baseline sociodemographic characteristics and cancer-specific survival. By understanding the impact of sociodemographic characteristics on cancer survival, we can identify and target high-risk groups to reduce the disparities in cancer mortality.

### GRIP STRENGTH AND SOCIOECONOMIC STATUS IN THE ELDERLY JAPANESE POPULATION

S. Davarian[1], Y. Saito[2], E. Crimmins[1], *1. Gerontology, University of Southern California, Los Angeles, California, 2. Nihon Univeristy, Tokyo, Japan*

Grip strength has been demonstrated as a useful predictor of disability, morbidity, and mortality as well as an indicator of frailty. Literature on the association between socioeconomic status and grip strength is not well developed. For the first time associations between those variables in a nationally representative sample of the 67 and older Japanese population are examined (n=2,406) using wave four of the Nihon University Japanese Longitudinal Study of Aging. It is hypothesized that less education and longer years spent in agriculture/fishery are associated with weaker grip. OLS-regression demonstrates that for every year of education overall grip increases by 0.15kg ($p<.001$), controlling for age, sex, and BMI. T-tests indicate people employed in agriculture/fishery have weaker grip (1.56kg, $p<.001$). These results demonstrate disadvantaged SES and rural occupation have negative implications in old age. Underlying mechanisms associating SES and grip strength might be similar to those associating lower SES and arthritis.

### PILOT TESTING OF A FUNCTION FOCUSED CARE INTERVENTION IN AN ACUTE CARE SETTING: IMPACT ON NURSING

M. Hammersla, *University of Maryland School of Nursing, Baltimore, Maryland*

The purpose of this pilot study was to test a motivational intervention to determine if this approach would alter nurses' beliefs and behaviors associated with their promotion of function and physical activity in older hospitalized patients. A single site pre/post test design was used with nurses recruited from 2 general medical units of an acute care hospital over a 6 month period. Twenty-three individuals consented to participate and completed baseline measures. There was a statistically significant increase (F=5.59, p=.03) in self-efficacy expectations. Although not significantly different, there was an increase in outcome expectations, knowledge of function focused care with test scores,and performance of function focused care during observed routine care interactions. The findings from this study provide some support for the feasibility of implementing a function focused care intervention in acute care in that nurses were willing to participate and engage in the educational aspects of the intervention.

### NEIGHBORHOOD SOCIOECONOMIC POSITION AND COGNITIVE MEASURES IN THE ACTIVE STUDY

S. Sisco, M. Marsiske*, Clinical & Health Psychology, University of Florida, Gainesville, Florida*

Using baseline pre-treatment data from the ACTIVE study (a multisite cognitive intervention trial on 2,802 adults aged 65+ years), the current paper examined whether relationships between neighborhood-level socioeconomic position (SEP) and cognition reported in cross-national research also hold in a U.S. sample. Using Census 2000 data collected around the time of the baseline assessment, a latent construct representing neighborhood SEP (i.e., area-level income, poverty, and educational attainment) was identified. Cognition was assessed with tasks of reasoning, verbal memory, visual attention, psychomotor speed, vocabulary, and everyday cognition. SEP evinced bivariate associations with cognitive measures ranging from r=-0.02 to r=0.33. SEP was most strongly associated with measures influenced by education/acculturation (e.g. tests of vocabulary, reasoning, and everyday problem solving), and least with measures of visual attention and psychomotor speed. Subsequent models sought to account for potential individual-level mediators of the area-level SEP-cognition associations.

## SESSION 925 (SYMPOSIUM)

### THE ROLE OF ARTS AND HUMANITIES IN MEDICAL, NURSING, AND SOCIAL WORK EDUCATION

Chair: *E. Gonzales, George Warren Brown School of Social Work, Washington University in St. Louis, St. Louis, Missouri*
Co-Chair: *R.K. Chow, National Council on Aging, Washington, District of Columbia*
Discussant: *J. Hendricks, University Honors College, Oregon State University, Corvallis, Oregon*

This multidisciplinary symposium demonstrates the critical role of the humanities and arts in facilitating empathy, dispelling ageism, raising critical consciousness, and increasing cultural competency among medical, nursing and social work students. The presenters highlight and evaluate the impact of innovative pedagogical techniques that integrate the arts and humanities into clinical education. A geriatrician discusses how written reflection exercises promote better understanding, communication skills, professionalism, and age appropriate competencies among medical students. A gerontological nurse examines use of new media (e.g., blogs, YouTube) as well as contemporary poems and paintings on aging as tools for enriching nursing education. Findings suggest that this pedagogy deepens the awareness of students for the unique and complex needs of older adults and as a result their commitment to person centered care. A geriatric social worker considers the impact of humanities and arts activities which successfully engage students in learning about domains of aging in which they had been previously uninterested. In addition to identifying strategies for incorporating the humanities and arts into clinical education, presenters assess the evidence-base and outcomes of the approaches discussed. Recommendations for future research in this emerging area of the scholarship of teaching and learning are proposed.

### ENHANCING MEDICAL STUDENT ATTITUDES TOWARD GERIATRICS: ANALYSIS OF PRE-CLINICAL STUDENT NARRATIVES

J. Powers*, Vanderbilt University, Nashville, Tennessee*

Reflection is useful to identify educational needs, develop critical reasoning and problem forming skills, and as a method to address professional challenges and to develop skills to cope with clinically complex situations. Written exercises promote better understanding and permit a commitment to learning and ownership of the experience and promote better understanding of professionalism, communication skills, and age appropriate competencies. Evolving evaluation methodology related to student journaling include identification of narrative references to professional competency domains and scoring of reflective ability. Examples of scoring techniques will be demonstrated using written, film, and digital media as well as evaluation of a course designed to enhance professionalism and communication skills for preclinical students

### GERONTOLOGIZING NURSING EDUCATION: FOCUSING ON POSSIBILITIES RATHER THAN PROBLEMS

D.J. Sheets*, School of Nursing, University of Victoria, Victoria, British Columbia, Canada*

Although nurses spend about 85 percent of their time caring for older adults, ageism is common. The impact of ageism on clinical practice and delivery of health services with poorer health outcomes is well-documented. Recent studies point to the importance of curricula that challenge stereotypes of aging through critical consciousness raising strategies. Poetry, art and new media on aging, including blogs and YouTube, that enhance and gerontologize the curricula will be demonstrated with examples of how they were used to deepen self awareness of detrimental attitudes towards older adults. Findings indicate that these pedagogical approaches in nursing education support person-centered care by transforming static stereotypical perceptions of aging into dynamic and socially critical views that take into account the heterogeneity and diversity of older adults.

### TEACHING SOCIAL WORK STUDENTS ABOUT AGING

H.Q. Kivnick*, School of Social Work, University of Minnesota, St, Paul, Minnesota*

US demographic trends mean that a large majority of social workers will find themselves working with older adult clients or with younger clients' aging family members. However, few social work students receive gerontological training as part of BSW or MSW degrees, due to a paucity of gerontological content offered by institutions, to students' lack of personal contact with elders, and to enduring and widespread attitudes of ageism. From one direction, experimental programs have demonstrated effectiveness in attracting students, providing training, and cultivating interest in and commitment to the aging population. From another direction, arts and humanities infusion in the curriculum has demonstrated effectiveness in deeply engaging students in domains of aging in which they had been previously uninterested. This presentation will highlight examples of innovations in social work educational programming, teaching, content, and qualitative student evaluation.

## SESSION 930 (SYMPOSIUM)

### VITAMIN D: SOMETHING NEW UNDER THE SUN

Chair: *D.K. Houston, Sticht Center on Aging, Wake Forest University School of Medicine, Winston Salem, North Carolina*
Co-Chair: *S.B. Kritchevsky, Sticht Center on Aging, Wake Forest University School of Medicine, Winston Salem, North Carolina*
Discussant: *M. Johnson, University of Georgia, Athens, Georgia*

Over the last two decades, our understanding of the role of vitamin D in health has extended beyond the musculoskeletal system to encompass cardiovascular health, immunomodulation, and regulation of cell growth. Vitamin D receptors have been identified in at least 36 different tissues, including skeletal muscle, osteoblasts, brain, and heart. There is also a growing list of tissues that show 25(OH)D-1-α-hydroxylase activity and can synthesize 1,25(OH)$_2$D (the active form) from 25(OH)D (the preferred indicator of vitamin D status), suggesting an autocrine or paracrine role for vitamin D. Approximately one-third of U.S. adults aged 70 years and older have low 25(OH)D concentrations (<50 nmol/L [<20 ng/mL]). This multi-disciplinary symposium examines the role of vitamin D status on aspects of health using data from the Health, Aging and Body Composition (Health ABC) Study, a prospective cohort study of 3,075 well-functioning older adults aged 70-79 years at baseline. Serum 25(OH)D was measured at the 2nd follow-up visit (n=2,793) with up to 9 years of follow-up data for the health outcomes being presented: incident depression (Williams and colleagues), incident mobility limitation (Houston and colleagues), fractures (Cauley and colleagues), and all-cause mortality (Kritchevsky and colleagues). While these observational analyses provide important preliminary evidence of the association between vitamin D status and several health outcomes, vitamin D supplementation trials are needed to definitively determine if improving vitamin D status reduces the risk of adverse health outcomes in older adults.

### VITAMIN D STATUS AND DEPRESSION IN COMMUNITY-DWELLING OLDER ADULTS

J. Williams[1], D.K. Houston[1], C.C. Davis[1], J.A. Cauley[4], S. Rubin[2], F.A. Tylavsky[3], S.B. Kritchevsky[1], K. Sink[1], *1. Wake Forest University, Winston-Salem, North Carolina, 2. University of California San Francisco, San Francisco, California, 3. University of Tennessee Health Sciences, Memphis, Tennessee, 4. University of Pittsburgh, Pittsburgh, Tennessee*

We examined the association between serum 25-hydroxyvitamin D (25(OH)D) and prevalent and incident depression in well-functioning older adults in the Health ABC Study (n=2,515). Depression was defined as a score of ≥5 on the Geriatric Depression Scale (GDS) or ≥10 on the short Center for Epidemiologic Studies Depression Scale (CES-D), or current treatment with antidepressant medication. Participant mean age was 74.7 years; 52% were women, 39% were black, and 33% were vitamin D deficient (25(OH)D<50 nmol/L). Vitamin D deficiency was not associated with prevalent depression. However, after excluding participants with prevalent depression (n=275), individuals with vitamin D deficiency were more likely to develop depression over the next 3 years (HR (95% CI): 1.54 (1.19-1.99)) compared to those who were sufficient (25(OH)D≥75nmol/L) after adjusting for age, sex, race, site, season, BMI, CVD and renal function. In summary, vitamin D deficiency may be a risk factor for depression in older adults.

### VITAMIN D STATUS AND INCIDENT MOBILITY LIMITATION IN COMMUNITY-DWELLING OLDER ADULTS

D.K. Houston[1], R. Neiberg[1], J. Tooze[1], D.B. Hausman[2], J.A. Cauley[3], D.C. Bauer[4], T. Harris[5], S.B. Kritchevsky[1], *1. Sticht Center on Aging, Wake Forest University School of Medicine, Winston Salem, North Carolina, 2. University of Georgia, Athens, Georgia, 3. University of Pittsburgh, Pittsburgh, Pennsylvania, 4. University of California, San Francisco, California, 5. National Institute on Aging, Bethesda, Maryland*

We examined the association between serum 25-hydroxyvitamin D (25[OH]D) and incident mobility limitation in older adults in the Health ABC Study (n=2,154). Mobility limitation was defined as reporting any difficulty walking 1/4 mile or climbing 10 steps on two consecutive 6-month contacts over 6 years of follow-up (n=764). Participant mean age was 74.6 years; 48% were women, 35% were black, and 65% had 25(OH)D <75 nmol/L. Compared to participants with 25(OH)D ≥75 nmol/L, the risk of incident mobility limitation was 1.66 (95% CI: 1.36-2.02) and 1.37 (1.14-1.64) for those with 25(OH)D <50 nmol/L and 50-<75 nmol/L, respectively, after adjusting for age, gender, race, site, and season (p for trend, <0.0001). The results were attenuated somewhat after further adjustment for health habits, BMI, kidney function, and co-morbid conditions but remained significant (p for trend, 0.02). In summary, low 25(OH)D was associated with increased risk of mobility limitation in community-dwelling older adults.

### VITAMIN D STATUS AND THE RISK OF FRACTURE

J.A. Cauley[1], D.K. Houston[2], K. Barbour[1], R. Boudreau[1], D.C. Bauer[3], F.A. Tylavsky[4], T.B. Harrris[5], S.B. Kritchevsky[2], *1. Epidemiology, University of Pittsburgh, Pgh, Pennsylvania, 2. Wake Forest University, Winston-Salem, North Carolina, 3. University of Tennessee, Memphis, Tennessee, 4. University of California, San Francisco, San Francisco, California, 5. National Institute on Aging, Bethesda, Washington*

We examined the association between serum 25-hydroxyvitamin D (25(OH)D) and incident fracture in older adults in the Health ABC Study (n=2651). Fractures were ascertained every 6 months and confirmed by radiology reports over an average of 5.6 years. Mean age was 74.6y; 48% were women, 35% were Black and 34% were vitamin D deficient (<50nmol/l). Among Whites, we found no association between vitamin D and fracture. Separate analyses of hip fracture revealed similar results. Among Blacks, the relative risk (95% CI) of fracture was 0.84(0.50, 1.44) and 0.42(0.20, 1.00) in participants with 25(OH)D 50-<75nmol/l and >75nmol/l, respectively, compared to those with 25(OH)D levels <50nmol/l after adjustment for age, gender, BMI, season, alcohol and fracture history (p trend=0.057). Further adjustment for physical function measures, e.g., gait speed, attenuated these findings suggesting that at least in Blacks, higher concentrations of 25(OH)D may protect against fracture because of improvements in physical function.

### SERUM 25-HYDROXYVITAMIN D, PARATHYROID HORMONE AND MORTALITY IN COMMUNITY-DWELLING OLDER ADULTS

S.B. Kritchevsky[1], D.K. Houston[1], R. Neiberg[1], J. Tooze[1], D.B. Hausman[2], J.A. Cauley[3], D.C. Bauer[4], T. Harris[5], *1. Sticht Center on Aging, Wake Forest University School of Medicine, Winston-Salem, North Carolina, 2. University of Georgia, Athens, Georgia, 3. University of Pittsburgh, Pittsburgh, Pennsylvania, 4. University of California, San Francisco, California, 5. National Institute on Aging, Bethesda, Maryland*

We examined the relationship between serum 25(OH)D and PTH and all-cause mortality in well-functioning, community dwelling, older adults in the Health ABC study (n=2,638; mean age, 74.7 years; 51% women; 39% black). Deaths were ascertained through semi-annual contacts over the subsequent 8.5 years (n=691). Proportional hazards models adjusting for demographics, health habits, season, physical and cognitive function, and common comorbidities showed that compared to 25(OH)D ≥75 nmol/L, mortality was elevated in individuals with low 25(OH)D (HR [95% CI]: <25 nmol/L, 2.25 [1.58-3.22]; 25-<50 nmol/L, 1.49 [1.20-1.84]; 50-<75 nmol/L, 1.25 [1.03-1.53]). Compared to PTH <23 pg/mL, individuals with PTH ≥70 pg/mL had elevated mortality (1.79 [1.32-2.42]). In models that included both 25(OH)D and PTH, both low 25(OH)D (<50 nmol/L) and high PTH (≥70 pg/mL) were significantly associated with elevated mortality (p<0.001). Stratified analyses suggested that 25(OH)D did not predict mortality in those with high PTH.

## SESSION 935 (SYMPOSIUM)

### BUILDING A MOVEMENT FOR BETTER HEALTH CARE: ENGAGING OLDER ADULTS, FAMILY CAREGIVERS AND CONSUMER ADVOCATES

Chair: *L. Feinberg, National Partnership for Women & Families, Washington, District of Columbia*

Discussant: *R. Browdie, Benjamin Rose Institute, Cleveland, Ohio*

The quality and delivery of health care services have an enormous impact on the well-being and overall quality of life for older adults. Yet, today's fragmented health care system fails to meet the fundamental needs of the most vulnerable older adults. Successfully reforming health care also is about improving how care is delivered, including transitions of care, so that the system better serves the needs of older adults and their family caregivers. This is especially critical for the 20% of Medicare beneficiaries with five or more chronic conditions who account for about 68% of Medicare expenditures. These are the people who make the heaviest use of the current system, at the highest cost, but with the poorest outcomes. Launched in 2010, the Campaign for Better Care is a consumer advocacy campaign pressing for high quality, comprehensive and coordinated care for vulnerable older adults with multiple chronic conditions and their families. Grassroots mobilization is a central element of the Campaign and key to meeting the goal of building a strong and lasting consumer voice for better health care, by engaging and mobilizing older adults and their families, and consumer advocates. This symposium will highlight the strategies being used to organize the grassroots voice of older adults and their families as activists for better care. Presenters will address key elements of the Campaign for Better Care, including messaging and communications, on-the-ground and online organizing, legal advocacy and analysis, and offer a view of the Campaign from the national and state levels.

### IMPROVING CARE FOR OLDER ADULTS WITH CHRONIC CONDITIONS AND THEIR FAMILIES: OVERVIEW OF THE CAMPAIGN FOR BETTER CARE

L. Feinberg, *National Partnership for Women & Families, Washington, District of Columbia*

The U.S. health care system is neither organized nor financed to deal with its greatest challenge: chronic illness. For many American families involved in caregiving for an older relative or friend with multiple health problems, there is deep worry about quality of care, and great frustration in the lack of communication and coordination across health providers. This presentation will provide an overview of a new multi-year initiative to change health policy and improve care, the Campaign for Better Care. It will explore the key elements of the Campaign, including the policy agenda to improve the payment and delivery of health care, educational/advocacy tactics to affect policies on chronic care, building diverse coalitions of stakeholders, and effective message development to engage older adults and their caregivers as activists for better care. The challenges and opportunities of engaging and mobilizing Baby Boomer caregivers as advocates will be discussed.

### MOBILIZING THE GRASSROOTS: STATE ADVOCACY GROUPS, OLDER ADULTS AND CAREGIVERS

R.M. Hodin, *Community Catalyst, Boston, Massachusetts*

Older Adults and their families are too often left out of state and federal debates around health care payment and delivery system reform, areas traditionally dominated by other stakeholders, such as providers and payors. It is critical that a consumer voice be powerful and engaged in order to ensure that these sorts of policy changes truly address the needs of vulnerable older adults and their families. This presentation will describe Community Catalyst's use of two integrated approaches to support the Campaign for Better Care: (1) mobilizing state-based advocacy infrastructure and (2) directly engaging and empowering older adults and caregivers. Specifically, it will discuss the coalition development and policy work of state-based campaigns in Maine, Massachusetts, North Carolina, Ohio, Pennsylvania and Wisconsin. It will also describe an innovative training program aimed at empowering older adults and caregivers as advocates who can then help support and shape their state-based campaigns for better care.

### LEGAL AND POLICY ISSUES IN PROMOTING NEW MODELS OF COORDINATED CARE

L.D. Cuello, *National Health Law Program, Washington, DC, District of Columbia*

The Campaign for Better Care (CBC) aims to improve care coordination and outcomes for vulnerable older adults with chronic conditions by changing the health care system in a way that truly puts the patient first that effectively integrates vulnerable and isolated communities into our health care system. Efforts to reform health care delivery and payment systems must pass through a complex legal matrix, including administrative authority to test new pilot programs, the creation of new laws and regulations, and the implementation of health care reforms at the federal and state level. This presentation will discuss legal and policy issues in promoting new models of coordinated care to more effectively treat chronic illness, with a special focus on how to protect health care rights and access for low-income vulnerable older adults and reduce health care disparities for minority populations in the process.

## SESSION 940 (POSTER)

## DIVERSITY AND AGING

### AN EMPIRICAL EXAMINATION OF A MEASURE OF WELL-BEING WITH OLDER LESBIANS

A.D. Ross, C.A. Waehler, *University of Akron, Akron, Ohio*

This study used Ryff's Scales of Psychological Well-being (Ryff, 1989) with lesbians (N=287) over age 60 to explore the measure's factor structure. This measure, commonly used with older adults, has not been reported with regard to lesbians. Ryff's proposed six factor structure was tested using CFA and EFA; well-being scores were also examined with other measures that may contribute to overall well-being (i.e., education, children, social support, and participation in the LGBT community) using hierarchical linear regression. The 6-factor structure did not hold for this group; as determined with EFA, a one-factor model seemed to fit these data the best. Major contributors to well-being were education, satisfaction with friends, and involvement in the LGBT community. Implications for use of this measure with lesbians are reviewed.

### THIS AIN'T SOMETHING YOU CAN PRAY AWAY

D. Stinson, *University of Michigan, West Bloomfield, Michigan*

Introduction: Increasingly, many grandparents are must care for grandchildren or face losing them to foster care. The 2000 U.S. Census shows >17,000 grandparents in Detroit, Michigan are raising their grandchildren. Many are unprepared for the accompanying challenges, which include declining fixed incomes, and struggling with added financial burdens. This novel presentation examines the major concerns facing these families, an important overlooked issue in aging in a vulnerable population. Methods: Study participants were Black grandmothers 50 to 69 years old in Project Guide, a neighborhood multi-service center program. They were trained in Photovoice research methodology and participated in the self-titled, "This Ain't Something You Can Pray Away" Project. Photovoice puts cameras in the hands of vulnerable individuals in order to document their condition and bring about social change. Grandmothers used photography to record and reflect on the personal and collective challenges faced raising grandchildren later in life. Results: The grandmothers selected photos representing their stories and situations. They identified common themes of physical space, safety, health, humiliation, faith, and resilience. Their images called attention to life lessons, hardships, and hopes for a better future. Grandmothers summarized the urgency of their needs with a six-point call to action expressed as statements/demands aimed at policymakers and civic leaders. Implications: The challenges of grandmothers raising grandchildren are rarely heard. This Photovoice project allowed the voices of Black grandmothers raising grandchildren to be heard through the camera lens. These results reveal how innovative qualitative methods can address their concerns and allow broader dissemination.

### LATINO BABY BOOMERS: THE PERSISTENCE OF HEALTH DISPARITIES

V.M. Villa[1], S. Wallace[2], M. Aranda[3], *1. UCLA/CSLA, Los Angeles, California, 2. UCLA, Los Angeles, California, 3. USC, Los Angeles, California*

California has the largest and fastest growing Latino population in the U.S. By 2050 Latinos will constitute nearly 50% of California's population (all ages) and 30% of California's population age 65+. While numerous studies have found evidence of significant social, health, and economic disparities among Latinos age 65+; there has been little investigation of the health of the Latino pre-elderly population i.e., those age 50-61. Investigation of the health and requisite social and economic disparities among the first wave of the Baby Boom population can offer insight regarding the form and content aging programs will need to take in order to meet the needs of this growing population. Utilizing data from the California Health Interview Survey (CHIS) 2007, we examine the health status of Latinos and Non-Hispanic whites age 50-61. Results reveal a persistence of health and economic disparities among the Latino population. Similar to the population age 65+, Latino baby boomers are two to three time more likely to report multiple chronic conditions and difficulty in daily functioning when compared to Non-Hispanic Whites. In fact, Latinos age 50-61 have health profiles consistent with, and in some cases worse than, Non-Hispanic whites age 65+. Additionally, Latinos are more likely to live in the deepest levels of poverty and have low education levels. Aging programs will need to provide an adequate set of health and income benefits prior to old age in order to reverse the pattern of disparities found among the Latino population.

### IMMIGRATION STRESS AND ADAPTATION: THE RESILIENCE OF THE OLDER IMMIGRANTS

J. Tan[1], N. Kagotho[2], *1. Social Work, Bridgewater State College, Bridgewater, Massachusetts, 2. Adelphi University, Garden City, New York*

This study examines the mental and physical health experiences of older adults who immigrate to the United States under the legal permanent residency status. Stressors are endemic in the immigration and resettlement process and older adults are especially susceptible to these stressors and the ensuing mental health problems. However, the older immigrants, who now make up American's fastest growing immigrant group, remain invisible to social work research literature. The data is drawn from the first wave of the New Immigrant Survey (NIS), and univariate and bivariate analysis are used to explore the immigration process among older adults. Results indicated that whereas the older immigrating adult displays mental resiliency during the visa application process, their physical health outcomes do not fare as well. Eighty nine percent of the older adult sample reported no depression symptoms associated with acquiring LPR status. In spite of undergoing a fairly stress free and uncomplicated visa application process, the Cochran-Mantel-Haenszel Statistic of general association finds a statistically significant difference between self-rating of health status prior to and after migration ($\chi 2$ (16) = 510.8, p<.0001). The percentage of respondents who rate their health as "poor" or "fair" increases from 12.5% prior to migration to 30.3% post migration. This study finds that family and social support are strong resources in this population's pre-migration experiences. Social work practitioners should therefore recognize the importance of family support and help maintain and strengthen these networks in creating health promotion strategies.

### FAMILY CAREGIVING FOR FRAIL OLDER ADULTS OF LATINO HERITAGE: THE HEALTH AND MENTAL HEALTH OF LATINA CAREGIVERS

B.M. Ramos[1], J. Jurkowski[2], B. Gonzalez[2], *1. School of Social Welfare, University at Albany, Albany, New York, 2. University at Albany, Albany, New York*

Frail older Latinos tend to be cared for by women relatives. Latinas are often their primary caregivers following traditional values of filial piety. Research indicates caregiving can be stressful and adversely impact caregivers' well-being, compromising their caregiving effectiveness. For Latina caregivers, traditional cultural values, gender, and ethnic minority status may further compromise their well-being. We examined the relationship between caregiving and well-being among Latina primary family caregivers. A health survey was administered in English or Spanish to a convenient community sample (N = 287) of adult Latinas; 30% were caregivers. Ages averaged 45, 79% were born outside the U.S., 56% self-identified as Puerto Rican, 42.3% had less than a high school education, and 51.4% were married or living with a partner and were twice as likely to be a caregiver. Regression analyses indicate caregivers were 4.3 times more likely to report a current physical chronic condition. Surprisingly, caregiving was not associated with mental health although 42.3% of the total sample reported anxiety and 39.2% depression. Furthermore, caregivers reported 65% fewer odds of currently experiencing panic attacks. The positive meanings Latino culture ascribes to caregiving may serve as a protective favor for mental health. Caregivers may have favorable perceptions of the caregiver role and might also deny caregiving stress, which could adversely impact their physical health. Research on Latina caregivers' risk and protective factors, including how they cope can inform culturally responsive policies and interventions. Support to enhance caregivers' well being can help improve the quality of life for their elders.

### THE IMPACT OF PAIN AND THE ECONOMIC DOWNTURN ON URBAN BLACK ELDERS

C.R. Green, D. Stinson, L.A. Chadiha, *University of Michigan, Ann Arbor, Michigan*

Purpose: A recent Generations article describes the U.S. economic downturn as challenging the resilience of older Americans but provided little information on minorities. The impact of the current economic downturn on the health and well-being of urban Black elders with physical and financial pain is unclear. This exploratory study was designed to gain a better understanding of pain and the recent economic downturn's impact on urban Black elders. Methods: The purposive sample (n=582) consisted of community dwelling black elderly (i.e., ≥ 60 years old) residents in greater Detroit. Participants attending an annual health reception completed a survey assessing attitudes regarding health, pain, and finances in the context of the recent economic downturn. Descriptive and bivariate analyses were conducted on participants reporting pain and those reporting no pain. Results: Compared to those reporting no pain, those reporting pain assessed their health as worse (28.6% vs. 14.1; p< .001), had trouble paying their bills (41% vs. 28%, p=.002), were having to choose between healthcare and food (19% vs. 7%, p<.001), were cutting their prescription drug spending (33% vs. 25%, p=.05), and were more likely to report being a victim of fraud than those without pain (15% vs. 5%; p=.001). Implications: These findings suggest urban Black elders' health and financial well-being may be affected by the recent economic downturn. They further suggest healthcare providers and policymakers should consider ways of assuaging the negative effects of physical pain while addressing ways to refuel the economy among vulnerable urban Black elders.

### EXPLORING RACE AND ETHNICITY IN THE MEASUREMENT OF PERCEIVED SOCIAL SUPPORT AMONG OLDER ADULTS: DIFFERENTIAL ITEM FUNCTIONING IN THE INTERPERSONAL SUPPORT EVALUATION LIST

P. Sacco, *Social Work, University of Maryland, Baltimore, Maryland*

Purpose: Perceived social support is an important construct in aging research. For example, investigators have studied social support to explain ethnic differences in health among caregivers (Pinquart & Sorensen, 2005), and outcomes in caregiving interventions (Lee, Czaja, & Schulz, 2010). Identified ethnic differences may be a result of differential item functioning (DIF), or item responses not a result of actual group differences (i.e. item bias). This study tests for DIF on one such measure, the Interpersonal Support Evaluation List (ISEL). Methods: Data were analyzed on a subsample of older adults aged 60+ (n=11,500) from the National Epidemiological Survey of Alcohol and Related Conditions (NESARC). Using Multiple-Indicator Multiple-Cause (MIMIC) modeling, DIF was tested on 12 Likert-scaled ISEL-12 items, while adjusting for socio-demographics. Results: Lower mean levels of social support were present among Asian Americans ($\gamma= -.351$; $z=-4.980$; $p<.001$) and Hispanics ($\gamma= -.115$; $z=-2.594$; $p<.01$) when adjusting for sociodemographic characteristics. Ten ISEL-12 items displayed DIF, with eight of the items less likely to be endorsed by African American and Hispanics, and two items more likely to be endorsed by African Americans and Hispanics. Once DIF effects were included, differences in social support between Hispanics and Caucasian older adults were nonsignificant, but lower mean levels of support among Asians remained significant. Implications: Findings suggest that lower ISEL-12 scores among older Hispanics may be a result of DIF, while group differences among Asians are not DIF-related. Future research should explore item properties that may be interpreted differently by older adults of different racial/ethnic groups.

## SESSION 945 (PAPER)

## INTERNATIONAL POLICY ISSUES AND AGING

### THE STRUCTURAL DETERMINANTS AND PROCESS OF ADOPTING INNOVATIONS IN COMMUNITY AGED CARE: THE CASE FOR INTEGRATED CARE DELIVERY IN NEW SOUTH WALES

L. Hixon, *University of Technology, Sydney, Broadway, New South Wales, Australia*

Using the theoretical framework of Everett Rogers' diffusion of innovations, this paper will describe the decisions about service structure that community aged care providers make in terms of what programs and services they offer. These providers are distributed across a range of seven service structures from segregated, single service, single program offerings to fully-integrated services across the aged care continuum (including residential care) and across programs. A mixed method approach is taken to investigate the adoption of fully-integrated service structures. First, data on all community and residential aged care providers in the State of New South Wales (Australia) is used to develop a multinomial logit model to identify those variables that are associated with selection into the seven various service structure types. Then, structured, narrative interviews with "early adopters" of the fully-integrated care strategy (the innovation) are used to further elucidate results from the modelling. The interviews focus on identifying both internal factors (e.g. perceptions of relative advantage, organizational values and receptiveness, leadership) and external factors policy influences, relationships with others, economics) that influence the diffusion of the innovation.

### A STUDY OF JAPANESE NURSING HOMES THAT HIRED INDONESIAN NURSING CARE WORKERS BASED ON EPA

N. Tsukada[1], T. Tatara[2], *1. Nihon University, Tokyo, Japan, 2. Shukutoku University, Chiba, Japan*

Fifty-three Japanese nursing homes hired 104 nursing care workers from Indonesia in August 2008. These care workers came to Japan based on the Economic Partnership Agreement (EPA). The major purposes of this study are to find out how administrators and program managers of the nursing homes, which have hired Indonesian care workers, would perceive their experience and to determine what sorts of problems they have encountered. The extensive-interview data, obtained from senior personnel of these nursing homes (N=18) between October 2009 and February 2010, were qualitatively analyzed. Preliminary analyses reveal that the respondents "decided to hire foreign care workers because there were concerned about the current or inevitable shortage of care workers in their institutions." Moreover, it was found that although the respondents had been concerned about the possible lack of communication skills in Japanese, about the religion (Muslim) of these people, and about their eating habits, the causes of these concerns (despite their presence) did not create any serious problems in any institution. The respondents agreed that the causes of their concerns are all manageable and could be handled satisfactorily with the use of "good management skills." The biggest problem of the Indonesian care workers turned out to be their poor skills in reading and writing the Japanese language. Something (e.g., policy modifications) has to be done about this problem immediately because they have to pass the National Care Worker License Examination, scheduled in January 2012, and if they fail to pass, they will be sent back to Indonesia.

### NETWORK INTEGRATED MODEL BASED ON CASE MANAGEMENT IN FRANCE: RESEARCH RESULTS AND POLICY ISSUES

H. Trouve[5,4], A. Veil[2], C. Yves[2], O. Saint-Jean[1,3], R. Hebert[3,6], D. Somme[1], *1. Assistance Publique Hôpitaux de Paris Hopital Europeen Georges Pompidou, Paris, France, 2. Research Center on Aging, University Institute of Geriatrics of Sherbrooke, Sherbrooke, Quebec, Canada, 3. University Paris Descartes, Paris, France, 4. University Paris Panthéon Sorbonne, Paris, France, 5. National Foundation for Gerontology, Paris, France, 6. Medical Faculty Sherbrooke University, Sherbrooke, Quebec, Canada*

A pilot program of integrated services delivery (ISD) for elderly people, based on the PRISMA methodology is ongoing in France since 2006. The PRISMA methodology was firstly assessed with success in Quebec. We reported results from the implementation study. Methods: The implementation is followed according to indicators resumed in an implementation rate. This measurement relates to the functions of the 6 tools and mechanisms of the model: coordination boards, single entry point, case-management, single assessment instrument, individualized services plan and information system. This tool is an adaptation of the implementation rate calculated and followed by a research team during the PRISMA Quebec experiment. Results: During the 18 first months, the evaluation does indicate a 15% progression of implementation, from 5% to 20%. In 36 months, the penetration rates are spread out between 50% and 60%. Contextual factors intrinsic to the French setting complexified the incorporation of integration into the public policy agenda. We identified also factors related to the background of the concerned managers and professionals and factors related to the particularities of the experiment's governance. All these factors contributed to explained the time frame of the implementation. Conclusion: This experimentation leads to consider time as the answer to important hindering contextual, professional and governance issues. This study is important because it carries important lessons learn from a first attempt to follow the implementation of the integration with a similar methodology in two very different countries.

## SESSION 950 (SYMPOSIUM)

### SRPP PRESIDENTIAL SYMPOSIUM: LONG-TERM CARE IN DIVERSE POPULATIONS: TRENDS, MYTHS AND REALITIES

Chair: *L.A. Chadiha, University of Michigan, Ann Arbor, Michigan*
Co-Chair: *D. Biegel, Case Western University, Cleveland, Ohio*
Discussant: *R. Kane, University of Minnesota, Minneapolis, Minnesota*

The U.S. aged population is witnessing unprecedented diversity across population subgroups. For instance, aged persons in some U.S. ethnic/racial minority groups (e.g., persons of Hispanic, Black or African American, Asian American origins) are projected to exceed the number of aged persons in the Caucasian group, thus raising questions about trends and patterns in transitions of aged minority persons from informal to formal long-term care settings. This SRPP Presidential Symposium focuses on the transitions of diverse aged population subgroups from informal care to formal care settings. Research documents aged persons in ethnic/racial minority groups are unlikely to transition from informal care into long-term care residential settings; however, a more recent study found African American families and elderly persons are utilizing small assisted living homes over relatively larger ones (Ball et al., 2005). Critical questions addressed by presenters in this symposium include: What are some observed trends and/or patterns in transitions from informal to formal long-term care settings among diverse aged populations? What do these trends and/or patterns reveal about myths and realities of transitions from informal to formal long-term care among these populations? What are the implications of the observed trends/patterns, myths and realities in transitions from informal to formal long-term care for aged diverse populations? The discussant, an expert in long-term care, synthesizes and reflects on content in the different presentations addressing these questions.

### SEPARATE AND UNEQUAL: RACIAL DISPARITIES IN QUALITY LONG TERM CARE

V. Mor, *Community Health, Brown University, Providence, Rhode Island*

Historically non-whites' use of nursing homes was lower than that of white elders. Over the last several decades a transformation has occurred with African Americans' rate of nursing home use exceeding whites', whose rates have been dropping with the expansion of alternatives such as Assisted Living and home care. Nursing homes remain relatively segregated, roughly mirroring the residential segregation within metropolitan areas. As a result, blacks are much more likely than whites to be located in nursing homes that have serious deficiencies, lower staffing ratios, and greater financial vulnerability. Furthermore, controlling for education and acuity, African American elders discharged from hospital to nursing home for post-acute care are much more likely to enter the home with poorer quality than is the case for whites. Finally, while nursing home closures are relatively rare, facilities in minority communities serving minority patients are much more likely to close. Persistent segregation among homes poses a substantial barrier to progress in improving the quality of nursing home care, particularly for the growing population of African American and Hispanic elders using nursing homes.

### SOCIAL DETERMINANTS OF HEALTH AND HEALTH DISPARITIES AMONG LOW-INCOME ASSISTED LIVING POPULATIONS

M.M. Perkins, M. Ball, C. Hollingsworth, C.L. Kemp, *Gerontology Institute, Georgia State University, Atlanta, Georgia*

Increasingly, the "social determinants of health" approach is recognized as an important framework for understanding and addressing health disparities among individuals, communities, and populations. This perspective moves beyond individually-focused biomedical and personal lifestyle approaches to health and acknowledges the social, environmental, economic, and political conditions that interact over the life course to shape health outcomes. Drawing on qualitative data and descriptive quantitative data collected in three studies conducted in Georgia between 1999 and 2007, we identify social determinants affecting the health of low-income assisted living (AL) residents from diverse racial and cultural backgrounds. Key areas we address include issues surrounding the growing population of elderly residents with mental illness, challenges related to increasing levels of dementia and physical impairment found in these settings, health risks associated with community-level social and economic changes, and the impact of persistent racial discrimination. We discuss findings in context to emerging trends and provide recommendations.

### CLASS, CULTURE, OR RACE? ADDRESSING DISPARITIES IN USE OF ASSISTED LIVING

M. Hernandez[1], P. Carder[2], *1. Concepts in Community Living, Inc., Clackamas, Oregon, 2. Portland State University, Portland, Oregon*

Purpose: Studies of long-term care (LTC) use in the US have reported persistent racial, ethnic and class disparities. We review existing knowledge about assisted living (AL) use by racial and ethnic minorities, propose a theoretical framework for examining disparities, and describe promising policy and practice interventions. Methods: We review findings of research on AL use and selected disparities studies in health and LTC. Results: Our review finds evidence that racial disparities in AL use may have increased as disparities in nursing home use have decreased. Policy solutions include strategies for increasing the supply of affordable AL and public subsidies and supporting research that examines policy effects between and within states. We identify environmental design and operational approaches that could make AL settings more culturally meaningful, accessible and desirable. Implications: We propose a multilevel theoretical framework for examining differences in AL use based on structural-, organizational- and individual-level factors.

### AFRICAN AMERICANS MOVE TO ASSISTED LIVING: THE ROLE OF CLASS, CULTURE, AND FAMILY DYNAMICS

M. Ball, C.L. Kemp, M.M. Perkins, C. Hollingsworth, *GERONTOLOGY, GEORGIA STATE UNIVERSITY, Atlanta, Georgia*

A number of societal trends contribute to growing diversity in the assisted living (AL) population. Despite increasing diversity, many African Americans reside in predominately African American facilities, often located in majority-black communities. Major factors contributing to segregation include: disparities in access and material resources; distrust of white institutions; and a preference among many for living among others of similar race, class, and culture. The current analysis based on ethnographic data from three studies conducted in Georgia between 1999 and the present explores variations in choice of facility and differences in the decision-making process. Interestingly, we find that some residents and families prefer more racially integrated settings. Results show that class, culture, and family dynamics are key factors that shape decisions and either limit or promote a good fit for residents. We discuss these findings in context to other factors within ALF environments that affect resident fit and make recommendations.

### CHANGES IN HEALTH AND QUALITY OF LIFE AMONG DIVERSE ELDERLY RECIPIENTS OF LONG TERM CARE

M.D. Naylor[1,3], K. Abbott[1,3], A.L. Hanlon[1], K.B. Hirschman[1,3,4], J. Prvu Bettger[1,3], C. Zubritsky[5], J. Foust[2], K.H. Bowles[1,3], *1. Nursing, University of Pennsylvania, Philadelphia, Pennsylvania, 2. University of Massachusetts, Boston, Massachusetts, 3. NewCourtland Center for Transitions and Health, Philadelphia, Pennsylvania, 4. Institute on Aging, Philadelphia, Pennsylvania, 5. University of Pennsylvania - School of Medicine, Philadelphia, Pennsylvania*

Among older adults new to the long-term care (LTC) system and admitted to one of the following LTC options — nursing homes, assisted living facilities or home and community-based services, this paper examines the natural history of changes in function, health status, and overall quality of life (QoL) during the first year of services. Data for 208 adults enrolled in these three LTC options and interviewed quarterly through 12 months were examined using mixed models with repeated measures. Functional limitations were found to increase over time and were associated with cognitive impairment. QoL ratings remain stable over time and elders with greater education report higher QoL overall. Self-rated health scores increase over time and greater education is associated with higher self-rated health scores overall. These data are the first longitudinal data available for this population. The policy and practice implications of these findings will be discussed.

## SESSION 955 (SYMPOSIUM)

### TRAINING CORRECTIONS STAFF, CORRECTIONS PROFESSIONALS, AND INMATES TO IMPROVE THE CARE OF AGING OFFENDERS

Chair: *R. Sterns, Creative Action LLC, Akron, Ohio*
Co-Chair: *A.A. Sterns, College of Nursing, Kent State University, Kent, Ohio*
Discussant: *H.L. Sterns, The University of Akron, Akron, Ohio*

The symposium will present one of the nations best examples of older adult care in a prison setting. The program will consist of presenting two training programs. The first is a web-based training program directed at staff and professionals training. The training development was funded by the National Institute on Aging. Training was assessed using a pre-test, post-test design, reaction questions, and focus groups of training participants. The knowledge gain assessment of the program demonstrates the effectiveness of learning using the web-based training. Focus groups demonstrate a culture change with a recognition of older offenders as a separate group with unique needs. The second presentation by the Assistant Warden of Angola will describe life at the prison. The prison houses the nations largest concentration of offenders with a life sentence. Many of these individuals will die in prison and be buried on the grounds of Angola. The offenders themselves have worked with staff and gerontological and medical professionals to develop programs where younger inmates provide assistance, palliative care, and hospice care to ill and dying inmates. The presentation will include pictures and video of prison life and illustrate these programs.

### THE SUCCESSFUL DEMONSTRATION OF A WEB-BASED TRAINING PROGRAM FOR CORRECTIONS OFFICERS TO BETTER MANAGE OLDER OFFENDERS

A.A. Sterns[1,2,4], G. Lax[2,3], R. Sterns[2], *1. College of Nursing, Kent State University, Kent, Ohio, 2. Creative Action LLC, Akron, Ohio, 3. The University of Akron, Akron, Ohio, 4. University of Maryland, University College, Adelphia, Maryland*

The symposium will present the results of a 3-state test of a National Institute of Aging funded education program for correction officers and professionals. The web-based training consisted of 10 30-minute modules that presented education on biological, psychological, and social aging issues related to older offenders aging in prison. The modules covered the identification of chronic illnesses, cognitive impairments, depression, and mental disorders and described changes specific to aging in prison. The training presented issues of accommodations and options for long-term care in corrections, the development of age appropriate programming, and coordination of care in the corrections setting. Results show a significant increase and learning and success in providing new and applicable information that can be used on-the-job by corrections officers. Focus group results demonstrate successful culture change and a recognition of older offenders as a unique group with unique needs.

### TRAINING INMATES TO CARE FOR AGING AND GERIATRIC OFFENDERS AT ANGOLA LOUISIANA STATE PENITENTIARY

C. Fontenot, *Angola LSP, Angola, Louisiana*

Life is life in Louisiana. Lifers are not eligible for parole and its a rare and newsworthy event when one gets pardoned. Working with such a large Lifer population has provided Assistant Warden Cathy Fontenot firsthand knowledge of challenges faced by these aging and geriatric offenders. The executive staff at Angola have responded with innovations that have been developed out of necessity. Examples of these care innovations include the conversions of dorms and the training of offender health care orderlies to accommodate the geriatric population. It is essential that we question our ability to continue to afford to house dying, old men in maximum-security prisons built for predators. The presentation will feature a presentation of the programs at Angola including pictures and video of the Angola facilities and the older inmate care program.

## SESSION 960 (SYMPOSIUM)

### URBAN AGING, HEALTH AND NEIGHBORHOOD ENVIRONMENT: EMERGING ISSUES IN RESEARCH, EDUCATION AND PRACTICE

Chair: *H. Chaudhury, Gerontology, Simon Fraser University, Vancouver, British Columbia, Canada*
Discussant: *H. Wahl, University of Heidelberg, Heidelberg, Germany*

The growing interest in the relationship between neighborhood environment and healthy lifestyle has raised numerous questions for theory, methodology, empirical research, policy-making and practice. In the context of gerontology, the complexity of the issues are interlaced with varying abilities in mobility, differing social resources, challenges in accessibility, etc. Given the general recognition and growing understanding of the salience of neighborhood characteristics for active urban aging, there is a need for more informed research, and simultaneous and coordinated efforts to effectively and efficiently translate relevant knowledge into policy-decisions. In this backdrop of intellectual activity and knowledge-transfer challenges, the session will present four empirical studies that address the issues from multiple methodological and practice orientations. The first paper is based on a community-based participatory research employing various research methods and giving feedback to decision-makers in multiple sectors. The next study will present findings on the role of physical activity resources and neighborhood-level socioeconomic status (SES) on walking among older men. The third paper will present neighborhood profiles based on environmental audit data and findings on neighborhood supports and barriers for physical activity from the participatory method of Photo Voice. The final study focused on older adults' knowledge about social and health care services and how that might inform local policies and practices to improve seniors' ability to access information. The symposium will end with a discussant integrating the common threads in empirical findings, prioritizing areas for further inquiry and addressing the issues faced in effectively informing policy decisions and implementation.

### LIVABLE COMMUNITIES FOR AN AGING SOCIETY: FINDINGS FROM A SENIOR CAPSTONE COURSE

A. DeLaTorre, *Institute on Aging, Portland State University, Portland, Oregon*

This presentation focuses on the development of a community-based research project and findings that emerged as part of a "Senior Capstone" course at Portland State University in the summer of 2009. The course consisted of 13 students, aged 21-70, who were involved in community-based participatory research within two neighborhoods with substantially different demographics and community support systems. Collaboration with community stakeholders led to the development of group projects which adapted protocols from previously developed research instruments – e.g., the WHO's Age-Friendly Cities project and AARP's Livable Communities: An Evaluation Guide. The final qualitative research projects were uniquely tailored to each community and included: walking/rolling assessments; focus groups pertaining to age-friendly features and barriers; and oral histories. Findings were delivered to the communities and various partners capable of advocacy and implementation and focused on neighborhood form (e.g., urban design, housing, transportation), service provision (e.g., available services, volunteering), and isolated/homebound older adults.

### PHYSICAL ACTIVITY RESOURCES AND CHANGES IN WALKING IN A COHORT OF OLDER MEN

Y.L. Michael[1], L. Perdue[3], E. Orwoll[2], M.L. Stefanick[4], L.M. Marshall[2], *1. Department of Epidemiology and Biostatistics, Drexel University School of Public Health, Philadelphia, Pennsylvania, 2. Oregon Health and Science University, School of Medicine, Portland, Oregon, 3. Center for Health Research, Kaiser Permanente Northwest, Portland, Oregon, 4. Stanford Prevention Research Center, Stanford, California*

We evaluated the influence of physical activity resources and neighborhood-level socioeconomic status (SES) on walking maintenance among community dwelling older men. Participants reported time walked per day at baseline (2000–2002) and follow-up (2005-2006). Residential addresses were linked to a GIS database to assess proximity to parks, trails, and recreational facilities. Log-binomial regression analyses tested the hypothesis that men living near physical activity resources were more likely to increase or maintain time walked. Daily walking time declined by 6 minutes on average during follow-up (SD 65). Neighborhood SES modified the association of proximity to physical activity resources and walking time (P<.1). In high-SES neighborhoods, men in close proximity to parks or to trails, respectively, were 22% (95% confidence interval [CI]=1.01, 1.47) and 34% (95% CI=1.16, 1.55) more likely to maintain or increase their walking time. However, in low-SES neighborhoods, proximity to physical activity resources and walking maintenance were not associated.

### LINKING ACTIVE AGING AND NEIGHBORHOOD ENVIRONMENT: USING ENVIRONMENTAL AUDIT TOOL AND PHOTOVOICE METHOD

A. Mahmood[1], H. Chaudhury[1], Y. Michael[2], M. Campo[1], A. Sarte[1], K.N. Hay[1], *1. Gerontology, Simon Fraser University, Vancouver, British Columbia, Canada, 2. Drexel University, Philadelphia, Pennsylvania*

The "walkability" of a neighborhood has particular relevance to maintaining independence of an ever-growing elderly population that prefer to age-in-place. The goal of this study was to examine the effect of neighborhood physical environment and social capital on the physical activity of older adults. Eight neighborhoods were selected in Vancouver, BC and Portland, OR that represent variation in residential density and mixed land-use. Profiles of these eight neighborhoods were created based on data collected through an environmental audit tool "SWEAT-R" (Seniors Walking Environmental Audit Tool – Revised) developed for this study. Photovoice technique was used to engage 64 older adults from these neighborhoods to photograph and journal their perceptions of the neighborhood environments in relation to physical and social barriers and facilitators to physical activity. Photovoice-based qualitative themes across these two regions are discussed to highlight similarities and differences between these two regions and to provide policy and planning guidelines.

### TRUST IN NEIGHBORS AND ACCESS TO SOCIAL AND HEALTH CARE SERVICES LATER IN LIFE: RESEARCH & POLICY PERSPECTIVES

A. Glicksman[1], K. Clark[1], M.H. Kleban[2], *1. Research, Phila Corporation for Aging, Philadelphia, Pennsylvania, 2. Polisher Research Institute, North Wales, Pennsylvania*

The lack of knowledge about where to find social and health care services has been associated with negative outcomes, such as poorer health, inability to remain in one's home (isn't this the same as moving to a facility – maybe you should say "age independently?), and moving to facility-based care. We examined the correlates of older persons' knowledge about social and health care services to inform local policies and practices to enhance seniors' ability to access information. We focused our investigation on the relation of knowledge about these services to the level of trust that older persons have in their neighbors (social capital). The data came from a representative sample of older (age 60+) Philadelphians. Of six measures of social capital in the data set, four showed a significant relation at the .05 level with knowledge about services. Our paper will present these results and discuss recommended policy changes city-wide and at the neighborhood levels that will strengthen social capital and increase knowledge among the city's older residents.

## SESSION 965 (PAPER)

## WORKING WITH OLDER ADULTS: HEALTH, SAFETY, AND JOB ISSUES

### OCCUPATIONAL HEALTH AND SAFETY ISSUES OF DIRECT CARE WORKERS: DOES TRAINING REDUCE WORKER INJURY?

D. McCaughey, G. McGhan, J. Kim, E. Walsh, *HPA, Penn State University, State College, Pennsylvania*

Purpose: The US Bureau of Labor (2009) identifies direct care workers as being among the occupational groups with the highest rates of workplace injury. Due to the nature of the work, DCWs are at high risk for workplace injuries and illnesses. Occupational health and safety studies have indirectly linked worker injury to negative worker and organizational outcomes such as higher likelihood of turnover. This study seeks to examine the relationship between DCW training and injury and the negative effects of DCW injury on employee job satisfaction, intention to quit, and employee willingness to recommend their facility for care and employment to friends or family. Methods: We completed a secondary analysis of data from the 2004 National Nursing Assistant Survey (NNAS), conducted by US Department of Health and Human Services (n= 3,017). Three training variables were examined in relation to injury incidents and worker and organizational outcomes. Regression analysis was performed to test for mediation and direct effects following Baron and Kenny's (1986) mediation protocol. Results: DCW injury-prevention training was significantly associated with fewer incidents of work place injuries. Higher number of injuries was significantly associated with higher turnover intent, lower job satisfaction, and decreased willingness to recommend the organization for care and/or employment. When both training and injury were added into the model, a partial mediation effect was found. Conclusion: This study offers preliminary empirical support for the importance of effective DCW training as a way to reduce injury and improve the environment for DCWs and the clients/residents receiving care.

### IS THE NURSING WORKFORCE REALLY AGING?

S. Klaus, C. Potter, B. Gajewski, *University of Kansas School of Nursing, Kansas City, Kansas*

The impact of an aging workforce is especially difficult to ascertain in the nursing profession where demand for healthcare services is expected to climb as the pool of qualified workers declines. The aim of this study was to investigate the work-unit age trends of direct care hospital registered nurses (RNs). We analyzed longitudinal unit-level data from the National Database of Nursing Quality Indicators® (NDNQI®) RN Survey across 5 years (2005-2009) to investigate aggregate RN age changes across time. Units were included if they had at least 5 RN survey responses each year (N=3,261). Hierarchical linear modeling was performed to test age trajectories by unit type across time. The overall trend of age showed an increase of 1.5 months per year. Differences in age trajectories were discovered based on unit type. Several unit types had statistically significant increases in age over time; the largest increase occurred in interventional laboratories where age increased annually by 6 months. Other units where age increased were psychiatric, ambulatory care, peri-operative, obstetrics, neonatal, pediatric, and others. Medical and surgical units became significantly younger across time; medical units decreased in age by 2.5 months per year and surgical units decreased by 1.3 months per year. No difference in age trend was found in emergency department, critical care, step down, rehabilitation, or medical-surgical units. Although some limitations exist, these findings support the proposition of an aging nursing workforce. Because the trends differ by unit type, this may demonstrate a migration of older nurses toward specific patient care units.

### STRESS PROCESS AND HEALTH AMONG AFRICAN-AMERICAN AND IMMIGRANT RUSSIAN-SPEAKING HOME CARE AIDES

V. Lukyanova, N. Muramatsu, *The University of Illinois at Chicago, Chicago, Illinois*

In metropolitan areas of the U.S., the majority of home care aides (HCAs) providing housekeeping and routine personal services for elderly are African-American women and immigrants with limited resources. Despite the diversity in this segment of the workforce, no study has compared stress-related issues among HCAs who are racial and ethnic minorities. To understand similarities and differences in the interplay among stressors, health, and health behaviors we conducted focus groups with African-American and immigrant Russian-speaking HCAs in a large Midwestern city. Results indicate that both groups experienced significant work stress due to low pay, limited benefits, insufficient training, and inadequate recognition. However, some causes of stress were different. African-American HCAs reported unique stressors related to discrimination, poverty, violent neighborhoods, child care, and unstable relationships that compounded work-related stress. Russian-speaking HCAs, on the other hand, experienced stress as a result of downgraded occupational mobility, difficult clients, and an unfamiliar work culture in addition to slow adjustment, language issues, and social isolation. In both groups, these personal and work stressors led to physical and psychological health problems, such as injury, chronic illness, and burnout. While chronic health problems motivated some of the workers to engage in health promotion activities, such as change in diet or exercise, for many of them health issues and self care were neglected or postponed due to more immediate problems. We conclude with suggestions to develop work-based support that would help native-born aides and accommodate to unique needs of immigrant workers in their transition to a new culture.

### FACTORS PREDICTING JOB TERMINATION AMONG HOME CARE AIDES: A MIXED-METHOD, LONGITUDINAL STUDY

S.S. Butler[1], M. Brennan[2], N. Simpson[1], W. Turner[1], *1. University of Maine, Orono, Maine, 2. AIDS Community Research Initiative of America (ACRIA), New York City, New York*

Despite high unemployment rates, retention of direct care workers in long-term care remains challenging for facilities and home care agencies throughout the country. When a worker leaves an organization, there are many replacement costs related to recruitment and training. At the service delivery level there is the possibility of a reduction in quality of care or potentially no care at all. This paper reports on a mixed-method longitudinal study investigating retention and turnover among workers providing personal care to clients in non-Medicare-certified home care agencies. The longitudinal design of this inquiry improves upon previous cross-sectional studies on this topic which have relied on the variable "intent to leave" as a proxy for actual turnover. A sample of home care aides (n=261) from 11 agencies serving all regions of a northern New England state were followed for 12 months over which time 70 (26.8%) terminated their employment. Binary logistic regression analysis ($\chi 2$ (2) = 14.32, p<.01) indicates factors at Time 1 predicting turnover the following year include younger age (3% less odds of termination with each year of increased age) and lack of health insurance (over twice the odds of terminating). Qualitative analysis of telephone interviews with workers soon after they left their agencies uncovered several overarching themes with accompanying sub-themes related to reasons for termination: job not worthwhile (including low pay, inconsistent hours); burn out (including difficult clients, trouble with agency); and personal reasons (including retirement, medical issues). Implications related to increasing retention of these valuable workers will be explored.

## SESSION 970 (SYMPOSIUM)

### AGING AS A TARGET FOR DISEASE INTERVENTION

Chair: *G.J. Lithgow, Buck Institute for Age Research, Novato, California*

Co-Chair: *H.M. Brown-Borg, University of North Dakota, Grand Forks, North Dakota*

Since aging is a major risk factor for human disease, targeting aging for pharmacological intervention by bring multiple benefits. The hunt for chemical compounds that delay aging in laboratory animals is well underway and the prospects for treating age-related diseases is being pursued. Do compounds that extend lifespan also extend healthspan? Will single compounds slow or prevent multiple diseases? Speakers: Monica Driscoll, Rutgers University Mathew Gill Ph.D., The Buck Institute Rafael deCabo Ph.D., National Institute on Aging, National

## SESSION 975 (SYMPOSIUM)

### AGING AND SOCIAL TIES: AN EXAMINATION OF RACIAL SIMILARITIES AND DIVERSITY

Chair: *K.S. Birditt, Institute for Social Research, Ann Arbor, Michigan*

Co-Chair: *K.L. Fingerman, Purdue University, West Lafayette, Indiana*

Social relationships are important for health and well-being especially as people age, but the majority of research has focused on White Americans. The five papers in this symposium examine positive and negative aspects of different types of social relationships and implications for well-being among diverse racial groups. Sechrist, Suitor, and Howard examined the extent to which parents differentiated among their children in the support provided and found White parents were more likely to differentiate between their children than Black and Latino parents. Fingerman, VanderDrift, Dotterer, Birditt, and Zarit examined support provided to aging parents and grown children and found that White adults provided more support to grown children whereas Black adults provided more support to parents. Brown, Bauremeister, and Orbuch assessed married couples' feelings of family closeness and found couples who reported greater closeness to in-laws were less likely to divorce although the specific associations varied by race. Sherman examined linkages between social relationships and depressive symptoms and found that White women were more disadvantaged by lack of support and more advantaged by support than Black and Native American women. Birditt and her colleagues examined daily interpersonal tensions and found White respondents showed more age related declines in reactivity to avoidance of arguments whereas Black respondents showed more age related declines in reactivity to engaging in arguments.

Overall, this symposium shows that the same basic effects of social relations occur (e.g., differentiations between children) in all racial groups but that there are variations in the types and intensity of effects.

### WITHIN-FAMILY DIFFERENCES IN SUPPORT: COMPARISONS AMONG WHITES, BLACKS, AND LATINOS

J. Sechrist, A. Howard, J. Suitor, *Purdue University, West Lafayette, Indiana*

Few studies have examined whether within-family variations in parents' provision of support to children differ by race and ethnicity. Using data on parents 40 and older from the National Survey of Families and Households (W2), we examine within-family differences in support provided to each adult child in 2,735 White, 625 Black, and 225 Latino families. Bivariate analyses revealed that White parents were more likely to differentiate among their children regarding emotional support than were Black or Latino parents; in contrast, there were only slight race and ethnic differences regarding instrumental support. These differences remained when controlling for socioeconomic and health status. Latino parents were 63% less likely than White parents to differentiate regarding emotional support, whereas Black parents were 43% less likely than Whites to differentiate regarding instrumental support. These findings indicate that despite greater need and fewer resources, parents of color are less likely to differentiate among their children.

### RACIAL DIFFERENCES IN HELP TO GROWN CHILDREN AND AGING PARENTS

K.L. Fingerman[1], L.E. VanderDrift[1], A. Dotterer[1], K.S. Birditt[2], S.H. Zarit[3], *1. Purdue University, West Lafayette, Indiana, 2. University of Michigan, Ann Arbor, Michigan, 3. Pennsylvania State University, State College, Pennsylvania*

Scholars have debated whether Black families differ from White families with regard to support of aging parents. Middle-aged adults support not only aging parents, but also grown children, and few studies have considered racial differences in support of multiple generations. Among middle aged participants (aged 40 to 60) in the Family Exchanges Study, 31% (n = 216) identified as Black and 69% as White (n = 397). Respondents reported on support they exchange with each of their parents and grown children. White middle-aged adults provided more support to grown children than Black middle-aged adults, but Black adults provided more support to parents than White adults. After controlling for participants' family structure, SES, relationship qualities and beliefs about support, effects for race became nonsignificant. Discussion focuses on cohort, social structural, and cultural factors that may contribute to racial disparities in intergenerational support.

### FAMILY-BASED TIES IN EARLY MARRIAGE AND COUPLES' MARITAL STABILITY OVER TIME

E. Brown[1], J.A. Bauermeister[2,4], T.L. Orbuch[2,3], *1. Human Development and Family Studies, University of Connecticut, Storrs, Connecticut, 2. University of Michigan, Ann Arbor, Michigan, 3. Institute for Social Research, UM, Ann Arbor, Michigan, 4. School of Public Health, UM, Ann Arbor, Michigan*

Research findings document the importance of family ties for Black Americans. Another body of research indicates that Black Americans divorce more often than White Americans, yet little is known about whether perceptions of family ties affect divorce over time and whether these effects vary by race and gender. Data were collected as part of a longitudinal study following Black American (n=199) and White American (n=174) married couples. We examined whether Black Americans reported closer family ties in early marriage than White Americans. Our survival analysis suggests that the odds of divorce decreased when both husbands and wives reported feeling close to their in-laws, but the specific results varied by race and gender. Findings are discussed in terms of couples merging families early in marriage and the unique role that family bonds play for marital stability over time.

### SOCIAL RELATIONS AND DEPRESSIVE SYMPTOMS IN AN ETHNICALLY DIVERSE SAMPLE

A.M. Sherman, *Psychology, Oregon State University, Corvallis, Oregon*

The contribution of social relations measures to depressive symptoms was assessed for a sample of Native American, African American and European American women (N=249, age range 41-89 years). Multiple regression analyses, controlling for demographic variables, showed significant interactions of racial group by support, indicating that European American women were more disadvantaged by low levels of general support and support specifically from friends, compared to women of color, and more strongly advantaged by such support when levels were high. These models account for 39% and 34% of the variance in CES-D scores, respectively. In addition, the data reveal that Native American women were particularly disadvantaged by high levels of social strain. We discuss the extension of models linking relationship dimensions and depressive symptoms to ethnically diverse samples and the continuing need to explore between-group differences.

### THORN IN MY SIDE: AGE AND RACE DIFFERENCES IN DAILY INTERPERSONAL TENSIONS

K.S. Birditt[1], K.E. Cichy[3], E. Wardjiman[1], D. Almeida[2], *1. University of Michigan, Ann Arbor, Michigan, 2. Pennsylvania State University, State College, Pennsylvania, 3. Kent State University, Kent, Ohio*

The present study examined age differences in exposure and reactivity to interpersonal tensions among White and Black Americans. Participants from the National Study of Daily Experiences II (n = 1696 White and n = 180 Black; ages 34 to 84) reported their experiences of daily interpersonal tensions and well-being (positive and negative affect) over 8 days and provided salivary cortisol samples. A total of 40% of respondents reported having an argument and 62% reported avoiding an argument. Multilevel models estimated separately for Black and White respondents revealed age related declines in exposure to interpersonal tensions. However, age differences in reactivity to tensions (e.g., appraisals, well-being, and cortisol) varied by race. White respondents showed more age related declines in reactivity to the avoidance of arguments whereas Blacks showed more age related declines in reactivity to engaging in arguments. Findings are consistent with gerontological theories of emotion regulation and the exposure reactivity model.

## SESSION 980 (SYMPOSIUM)

### AGING IN DEVELOPING COUNTRIES

Chair: *M.A. Perkinson, Saint Louis University, St. Louis, Missouri*
Discussant: *E. Rosenberg, Appalachian State University, Boone, North Carolina*

World populations are undergoing unprecedented changes in age structure due to lower birth rates and death rates associated with the "Demographic Transition." The United States and other developed nations have had over a century to deal with issues that accompany aging populations. In contrast, many developing countries are projected to have much less time to address health and social needs of growing numbers of aged. Countries still in early stages of this transition have a window of opportunity to lay the groundwork now to ensure that limited resources are used effectively and efficiently to support their older members. What are the roles and responsibilities of gerontologists from developed countries in helping to address the unprecedented demands and opportunities that accompany aging populations in less developed lands? What can we learn from developing countries that might inform our own system of services? This symposium examines aging issues in developing countries and offers strategies and guidelines for partnering with local practitioners and scholars to address those issues without imposing culturally inappropriate models of care. A demographic analysis of population aging in developing societies is followed by an anthropological analysis of the "Nutrition Transition" and aging in Kenya and India. Social gerontologists addressing health and social issues through interdisciplinary service-learning-based programs in Nicaragua, Mexico, Guatemala, and Ethiopia describe and evaluate their individual models of partnership with local educators, researchers, and practitioners, sharing strengths of each program, issues of sustainability, and lessons learned. An expert in global aging offers a summation and concluding remarks.

### A DEMOGRAPHIC ANALYSIS OF POPULATION AGING IN DEVELOPING SOCIETIES

Z. Zimmer, *University of Utah, Salt Lake City, Utah*

This presentation is intended to provide a demographic background for the symposium. Population aging will be amongst the most important demographic phenomenon of the current century. It will impact upon every region of the world and almost all countries. However, the pace of aging will vary, as will its causes and consequences, which suggest that related challenges faced are bound to diverge across the developing world. This presentation will discuss current and expected future trends in population aging in the developing world with attention paid to similarities and differences across regions and countries, and specific focus on those highlighted in other papers that are part of the current symposium. The presentation will also make reference to variations in challenges that different countries and regions are likely to face and the types of data and research that will be necessary to confront these challenges.

### CULTURAL CONTEXTS, NUTRITIONAL TRANSITIONS: THE ANTHROPOLOGY OF GLOBAL OVERWEIGHT & OBESITY TRENDS OF OLDER ADULTS

S.R. Williams[1], G. Ice[2], *1. Anthropology, Purdue University, West Lafayette, Indiana, 2. Ohio University, Athens, Ohio*

Although the undernourished still outnumber the over-fed, global rates of obesity are increasing, especially among older adults. Labeled the “nutrition transition” by Popkin and initially described in Latin American urban populations, this phenomenon appears to be spreading across the developing world. As overweight and obesity increase, a concomitant increase in prevalence of chronic diseases (e.g., cardiovascular disease and diabetes) is likely. Recent epidemiological studies report rates of overweight and obesity exceeding 70% for U.S. and South African older adults (National Social Life Health and Aging Project; WHO Study of Global Aging and Adult Health), and near 15% for aged in India (WHO/SAGE). However, these studies provide little insight into the cultural context of this nutritional transition. This paper combines in-depth anthropological data from field work in Kenya and India with population-level data, to demonstrate the importance of cultural context for understanding global trends in overweight and obesity among older adults.

### SERVICE-LEARNING AND OLDER ADULTS IN NICARAGUA: DESIGNING A PROGRAM THAT FITS

M.B. Neal[1], K. Wilson[2], A. DeLaTorre[1], *1. Institute on Aging, Portland State University, Portland, Oregon, 2. Jessie F. Richardson Foundation, Clackamas, Oregon*

Portland State University (PSU) recently received a major gift to establish an initiative, “Aging Matters, Locally and Globally,” aimed at enhancing the lives of older adults without adequate resources. The gift expands on PSU’s partnership with the Jessie F. Richardson Foundation (JFR) in an interdisciplinary service learning course on global aging and health focusing on Nicaragua. Since 2004, JFR, PSU faculty, 100+ students, and Nicaraguan government and community stakeholders have worked together to create sustainable solutions to support a growing Nicaraguan elder population. This presentation describes the program’s rationale, components, and modifications over time. Challenges (e.g., student recruitment; program cost, course content and requirements when students have widely varying backgrounds and interests; coordination of multidisciplinary faculty; in-country resources, logistics and politics) are discussed and potential solutions are offered. Strengths (e.g., the partnerships established with local and national organizations) and lessons learned for helping to assure program success are shared.

### DEVELOPING GERONTOLOGICAL EDUCATORS IN MEXICO: A PARTNERSHIP BETWEEN USA AND MEXICO

S. Ingman[1], I. Amin[2], *1. University of North Texas, Denton, Texas, 2. Gerontology, University of Louisiana at Monroe, Louisiana, Louisiana*

As low income societies experience rapid aging of their populations, they face major challenges in developing educational policies to prepare their workforce for the future. With over 50 % of the population in poverty in Mexico – mostly in rural areas – policy makers and gerontological researchers are joining forces to respond to the “senior crisis” as poverty crisis. In response to global aging across the world, we have a responsibility to assist our colleagues in younger societies to prepare for the aging of their populations. University of North Texas faculty and graduate students have joined forces with colleagues in the Guadalajara area to expand the number of the applied gerontologist in Mexico. This paper reviews the strategies we employed to reach this goal and discuss which ones were successful, e.g. informal certificates, gerontology conferences, and seminars for seniors and health care professionals in the State of Jalisco.

### GAGE: A NON-PROFIT ORGANIZATION BRINGING GERONTOLOGICAL AWARENESS TO ETHIOPIA

T.L. McMullen[1], C. Brown[2], *1. Gerontology-Doctoral Program, University of Maryland, Baltimore County, Baltimore, Maryland, 2. Seasons of Life, LLC., Parker, Colorado*

Ethiopia is the second most populous nation in Africa; however, it is one of the least developed counties in the world. Recent strategic governmental policies, used to increase life expectancy, lack balance between population growth, resources, the economy, and the age structure. The culture of caregiving is transitioning from familial to social. Further, services rendered by current non-governmental organizations are neither well known throughout Ethiopia nor available to aging individuals in many areas. To aid with these challenges, GAGE, a gerontologically focused international organization is assisting with the development and implementation of a community senior center supported within a functional gerontology certification program at Addis Ababa University. The presence of this organization may bring a greater quality of care and increase life expectancy through educating future gerontologists and the community about the effects of aging. This paper will describe current research and developmental challenges experienced while completing this international project.

## SESSION 985 (SYMPOSIUM)

### BIO-SOCIAL AND SOCIAL-PSYCHOLOGICAL ACCOUNTS OF THE LIFE COURSE

Chair: *R.M. Hauser, Center for Demography of Health and Aging, University of Wisconsin- Madison, Madison, Wisconsin*

This symposium presents a set of complementary papers on health and behavior among older adults that address both genetic and social influences on those outcomes. Two of the papers focus on possible biological sources of health and behavior, one on putative correlations between a well-known genetic marker, taq1a, and several behavioral outcomes, and a second study of the length of women’s reproductive life on overall survival. The other two papers focus on social influences on later life outcomes, one on the role of early life experiences on financial literacy in the later years and another that explains the putatively biological correlation between IQ and length-of-life by means of a simple indicator of responsibility and organization in adolescence that is only moderately related to IQ. These complementary perspectives on later life outcomes are each drawn from a common set of data, the 50+

year-long Wisconsin Longitudinal Study, which has followed the lives of Wisconsin's high school "class of '57."

### EARLY LIFE PREDICTORS OF LATE LIFE FINANCIAL LITERACY

P. Herd, K. Holden, Y. Su, *University of Wisconsin-Madison, Madison, Wisconsin*

Financial literacy skills have become of interest to researchers and policymakers as individuals are increasingly responsible for their own retirement financial planning. An era of retirement savings dominated by simple defined benefit pension plans has been replaced by defined contribution pension plans, which require significant financial literacy skills to manage effectively. But what predicts one's ability to be an effective financial planner? We focus on the extent to which early life factors, especially schooling experiences and family characteristics, ultimately impact late life outcomes. We utilize the Wisconsin Longitudinal Study (WLS) 1957-2004/5. The most recent surveys, when respondents were in their 50s and 60s, ask questions regarding their knowledge of characteristics of their pension and retirement savings. Further, there is prospective data, both self-report and administrative, on the students' schooling characteristics (i.e. IQ, high school rank, number of semesters of specific subjects such as Algebra and Geometry) and their family characteristics (i.e. family income, parental educational attainment, and parental occupation). We find that schooling experiences, in particular, are important predictors of late life financial literacy skills.

### TAQ1A AND EDUCATION, PARTISANSHIP, VOTING, AND OTHER OUTCOMES: REPLICATION ATTEMPTS USING THE WISCONSIN LONGITUDINAL STUDY

J. Freese[1], A.R. Branigan[1], R.M. Hauser[2], T. Hauser[2], C.S. Atwood[2], D.S. Benjamin[3], C.F. Chabris[5], D. Laibson[4], *1. Sociology, Northwestern University, Evanston, Illinois, 2. University of Wisconsin-Madison, Madison, Wisconsin, 3. Cornell University, Ithaca, New York, 4. Harvard University, Cambridge, Massachusetts, 5. Union College, Schenectady, New York*

Findings using molecular genetic data have recently begun appearing in prominent social science journals. Much of this is attributable to the pioneering efforts of a single study, the National Longitudinal Study of Adolescent Health (Add Health). Within medical and behavioral genetics research more broadly, the gold standard of replication in independent samples before positive findings can be taken seriously is well understood. We focus on one of the six variants genotyped in Add Health (Taq1a), and consider comparable outcomes to published findings in a different data source, the Wisconsin Longitudinal Study (WLS). Across all outcomes we consider, we fail to find associations with Taq1a. While the divergent findings might be attributable to differences between the two samples, the history of replication in genetics research and the statistical power of the respective studies suggests it is more plausible that the positive Add Health results may simply have been capitalizing on chance.

### HIGH SCHOOL ATHLETES, EDUCATION, AND COGNITIVE ABILITY IN LATER ADULTHOOD

D. Kuo, H. Han, A. Palloni, R.M. Hauser, *University of Wisconsin, Madison, Wisconsin*

Neurological evidence suggested that contact sports players were more likely to have a history of concussion which affected their cognitive ability in later life. However, social scientists found that being an athletic was positively associated with education. In the current paper, using a large group of male high school seniors in Wisconsin Longitudinal Study from 1957 to 2004, we study the relationships between being a high school athletic (football player) and the cognitive performance in later adulthood with a control for IQ in high school and education in adulthood. The sports participation was coded from the yearbooks. Education was measured at ages 36, 54 and 65. Cognitive function was measured at ages 17, 54 and 65. The preliminary findings showed that participation in sports was positively related to education at age 36, controlling for SES, IQ, grades, and aspiration. Being in football teams was the most strongly related to education.

### MAINTENANCE OF CIRCULATING SEX HORMONES CORRELATES WITH PROLONGED LONGEVITY: AN ANALYSIS OF THE WISCONSIN LONGITUDINAL STUDY

C. Atwood, J. Yonker, C. Lee, V. Chang, T. Hauser, R.M. Hauser, *Medicine, University of Wisconsin, Madison, Wisconsin*

The Reproductive-Cell Cycle Theory of Aging posits that changes in reproductive hormones associated with menopause and andropause drive our senescent phenotype (Bowen and Atwood, 2004; Gerontology, 50, 265). Supporting this, human studies have shown that higher age at menopause and last birth are associated with prolonged female post-reproductive lifespan. Utilizing the Wisconsin Longitudinal Study (WLS), we have analyzed the relationship between longevity, menopause and total reproductive lifespan in the graduate and sibling populations (n = 3720) taking into account modalities that impact 'ovarian lifespan'. There was a significant increase in longevity in those with 1) an increased total reproductive lifespan (30.93 vs. 29.41 years) and, 2) later age at last menstruation (47.01 vs. 45.71 years). Living subjects were more likely to have used HRT (62% vs. 47%). These data support the maintenance of circulating sex hormone levels in the prolongation of human longevity.

### IQ, GENDER, AND MORTALITY

R.M. Hauser, A. Palloni, *Center for Demography of Health and Aging, University of Wisconsin- Madison, Madison, Wisconsin*

Many studies have found a positive relationship between cognitive ability, as measured in childhood or youth, and subsequent survival, and several explanations of this have been offered, ranging from the idea that low ability is an indicator of adverse systemic events in infancy or childhood to the idea that high cognitive functioning is required continuously to maintain health and reduce threats to survival. The Wisconsin Longitudinal Study reproduces the basic finding that adolescent cognitive ability (IQ) is positively correlated with survival from ages 18 to 69, but there is a straightforward explanation of the relationship: High school grades account completely for the relationships between IQ and survival and have a much larger effect on survival than does IQ. That is, higher cognitive functioning improves the chances of survival because it leads to behaviors that are well organized, timely, and situationally appropriate.

## SESSION 990 (PAPER)

## DEPRESSION AND MENTAL HEALTH: CULTURAL VARIATIONS

### PREVALENCE AND CORRELATES OF DEPRESSIVE SYMPTOMS IN CHINESE OLDER ADULTS: A POPULATION-BASED STUDY

J. Li, J. Yu, *Institute of Psychology, Chinese Academy of Sciences, Bei jing, China*

Objective In China, the rapid socioeconomic transition and the consequential traditional culture change had significant influences on Chinese elderly depression. In present study, the prevalence, the potential risk and protective factors of depression for the Chinese old population were investigated. Method A cross-sectional survey was conducted with a national wide representative Chinese sample of 4945 old adults (55+ years old), and the Center for Epidemiologic Depression Scale (CES-D) was used as the measurement tool for depressive symptoms. Demographic and other self-reported related factors were taken into consideration. Results The prevalence of self-reported depressive symptoms (CES-D≥16) in the total study population was 39.86% (pre-old: 39.95%, young-old: 39.84%, old-old: 39.65%, oldest-old: 45.19%), and the CES-D score was significantly higher in the oldest-old than the three younger groups. Furthermore, multiple regression analysis indicated that age itself was not an effective predictor for depressive symptoms, whereas family support and health status explained most part of the variations of the depression. Conclusions The present study had found a higher prevalence of depression in Chinese elders compared to the prevalence rate found decades ago. Family support and health status were the most significant protective factors for Chinese elderly depression. Chinese traditional culture, which value family much and explained the previous low prevalence rate, changed significantly, and supposed to be the main reason for the current higher prevalence. In addition to the deterioration of family support, health status worse is another significant effecting factor.

### DEPRESSION: UNDER-IDENTIFIED AND UNDER-TREATED AMONG LIMITED-ENGLISH PROFICIENT PATIENTS WITH TYPE 2 DIABETES

D. Sorkin, Q. Ngo-Metzger, J. Billimek, S. Greenfield, S. Kaplan, *Health Policy Research Institute, University of California, Irvine, Irvine, California*

Research suggests the presence of diabetes doubles the odds of comorbid depression. Primary care physicians serve as the initial point of contact for most patients with depression. The under-diagnosis and under-treatment of depression may be exacerbated among ethnically and racially diverse patients because of cultural or linguistic barriers. We examined racial/ethnic differences in diagnosis and treatment of clinical depression among Vietnamese and Hispanic patients with type 2 diabetes compared to non-Hispanic white patients within primary care settings. Data were analyzed from an ethnically diverse sample of 1,026 (76% recruitment rate) Hispanic, Vietnamese, and non-Hispanc white patients with type 2 diabetes who were recruited from 6 university-affiliated medical clinics. The sample was mostly female (59.7%) with a mean age of 58.8 years (sd=11.6). Most Vietnamese (86.0%) and Hispanic (74.8%) patients spoke limited or no English. Vietnamese patients reported significantly higher rates of clinical depression compared to Hispanics and whites (p<.001). Among patients with depressive symptoms, whites were significantly more likely to be diagnosed and treated compared to Vietnamese and Hispanics patients (p<.001). Furthermore, Hispanic patients were less likely to report having seen a mental health provider in the past 12 months compared to Vietnamese and white patients (p<.001). Many patients with type 2 diabetes self-report clinical depression and yet their symptoms are not being recognized and treated in primary care settings. The under-recognition and under-treatment of clincal depression are particularly striking among Vietnamese and Hispanic patients. These findings highlight potential linguistic and cultural barriers that may contribute to these disparities.

### LIVING ARRANGEMENTS AND SUICIDAL IDEATION AMONG OLD PEOPLE IN KOREA

J. Kim[1], Y. Lee[2], J. Kang[3], *1. NORC, Chicago, Illinois, 2. University of Seoul, Seoul, Republic of Korea, 3. Yonsei University, Seoul, Republic of Korea*

We examined the relationship between living arrangements and suicidal ideation of Korean older people. Using the Social Statistics Survey conducted by the Korean National Statistical Office in 2008 (N=6,078), we first showed the prevalence of suicidal ideation by living arrangements, and then we ran multivariate logistic regressions to assess suicidal ideation. About 8% of Korean older people have a suicidal ideation. About 13% Korean single people, 5% single people with children, 6% coupled people, and 6% coupled people with children had suicidal ideation. The prevalence rate of suicidal ideation is similar for men and women except in the single people category (22% for men and 11% for women). Net of age, education, health, home ownership, and economic status, for both men and women, compared with coupled people households, single people living alone are more likely to have suicidal ideation but there is no statistically significant difference between coupled people without children and single people with children or coupled people with children. Our result may suggest that compared with other living arrangements, the single people household structure may be less likely to meet their social or economic needs, especially for old men.

### RACIAL AND ETHNIC DIFFERENCES IN THE ASSOCIATION BETWEEN SELF-RATED MENTAL HEALTH AND PSYCHIATRIC DISORDERS AMONG OLDER AMERICANS

G. Kim[1], J. DeCoster[1], D.A. Chiriboga[2], Y. Jang[2], R.S. Allen[1], P. Parmelee[1], *1. The University of Alabama, Tuscaloosa, Alabama, 2. University of South Florida, Tampa, Alabama*

This study examined racial/ethnic differences in the association between self-rated mental health (SRMH) and psychiatric disorders among community-dwelling older adults in the United States. Four racial/ethnic elderly groups were drawn from the Collaborative Psychiatric Epidemiology Surveys (CPES, 2001-2003) and included non-Hispanic Whites (n = 351), Blacks (n = 826), Hispanics (n = 406), and Asians (n = 257). All provided information on self-rated mental health and responded to a diagnostic screen. After adjustment for covariates, there were significant associations between SRMH and current diagnoses for psychiatric disorders (i.e., any mood disorder, any anxiety disorder, and any mood or anxiety disorder) among older non-Hispanic Whites, Blacks, and Hispanics but not among Asian elders. The predictability of SRMH to diagnoses for psychiatric disorders was strongest in the non-Hispanic White sample. Racial/ethnic variations were found in the relationship between self-perception of mental health and DSM-IV psychiatric disorders. The findings suggest the need to develop race/ethnicity-specific strategies to screen psychiatric disorders in diverse elderly populations. Further exploration of how emotional distress is expressed within the diverse racial/ethnic groups is needed to improve access to quality mental health care.

## SESSION 995 (SYMPOSIUM)

### AGHE PRESIDENTIAL SYMPOSIUM: ENVIRONMENTAL TRANSITIONS AND THE MEANING OF HOME IN OLD AGE: EDUCATIONAL PERSPECTIVES

Chair: *G.D. Rowles, University of Kentucky, Lexington, Kentucky*

This internationally-focused AGHE Presidential Symposium brings together leading scholars from England, Ireland, Germany, Canada and the United States to explore the meaning of home in the context of relocation in old age. A growing body of literature confirms the relationship between “being at home” and wellbeing. Relocation resulting from transitions in the level of needed care typically disrupts this experiential person/place relationship with negative consequences for both physical and psychological wellbeing. Information on strategies to mitigate the stresses of relocation is limited. In this symposium we discuss education-related interventions that can facilitate maintaining a sense of home in the context of relocation. Within this rubric, the contributors utilize theoretical and empirical research conducted in several Western countries to critically explore five interwoven themes: (1) dimensions of the meaning of home in old age; (2) changes in the meaning of home resulting from relocation in response to transitions in care needs; (3) innovative education-based interventions to ease the process of relocation that focus on maintaining, transferring,creating or re-creating a meaningful sense of home; (4) the need to train human service and care professionals to greater sensitivity to the meaning of home and its implications for the manner in which older people accommodate to relocation; and (5) the potential for using a focus on the meaning of home for older people as an educational portal for gerontology students to gain insight into and appreciation for the role of place in the lives of older people.

### EDUCATING FOR THE LATE-LIFE LIVING AND CARE CONTEXT: WHAT CAN WE LEARN FROM URBAN HOUSING IN VERY OLD AGE?

F. Oswald[1], H. Wahl[2], *1. Interdisciplinary Ageing Research, Faculty of Educational Sciences, Goethe University Frankfurt, Frankfurt, Germany, 2. Institute of Psychology, Dept. of Psychological Ageing Research, University of Heidelberg, Heidelberg, Germany*

The European project ENABLE-AGE continues to address the role of home environments in advanced old age. We rely on key findings and link them with educational challenges across the lifespan. First, we found that functional and experiential aspects of the home go together across research sites and are similarly related with endpoints of autonomy and depression. Second, home adaptation and relocation from home to home is rare in those very old urban elders, although variation across countries occurs. Third, qualitative analyses show subtle forms of societal participation, although active community involvement decreases. Finally, longitudinal quantitative analysis revealed that functional housing aspects were predictive for change in autonomy and depression. Subsequently, understanding the intertwined nature of the functional and experiential home must enter professional care and counselling curricula. Further, the lifespan task of preparing for home alternatives most suitable to preferences of present and future cohorts of elders should find an echo in our societies educational pathways.

### RELOCATION WITHIN AN ENGLISH RETIREMENT COMMUNITY: REMAKING PLACE DURING A TIME OF CHANGE

T. Scharf[1], J. Sim[2], B. Bartlam[2], M. Bernard[2], J. Liddle[2], *1. National University Ireland Galway, Galway, Ireland, 2. Keele University, Keele, United Kingdom*

This paper examines remaking of place by older people during and after relocation to new accommodation as part of the major redevelopment of their community. Data derive from the mixed-methods Longitudinal Study of Ageing in a Retirement Community. Quantitative changes in health status, quality of life and loneliness over a two-year period were compared between residents who had relocated (n=19) and those who had not (n=53), controlling for relevant baseline variables. Additionally, 15 qualitative interviews were completed with 8 residents during the relocation process: pre-move; on first viewing of their property; and post-move. While quantitative differences between the two groups of residents were small ($\leq$ 8% of the total scale for each measure) and statistically non-significant ($p \geq .131$ in each case), qualitative findings highlight the complex relationships people have with their living environments. The paper concludes by discussing the implications for educating and supporting people during such a transition.

### PLACE INTEGRATION AND HABIT: CONCEPTS CENTRAL TO MEANING IN RESIDENTIAL TRANSITIONS

M. Cutchin, *University of North Carolina at Chapel Hill, Chapel Hill, North Carolina*

The transition from one home to another is often a difficult challenge for older adults, but it is a challenge that shares generic traits with other problematic situations we face in life. Drawing on research with people in adult day centers and assisted living residences as well as a trial of an intervention with at-risk older people in their homes, I will discuss the concepts of place integration and habit as central to understanding residential transitions and the creation (and re-creation) of meaning for seniors. These concepts, based on John Dewey's philosophy of experience, provide useful ways to interpret the process of residential transitions. Moreover, the concepts provide the basis of educational interventions that can foster the integration of older people with new environments and their development of meaning and quality of life. That basis of intervention and its implications will be discussed.

### TAKING 'HOME' WITH YOU WHEN LEAVING 'HOME': STRATEGIES IN TRANSFERENCE OF MEANING OF HOME

H. Chaudhury, *Gerontology, Simon Fraser University, Vancouver, British Columbia, Canada*

Relocating from one's home to a care facility or assisted living can be an emotionally challenging experience. Are there practical ways in which the meaning of home is transferred and/or recreated in an institutional environment? The presentation will illustrate a few methods in which older adults, caregivers and professionals could be sensitized and educated toward that goal. The process of understanding and implementation can be characterized as having three stages: recognition of opportunities, planning for the activities and implementation. Opportunities with older adults and/or their family caregivers would include creation of "home-stories," "home-leaving-ritual," and identifying objects of meaning. Formal caregivers and design professional could employ methods based on activities and design to support the meaning of home. These include home-themed reminiscence, art as a medium to connect with the meaning of home and physical environmental design based on home and home-based activities. Potential challenges associated with implementation of such methods will be highlighted.

### THE HOMES OF OLDER PEOPLE AS TEACHING TOOLS FOR GERONTOLOGY STUDENTS

R.L. Rubinstein, K. de Medeiros, *UMBC, Baltimore, Maryland*

Fundamental in the teaching of gerontology students at any level is an appreciation of the biographical or life course approach to aging. We believe that it is difficult to understand the present-day life of a person without understanding that person's history. One way of accessing this history is though the discussion of personal objects and spaces in the home. In a sense, the home acts as a repository for a person's life history through objects, photos, moments, and the like. In addition, students who meet elders in their home keep detailed field notes on physical characteristics of home such as neighborhood, arrangement of furniture, and other impressions of place. Gerontology students can begin an appreciation of the lives of elders through an appreciation of such worlds.

## SESSION 1000 (SYMPOSIUM)

### EXPRESSIONS AND EXPERIENCES OF RESILIENCY IN PERSONS WITH DEMENTIA

Chair: *L. Snyder, Shiley-Marcos Alzheimer's Disease Research Center, University of California, San Diego, La Jolla, California*
Discussant: *L.P. Gwyther, Duke University, Bryan Alzheimer's Disease Research Center, Durham, North Carolina*

People with Alzheimer's disease and related dementias are often equated with terms that are synonymous with cognitive decline, functional failure, and the disintegrating loss of self. Indeed, the very word "dementia' means "without mind." These social and scientific constructs obstruct our capacity to explore and affirm the ways in which persons with dementia exert behavioral and psychological coping abilities and enduring expressions of selfhood throughout the disease continuum. This symposium illuminates the capacity of persons with dementia to both experience and express resiliency, and underscores circumstances that can threaten capacity for resiliency. Sabat provides a theoretical overview of how Social Constructionist theory can help to conceptualize the ways in which persons with Alzheimer's reveal enduring aspects of self and resiliency along the disease continuum. Harris examines resiliency as a behavioral process that might be learned and promoted as illustrated through case studies. Samsi analyzes in-depth narratives of persons with dementia and their care partners to reveal the role of resiliency in effective coping. Finally, Logsdon discusses quantitative data on the effects of support group participation for people with early-stage Alzheimer's and explores the potential of this model to enhance resiliency. Together these four presentations deepen our awareness of experiences and expressions of resiliency in persons with Alzheimer's and help to inform our practice with this population. This symposium is sponsored by the Alzheimer's disease interest group.

### RESILIENCY OF THE SELF IN PERSONS WITH DEMENTIA

S.R. Sabat, *Psychology, Georgetown University, Washington, District of Columbia*

Although it has been alleged that dementia entails a "loss of self" (see Eisdorfer and Cohen), the allegation itself has been made on the basis of the fact that people with dementia have problems recalling their life narratives. Thomas Reid, centuries ago, dispelled the notion that selfhood depended upon recollection of one's life events. In recent years, it has become clear through the use of qualitative approaches, case studies, and the application of a Social Constructionist approach to understanding different aspects of selfhood, that people with Alzheimer's disease can retain many aspects of selfhood even in the moderate to severe stages of the disease as defined by standard measures. The resiliency of the self is not dependent on recollection of life events, but rather upon the interdependency of persons—those diagnosed and those who are their care partners. This presentation will provide concrete examples of this phenomenon

### IS RESILIENCE A KEY TO LIVING A MEANINGFUL LIFE WITH DEMENTIA? FACTORS THAT CONTRIBUTE TO THE RESILIENCE PROCESS IN PEOPLE WITH EARLY STAGE DEMENTIA

P. Harris, *Sociology, John Carroll University, Cleveland, Ohio*

This study examines the concept of resilience as a behavioral process, not as a personality trait. Thus, resilience should be able to be learned and environmental conditions promoted to nurture it. By applying a resilience framework, with its concepts of assets, protective factors, risks, and vulnerabilities, to the case studies of 6 people living with early stage dementia, some doing well and some struggling, differences between the two groups can be identified. Multiple risks and vulnerabilities, such as other serious healthcare problems and various family concerns were present in all case studies. However, differences between the two groups lie in their assets and protective factors, such as: acceptance of changing views of self, motivation to find new ways to remain a contributing member of society, a positive attitude, and an affirming person-centered or relationship-centered environment, which counterbalanced individuals' risks and vulnerabilities. Practice implications of these findings will be discussed.

### RELATIONSHIP BETWEEN RESILIENCY AND COPING IN PERSONS WITH DEMENTIA

K. Samsi, J. Manthorpe, *Social Care Workforce Research Unit, King's College London, London, United Kingdom*

Qualitative studies exploring the experience of change in dementia has identified a variety of coping techniques used by people with dementia. Most of these have been conceptualized as strategies consciously employed to incorporate dementia into everyday lives. The current study adds to this evidence base by highlighting the role of resiliency and mental strength, or life-long personality traits and characteristics as unconscious coping styles. In-depth narratives of people with dementia and their carers revealed the power of resilience in enabling people to cope with their condition. Resiliency was demonstrated through individuals reflecting on their levels of autonomy, focusing on experiences in the past which had been more challenging than the current situation, their ability to focus on positives in their lives, and to remain cheerful. Resilience enabled people with dementia to feel a sense of continuity in their lives, and ultimately contributed to a sense of overall well-being.

### ENHANCING RESILIENCY IN EARLY STAGE DEMENTIA: BENEFITS OF SUPPORT GROUP PARTICIPATION

R.G. Logsdon[1], K.C. Pike[1], S.M. McCurry[1], P. Hunter[2], J. Maher[2], L. Snyder[3], L. Teri[1], *1. University of Washington School of Nursing, Psychosocial & Community Health, Seattle, Washington, 2. Alzheimer's Association Western and Central Washington State Chapter, Seattle, Washington, 3. Shirley-Marcos Alzheimer's Disease Research Center, University of California, San Diego, California*

Individuals with early stage dementia and their families have identified a need for education and support in coping with psychosocial and lifestyle changes. This presentation describes a randomized controlled trial comparing an Early Stage Memory Loss support group program (ESML, $n = 96$) to a wait list control condition (WL, $n = 46$). Mean age of participants was 74.9; mean MMSE was 23.4. On the intent-to-treat analysis, ESML participants reported significantly improved quality of life compared to WL participants ($p < .001$). Self efficacy and mental health were significantly improved in ESML participants reporting improved quality of life compared to ESML participants reporting no change or decreased quality of life (both $p < .01$), as were family communication, emotional and social functioning, depression and behavior problems (all $p < .05$). These results support the efficacy of ESML support groups and provide information about ways in which groups enhance resiliency.

## SESSION 1005 (POSTER)

## FAMILY CAREGIVING I

### SLEEP DISTURBANCES IN ALZHEIMER'S DISEASE AND CAREGIVER MOOD: A DIARY STUDY

A.M. Akerstedt, *Clinical Psychology, University of Massachussetts Amherst, Amherst, MA*

Caring for a family member with Alzheimer's disease (AD) is associated with significant stressors and negative consequences, including psychological and emotional distress (Belle et al., 2006; Schulz & Martire, 2004). One of the most problematic stressors for family caregivers is patient sleep disturbance (Hope, Keene, Gedling, Fariburn, & Jacoby, 1998; Pollack & Perlick, 1991). Whereas the impact of patient sleep disturbance on general measures of negative affect has been established, no prospective diary studies have been conducted and the effect of daily sleep disturbance on daily negative moods is not known. The current study examines the impact of AD patient sleep disturbance on the daily positive (PA) and negative affect (NA) of their family caregivers. Data collection is on-going and participants are caregivers ($N=40$) living with a family member with AD. Caregivers are interviewed about their own and their patient's mood, sleep, stress and physical activity twice daily for eight days. Sufficient data for analyses will be collected by the GSA meeting. Hierarchical linear modeling (HLM) will address the hypothesis that poor patient sleep is associated with increased daily NA and decreased daily PA. Because poor sleep is associated with an increase in NA and a decrease in PA (McCrae et al., 2008), caregiver sleep will be examined as a mediator between poor patient sleep and caregiver daily mood. Improving patient sleep could prove to be a beneficial target for treatment that could have a positive impact on caregivers' daily mood and well-being, and potentially improve the quality of care.

### EMOTION WORK IN INFORMAL CAREGIVING FOR PERSONS WITH DEMENTIA

C. Simpson, G. Acton, *School of Nursing, University of Texas, at Austin, Austin, Texas*

Emotion work refers to efforts made to enhance emotional well-being and provide emotional support in a relationship between two people. Emotion work is an important variable in family work but has not been described in the work done by family members caring for a person with dementia. The study presented is an initial step in understanding how emotion work can be identified as a part of the caregiving experience. Content analysis was applied to 11 interviews of informal caregivers. While emotion work was not the subject of these interviews, evidence of emotion work was found in each interview. Five categories of emotion work were identified: 1) managing feelings, 2) overriding feelings; 3) weighing options, 4) being parental and 5) ensuring well-being. Both men and women performed emotion work and expressed feelings of incongruence and some strategy for managing emotions. Female caregivers performed more emotion work than male caregivers. Daughters performed the most emotion work. These findings suggest emotion work is a part of family work for caregivers. Further research is needed to understand how emotion work changes in a relationship when one person has dementia; do the changes create stress and negative health outcomes; and can interventions be designed to reduce stress through improved strategies for emotion work?

## FAMILY CAREGIVER EXPERIENCES WITH PROGRESSIVE DEMENTIA: A PILOT STUDY

C. Stewart, J.S. Wilson, *College of Nursing, University of Oklahoma, Tulsa, Oklahoma*

The chronic progressive nature of cognitive and functional decline in persons with dementia creates progressively higher demands for caregivers. For community-dwelling older adults diagnosed with dementia, there are one or more caregivers that provide an increasing amount of complex tasks at tremendous physical and psychological expense. As the population ages, the number of individuals diagnosed with dementia continues to increase. An estimated 5.3 million Americans have been diagnosed with Alzheimer's which is now the 6th leading cause of all deaths in the United States and the 5th leading cause of death in people over the age of 65. Caregivers, which are usually family members, supervise and eventually assume responsibilities for the dementia patient and assist them to retain as much independence as possible. A systematic review of the literature was done to identify trends in dementia caregiver research which included physical and psychological illnesses, burden, depression, and placement in long term care, among many others. Gaps identified include older adults, ages 65-99, serving as primary caregivers for the older adult with dementia and successful management strategies implemented by these caregivers. This qualitative study will seek to examine the effective ongoing management of community-dwelling older adults being cared for by an aging caregiver.

## THE EFFECT OF CAREGIVING ON MARITAL SATISFACTION: ACCULTURATED VS. NON-ACCULTURATED ARMENIAN WOMEN

G. Mkrttchian, R. Giarrusso, *Sociology, California State University-Los Angeles, Los Angeles, California*

Research has shown that caregiving has a negative effect on marital satisfaction; however, most research has been based on white samples and has ignored the possible moderating effect of culture. In the Armenian culture, women are expected to provide care to family members in need. Therefore, it is likely that the negative relationship found between marital satisfaction and caregiving found with white samples does not hold for traditional Armenian women. However, a negative association between marital satisfaction and caregiving would be expected for Armenian women who have become acculturated to the American culture. The purpose of this study is examine the possible moderating effect of ethnic culture on the relationship between family caregiving and marital satisfaction among Armenian women between 35 to 60 years of age who are caregiving for one or more family members (parents, parents-in-law, children, and/or grandchildren. A convenience sample of 110 Armenian females was selected from two Armenian Christian churches in southern California. The results revealed that Armenian women are not only "sandwiched" between parents and children in their family caregiving responsibilities but also between parents and grandchildren. Further, many Armenian women are also "sandwiched" between parents-in-law and other family members. As hypothesized, family caregiving only has a significant negative on marital satisfaction when the women are highly acculturated to the dominant American culture; otherwise, family caregiving has little to no negative effect on marital relationships. The findings are discussed in terms of the moderating influence of ethnic culture on marital satisfaction.

## EMERGING ADULTS' CAREGIVING EXPERIENCES AND PREPAREDNESS FOR FUTURE CAREGIVING

J.J. Benson[1], L.A. Snyder[1], J. Krampe[2], M.L. Matteson[2], *1. Human Development and Family Studies, University of Missouri, Columbia, Missouri, 2. University of Missouri School of Nursing, Columbia, Missouri*

Care demands of older adults continue to grow as the size of this age group expands. United States policy places the majority of the burden for caregiving of older adults on family members. Thus, current research on caregiving has devoted much attention to the implications of caregiver preparedness on caregiver burden and care-recipient well-being. Caregiving studies have primarily focused on care provided by adult children to their aging parents while research rarely explores the caregiving experiences of young adults (aged 18-25). No known research explores the relationship between emerging adults' prior interactions with the caregiving experience and their preparation for future caregiving of their parents. To address this gap in the literature, the current study investigated how emerging adults' gender, observations of their mother's parental caregiving, and their own performance of care tasks, influence preparedness for caregiving of their own mothers. Data were drawn from a sample of 233 college students who completed a survey focused on their past caregiving experience and preparation for future caregiving. Data analyses revealed that students' gender and observations of caregiving were not significant in predicting preparedness for caregiving. However, students who assisted with or performed a greater number of care tasks perceived themselves as significantly more prepared to provide care than their peers with less hands-on caregiving experience. These findings illuminate the need for practitioners to consider the influence previous encounters with caregiving may have on emerging adults' preparedness for future parental caregiving. The need for further exploration of emerging adult caregivers is discussed.

## THE EFFECTS OF POSITIVE INTERACTIONS ON CAREGIVER WELL-BEING

C.A. Sofko, A.M. Reamy, J. Lee, S.H. Zarit, *The Pennsylvania State University, State College, Pennsylvania*

Much of the focus in caregiving research has been on behavior problems and other stressors, but there is increasing interest in the positive experiences of caregivers. One potentially important factor is positive interactions between caregivers and care receivers. When caregivers and care receivers interact in pleasant or enjoyable ways, this may enhance caregivers' well-being or buffer the negative effects of care-related stressors. This study examines the association of positive interactions to care-related stress and caregivers' well-being in a sample of 234 family caregivers of individuals with dementia. Caregivers were interviewed about care receivers' current behavior problems in the past week, as well as, the frequency of positive interactions between them. Dependent measures were overload, depressive symptoms, and anger. Using multiple linear regression, we found that frequency of behavior problems and positive interactions contributed independently to each of the dependent measures. Increases in frequency of positive interaction were negatively associated with overload, depressive symptoms, and anger, while behavior problems had a positive association with these same outcomes. Tests of whether positive interactions might buffer the effects of behavior problems were not significant. These findings contribute to the growing literature on the importance of positive interactions in caregiving and suggest that improving daily interactions may enhance the caregiving experience for both caregivers and care receivers.

### SUBJECTIVE CAREGIVER BURDEN AND NEEDS OF CAREGIVERS FOR SENIORS WITH NEUROLOGICAL DISEASE

J. Bibbo, *California State University, Chico, Chico, California*

This study explored the needs of informal caregivers for seniors with neurological disease. The aim was to better understand factors impacting caregiver burden over time in order to more effectively serve this valuable and expanding population. The population was selected from cases that had begun receiving services from a Caregiver Resource Center in northern California from 2004 – 2008. Research was conducted using data from the center's archives. Objective and demographic factors that may have contributed to subjective caregiver burden were examined. Major problems and needs identified by the caregivers were also considered. Subjective caregiver burden was assessed using the Adapted Zarit Burden Interview. Results of a Wilk's Lambda ($p < .001$) indicated that burden significantly decreased from intake to 6-months and 1 year. These results indicate that such individually tailored programs are useful resources for informal caregivers.

### EXAMINING THE FEASIBILITY OF RECRUITING ADOLESCENTS LIVING IN ALZHEIMER'S CAREGIVING FAMILIES

C. Mitchell, E.K. Stevens, *Case Western Reserve University, Cleveland, Ohio*

Research on older adults with Alzheimer's disease suggests that the caregiving experience impacts not only the primary caregiver, but also the entire family system. Many older adults diagnosed with Alzheimer's disease live with their primary caregiver, and this caregiver is often an adult child living with his or her own spouse and children. Adolescents living in a home with a grandparent with Alzheimer's often participate in the caregiving process, but relatively little is known about the experiences of these adolescents. Research also indicates that adolescents have positive experiences related to caregiving, although it is likely that stress experienced by a caregiving parent spills over and is also experienced by these adolescents. In order to better understand the experiences of adolescents living with a grandparent with Alzheimer's, the present study sought to recruit adolescents living in Alzheimer's caregiving families and to employ a strength-based journaling intervention completed twice a month, over a two month period. After intense recruitment efforts over a period of approximately one year, eight adolescents were successfully recruited. Recruitment occurred nationally and locally, via calling branches of the Alzheimer's Association, churches, senior centers, a caregiver registry, and an Area Agency on Aging. The present study demonstrated that the feasibility of recruiting adolescents living in Alzheimer's caregiving families was quite low given the recruitment effort. Before developing interventions targeted at adolescents living in Alzheimer's caregiving families, future studies should consider alternative means of identifying and collecting data from this population.

### DEMENTIA CAREGIVERS AND COPING STRATEGIES: RELATIONSHIP TO HEALTH AND WELL-BEING. THE CACHE COUNTY DEMENTIA PROGRESSION STUDY

C. Snyder[1,2], C. Smith[1,2], L.S. Lee[1,2], M.C. Norton[3,2], K. Piercy[3,2], E.B. Fauth[3,2], S. DeBerard[1], J. Tschanz[1,2], *1. Dept. of Psychology, Utah State University, Logan, Utah, 2. Center for Epidemiologic Studies, Utah State University, Logan, Utah, 3. Dept. of Family, Consumer, and Human Development, Utah State University, Logan, Utah*

Emotion-focused coping strategies have been associated with negative psychological outcomes among caregivers. Using linear mixed models, we examined change in caregiver coping strategies over the course of providing care to persons with dementia, and whether coping strategies predicted caregiver anxiety and occurrence of medical conditions in a population-based study of dementia progression and caregiving. Dementia caregivers (N = 312; 74% female, 43% spouses, 49% adult children, 8% other relatives/friends) were assessed annually (maximum = 5.67 years). Mean (SD) age and educational attainment were 67.68 (14.13) and 14.14 (2.38) years, respectively. Caregivers completed the Ways of Coping Checklist-Revised, Beck Anxiety Inventory, and questions regarding health concerns at each visit. Providing care was the most frequently reported type of problem identified by caregivers. While the use of most coping strategies was stable over time, compared to the "other caregiver" group, adult children reported increased use of Blames Self and Avoidance while spouses reported increased use of Seeks Social Support (all interactions, $p < 0.05$). On average, greater use of Wishful Thinking and Blames Self was associated with higher caregiver anxiety (p's < 0.002). On average, increased use of Blames Others among males (interaction, $p = 0.02$) and increased Wishful Thinking among younger caregivers (interaction, $p = 0.01$) was associated with a higher number of medical conditions. Coping strategies did not affect rate of change in either anxiety or medical conditions. Our results emphasize the importance of caregiver coping strategies on caregiver well-being and may suggest avenues for effective caregiver interventions.

### DEMENTIA CARE RECIPIENT AND CAREGIVER PERCEPTION OF DECISION MAKING AND ITS EFFECT ON CARE RECIPIENT QUALITY OF LIFE

H. Moon[1], C.J. Whitlatch[2], A.L. Townsend[1], *1. Case Western Reserve University, Cleveland, Ohio, 2. The Benjamin Rose Institute, Cleveland, Ohio*

Few studies have examined the similarities and differences between dementia care recipients (CRs) and caregivers (CGs) in their perspectives about CR's involvement in decision, and the effect on CR's quality of life. This study examines difference between CR's and CG's report about CR's involvement in decision about his/her daily care (15 items-DMI: Menne & Whitlatch, 2007) and the effect of this difference on CR's quality of life (13 items-QoL; Logsdon et al., 1996). Within 215 care dyads of CRs with mild to moderate Dementia and CGs, in 25%, CG reported CR is more involved than CR did, and in 65% CR reported CR is more involved than CG did. In the remaining, in 10% there is no difference. In OLS, simultaneous multiple regression, CG quality of life was significantly lower in dyads where CG reported more CR's involvement than CR did ($B= -2.87$, $p=.02$) compared to dyads where there is no discrepancy in perspectives. For dyads, where CR reported more involvement than CG did, there was no significant effect on CR quality of life. Regression results control for other characteristics such as gender and kin relationship ($R2 = .17$, $p<.001$). One implication of these findings is that enhancing CG and CR communication about the CR's involvement in decision making may promote CR quality of life. Discussion will focus on strategies for improving communication between CRs with early-stage dementia and their family caregivers.

### ALZHEIMER'S DISEASE AND TRANSITIONS OF CARE: THE LOSS OF THE FAMILY CAREGIVER ROLE

A. Gentz, C. Fruhauf, *Human Development and Family Studies-Marriage and Family Therapy, Colorado State University, Fort Collins, Colorado*

Family caregiving for adults with Alzheimer's disease is an important issue that affects many individuals. When caregivers are no longer caregiving, the loss of the role may impact their life. However, it is unknown in the gerontological literature how the loss of the caregiver role is experienced. The purpose of this research was to understand the loss of the caregiving role of family caregivers who provided assistance to individuals who had Alzheimer's disease. A total of 21 participants age 41 to 88 participated in one focus group (i.e., three focus groups were conducted with 5 to 10 participants) addressing the loss of their caregiver role. Many participants (n = 18) were female and were caring for a parent/in-law (n = 14). A third of caregivers provided care for 5 to 8 years. Qualitative data analysis techniques were used to develop themes and codes to understand the experiences of previous caregivers. Two themes emerged from the data: caregiving journey and standing at a cross-road. Data focusing on the caregiving journey addressed rewards and stumbling blocks during and after active caregiving. For example, participants discussed tools and feelings associated with providing care. Standing at a cross-road illustrated four sub-themes: unforeseen happenings, unexpected phase of caregiving, caregiver's sense of self, and grief/sadness. Future researchers should consider examining gender differences and the loss of the caregiver role for children versus spouses. Professionals should consider developing educational materials and support groups focusing on the loss of the caregiver identity.

### WHAT AFFECTS DEMENTIA PATIENT CAREGIVER WELL-BEING?

K.H. Lonergan, K. Vo, V. Samarina, F. Moise, R. Gomez, *Pacific Graduate School of Psychology at Palo Alto University, Palo Alto, California*

Objective: Using baseline data of 643 dyads from the REACH II (Belle et al., 2006) study, the effect of social support on the relationship between dementia patient impairment and caregiver well-being was examined. Methods: Care-recipient impairment was measured using the MMSE (Folstein et al., 1975), RMBPC (Teri et al., 1992), and ADLs/IADLs (Katz, Ford, Moskowitz, Jackson & Jaffe, 1963; Lawton & Brody, 1969). Caregiver well-being included depression (CES-D; Radloff, 1977), single-item physical health question, and positive aspects of caregiving (PAC; Lawton et al., 1989; Tarlow et al., 2004). Social support was based on satisfaction ratings and frequencies of social and formal care activities. Results: A significant model emerged for caregiver depression ($F_{8,634} = 30.53$, p<.001), revealing that satisfaction with social activities (β = -2.904, p<.001), satisfaction with social support (β = -.250, p<.001), frequency of formal care services (β = .283, p=.013), and care-recipient behavioral problems (β = .089, p=.023) were significant predictors of caregiver depression. Significant models also emerged for caregiver physical health ($F_{8,634} = 14.24$, p<.001) and positive aspects of caregiving ($F_{8,634} = 9.79$, p<.001). Multivariate regression analysis revealed that frequency of social activities was the only significant predictor of caregiver health (β = -.509, p<.001) and that satisfaction with social activities (β = .268, p<.001), satisfaction with social support (β = .202, p=.001), and patient cognitive impairment (β = -.015, p=.012) were significant predictors of positive aspects of caregiving. Conclusion: Caregivers' perception of support received, not just the amount received, plays an important role in their well-being.

### CORRELATIONS BETWEEN INDICATORS OF CAREGIVING-RELATED STRESS AND STRESS BIOMARKERS IN OLDER CAREGIVERS

S.O. Stuver, L. Fredman, C. Mezzacappa, *Epidemiology, Boston University School of Public Health, Boston, Massachusetts*

Chronic stress may lead to dysregulation of homeostatic systems and immune function. As evidence, caregivers have poorer neuroendocrine and immune profiles than non-caregivers in many studies. However, few studies have investigated whether caregiving stress measures are associated with these biomarkers. In a cohort study of elderly caregivers of persons with Alzheimer's or Parkinson's Disease in the Boston metropolitan area, we evaluated the correlation of the Sum of Care Recipient's Problem Behaviors and Reaction to Care Recipient's Problem Behaviors scales from the Revised Memory and Problem Behavior-Checklist (RMPBC) and the Caregiving-related Stress scale from the standard 14-item ADL/IADL scale with the stress biomarkers interleukin-6 [IL-6], dehydroepiandrosterone-sulfate [DHEA-S], cortisol, and epinephrine. The mean age of the 51 caregivers studied was 71.6, with 41% being female and 92% being white. They had mean scores of 9.6 (std, ±4.1) for RMPBC Sum of Care Recipient's Problem Behaviors, 12.4 (±9.9) for RMPBC Reaction to Care Recipient's Problem Behaviors, and 5.3 (±4.8) for Caregiving-related Stress. As anticipated, lower levels of DHEAS were correlated with higher Caregiving-related Stress (Spearman correlation, r=-0.216; p=0.23), which was stronger for dealing with physically difficult caregiving tasks (r=-0.296; p=0.09) than for emotionally difficult caregiving tasks (r=-0.158; p=0.38). In addition, lower levels of epinephrine were correlated increased distress due to Care Recipient's Problem Behaviors (r=-0.225; p=0.21). Neither IL-6 nor cortisol was significantly correlated with any of the indicators of stress related to caregiving. In summary, caregiving-related stress was associated with disruptions in selected neuroendocrine stress biomarkers in this older population of community-dwelling caregivers.

### UNDERSTANDING DISPARITIES AMONG HISPANIC AND WHITE NON-HISPANIC CAREGIVERS

N.J. Karlin[1], J. Weil[1], S. Collins[1], M. Adams[2], C. Fruhauf[3], *1. School of Psychological Sciences, University of Northern Colorado, Greeley, Colorado, 2. Weber State University, Ogden, Utah, 3. Colorado State University, Fort Collins, Colorado*

The focus of this study was concerned with understanding the differences between white and Hispanic familial caregivers providing care to a family member with Alzheimer's disease and related disorders (ADRD). Particular attention was paid to Hispanic caregivers since less is known about changes in caregiving patterns among this group in northern Colorado – where Hispanics make-up about one-third of the county population. Data suggests Hispanic care providers report both satisfaction and burden. Hispanic caregivers in this study were experiencing increased financial strain as a result of being a caregiver, had received help from others for a shorter duration of time, and had been in the caregiving role longer than their non-Hispanic counterparts. Participants indicated a desire to learn additional skills, gain knowledge, and to receive more support. With current trends of demographic changes and cultural inversion it is crucial to more fully understand the changing role and needs of Hispanic familial caregivers.

### MEDICATION REGIMEN FOR DEMENTIA IN CHINESE AMERICAN CAREGIVERS

Y. Chang[1,2], L. Wray[2], P. Chang[3], *1. The State University of New York, University at Buffalo, School of Nursing, Buffalo, New York, 2. VA Western New York Health System Center for Integrated Healthcare, Buffalo, New York, 3. Alzheimer's Association Northern California & Northern Nevada, Mountain View, California*

Background: More than 90% of Chinese American immigrants used numerous traditional Chinese herbal medicines to treat their disease symptoms. They may also combine some over-the-counter medications and prescribed medications without communicating with their health care providers. The drug-remedy interactions may pose potential risks to their health. Thus, there is a need to understand the scope of multiple medication regimens in Chinese American families for cognitive impairment symptoms. Purpose: This ongoing study aims to describe medication regimens for cognitive impairment among Chinese American caregivers of people with dementia and to examine the association between cultural beliefs about dementia and medication use. Method: This study is a cross-sectional design. Participants are recruited from Adult Day Health Center in San Jose and Chinese Outreach program in Alzheimer's Association Northern California and Northern Nevada chapter. Measures include the Cultural Beliefs about Dementia, the Medication Use Questionnaire, and a demographic questionnaire. Descriptive statistics and Pearson's correlation will be utilized for analysis. Results: We expect that a total of 60 family caregivers will participate in this study. Preliminary findings indicate 50% of participants used multiple medication regimens for treating dementia. We hypothesize a moderate correlation between cultural beliefs about dementia and mixed medication use. Conclusion: The findings will extend our understanding of mixed use of medications for dementia among Chinese American Caregivers. Also, our findings will indicate a need to develop culturally appropriate educational interventions to promote better communication between Chinese American older adults, their families, and health care providers regarding medication use in dementia treatment.

### CHALLENGES IN RECRUITING FAMILY CAREGIVERS TO A CLINICAL TRIAL ON MBSR FOR STRESS REDUCTION

R.R. Whitebird[1], M. Kreitzer[2], B. Lewis[2], A.L. Crain[1], L.R. Hanson[3,1], C.J. Enstad[1], *1. HealthPartners Research Foundation, Minneapolis, Minnesota, 2. University of Minnesota, Minneapolis, Minnesota, 3. Alzheimer's Research Center, Regions Hospital, St. Paul, Minnesota*

The Balance Study is a randomized controlled pilot study examining the effect of a mindfulness-based stress reduction intervention vs. a community caregiver education and support program on stress reduction. Participants were self-identified as caregiving for a family member with dementia. Outcome variables included both psychological and physiological (biomarker) data. We identified challenges in study recruitment and innovative efforts were required to recruit participants. Strategies included outreach within a large health plan and to community and social service organizations, print articles, paid advertising, and word of mouth. We received 256 calls about the study, of these 141 (56%) expressed interest and 112 were eligible for participation; 78 (70%) of those eligible consented with 72 completing the study. The challenges to recruitment we identified were: 1) family caregivers are a self-identified group who do not identify with the descriptor of "caregiver" and thus do not identify with a specific group/ venue that can be used for outreach; 2) cultural issues deeply influence how they see this role, their responsibilities, and define help-seeking behavior; 3) caregivers are heavily burdened by their caregiving duties and do not seek help until they are overwhelmed by stress; 4) they require help in addressing respite care issues; and 5) commuting requirements and time of day are critical to study participation. By addressing these challenges and giving significant focus to study retention, including regular contact during the intervention and follow-up phases, the study was successful in meeting our recruitment goal with 92% of those consenting completing the study.

## SESSION 1010 (POSTER)

## FUNCTION AND FALLING

### RISK FACTORS OF FALLS AND RECURRENT FALLS IN COMMUNITY DWELLING OLDER KOREAN WOMEN

Y. Lim, M. Sung, *Yonsei University, Wonju, Republic of Korea*

The purpose of the study was to determine which risk factors, biological, medical, behavioral, and home environmental factors, contribute to falls and recurrent falling in community dwelling older Korean women. The study population included 438 older women, aged 65 years and over. Risk factors included biological factor (old age), medical factor (chronic disease), behavioral factor (no physical activity), and home environmental factors (poor nightlight, non-slip bath mat, and doorsill). Risk indicators for accidental falls and recurrent falling were analyzed using logistic regression. Logistic regression analysis revealed that old age, chronic disease, poor nightlight, and doorsill were predictors of accidental falls, and no physical activity and non-slip bath mat were predictors of recurrent falling. The findings have implications for strategies and suggest the need to modify home environmental context in systematic and consistent ways and the need to maintain physical activities to prevent falls and recurrent falling.

### HEALTH RELATED QUALITY OF LIFE OF CHILEAN ELDERS AND ITS ASSOCIATION WITH FUNCTIONAL LIMITATIONS

L. Marques, C. Albala, H. Sánchez, A. Fuentes, F. Salas, X.D. Cea, *Public Health Nutrition Unit, . Institute of Nutrition and Food Technology (INTA), University of Chile, Santiago, Chile*

PURPOSE: To asses the quality of life of elder people with different degrees of Functional Limitations (FL) METHOD: Population based cross-sectional study conducted in Chile in 2009 in a representative sample of 4546 community-living subjects 60y and older (61.2% women).Severe FL was defined as having limitation in 1 ADL or/and 2 IADL, mild FL as having 3 mobility limitations and moderate FL as having any other combination. The Short-Form-36 Health Survey (SF-36) was applied to whole sample. Score of 8 subscales of SF-36 and summary measures Mental Component (MCS) and Physical Component (PCS) were calculated. Logistic regression analysis was used to estimate associations with MCS and PCS. RESULTS: The prevalence of disability was 28.6% (men 27.2%, women 29.5%). Women had lower scores than men after adjusting for age and FL. Subjects with severe FL had significantly lower mean scores than moderate and mild FL in all SF-36 domains and in PCS (35.8, 40.6, 43.0, respectively; $p<0.0001$) and MCS (35.8, 48.2, 48.4, respectively; $p<0.0001$). Logistic regression analysis showed the strongest association of poorer scores of PCS (p25) with levels of FL (mild OR=4.7; 95%CI 4.42-7.26, moderate OR=8.6; 95%CI 6.41-11.51, severe OR=26.7; 95%CI 16.82-42.27), being women (OR=1.7; 95%CI 1.45-2.06), low educational level (OR=1.42; 95%CI 1.16-1.73) and no association with age. The same associations were observed for low score in MCS (p25) except for an inverse association with age (OR=0.97; 95%CI 0.96-0.98) CONCLUSIONS: These results shows the significant impact of Functional limitations on quality of life in the elderly evincing socioeconomic and gender differentials. Funded by Fondecyt Grant 1080589, Chilean National Service for the elderly and Spanish Agency for International Cooperation

### POVERTY AND DISABILITY TRANSITIONS: IMPACT ON SOCIAL PARTICIPATION AND ISOLATION

M.J. Penning[1], S.P. Clouston[2], Z. Wu[1], M. Brackley[1], *1. University of Victoria, Victoria, British Columbia, Canada, 2. University of McGill, Montreal, Quebec, Canada*

Recent research has focused on the impact of life course transitions on a variety of outcomes. In particular, studies have addressed the impact of poverty transitions on various health and disability outcomes, with some attention also given to the impact of disability transitions on other relevant outcomes, such as social isolation and participation. However, less attention has been given to intersecting transitions. As a result, little is known regarding the implications of becoming disabled when one has never been poor versus becoming disabled when one has always been poor. We know even less about the differential impacts when experiencing both transitions at once: becoming poor while becoming disabled. This is particularly evident in the Canadian context. This poster reports the results of analyses conducted to address the impact of both poverty and disability transitions on social isolation and participation experienced at different stages of the life course. Data are drawn from the National Population Health Survey (NPHS), Household Component, longitudinal data files (Cycles 1 to 7, 1994/95 to 2006/07). These include data obtained from a nationally representative sample of 17,276 respondents aged 12 and over first interviewed in 1994/95. Findings suggest that disability is worse for those who are always poor than those who are always rich, but that the transition is particularly difficult for those who experience transitions simultaneously. Research and policy implications are discussed.

### A COMMUNITY-BASED FALL PREVENTION INTERVENTION THAT MAY IMPACT FEAR OF FALLING AND LEISURE FOR OLDER ADULTS

C.M. Headley[1], L.L. Payne[2], C. Katzenmeyer[3], *1. Exercise & Sport Science, Judson University, Elgin, Illinois, 2. University of Illinois, Champaign, Illinois, 3. Metropolitan State College, Denver, Colorado*

Multi-factorial, multidimensional community-based fall prevention programs have been shown to have a decrease in the risk of falls in older adults and can have a greater reach within a community. The purpose of this study was to examine the effects and influence of N'Balance, a community-based fall prevention intervention for older adults, and better understand fear of falling and its implications for leisure among older adults. N'Balance is a multi-factorial, multidimensional intervention focusing on challenging and improving the sensory systems. This was a community-based intervention trial with a control group using two sites. A two-way (group x time) ANOVA was used to examine differences in the dependent variables within each group over time (from pre- to post-test) and between groups (intervention vs. control). Results of pre- and post-test assessments indicated that N'Balance was associated with improved balance (.00) and the fear of falling (.04). Leisure self-efficacy approached significance (.06) as a result of participation in N'Balance. Overall, the results indicated that N'Balance is a promising intervention program that seems to have physical and psychosocial benefits for older adults.

### INFORMATION PROCESSING AND FEAR OF FALLING IN OLDER JAPANESE ADULTS

F. Togo, A. Ohnishi, K. Ishimatsu, *National Institute of Occupational Safety and Health, Japan, Kawasaki, Japan*

The present study examined the associations between information processing and fear of falling in 28 male volunteers, aged 60-69 years. Reaction times (RT) for simple RT and flanker tasks were collected. For the simple RT task, participants pressed a key as quickly as possible once the stimulus appeared on the screen. For the flanker task, stimuli consisted of a row of 5 items with the third (central) item as either a leftward or rightward pointing arrow. Participants focused on the central target and pressed one key when the central target pointed to the left or a different key when it pointed to the right. The two items (flankers) on either side of the central target were either horizontal lines (neutral condition) or arrows. The congruent and incongruent flanker conditions consisted of flanking arrows pointing in the same and opposite direction as the central target, respectively.. Participants completed 20 trials of the simple RT task and 96 trials of the flanker task. Information processing speed was calculated by subtracting the median simple RT (i.e., reflecting motor response time) from the median RT of each flanker condition. Fear of falling was assessed by the Modified Fall Efficacy Scale. Simple RT did not correlate with the level of fear of falling. Information processing speed did not correlate with the level of fear of falling for congruent or incongruent conditions, but correlated significantly for the neutral condition. These results indicate that impaired information processing might correlate with falls in the elderly.

### CO-MORBIDITIES AND PERCEIVED FUNCTIONAL ABILITY IN OLDER ADULTS

R.J. Gretebeck[1], K. Gretebeck[2], *1. Kinesioogy, Health and Sport Studies, Wayne State University, Detroit, Michigan, 2. University of Michigan, Ann Arbor, Michigan*

Regular physical activity (PA) is beneficial for older adults although is often affected by chronic diseases and physical impairments. The objective of this investigation was to examine how co-morbidities impact perceived functional ability in older adults. Questionnaires were mailed to retired non-faculty staff members from a large university with questions on demographics, functional ability, and health. Participants included 1,091 (53.8% female) older adults (65-98 years, M age=75.47+6.67) Subjects were asked if they had been diagnosed with any of the following chronic conditions: Arthritis, heart trouble, high blood pressure, circulation trouble, diabetes, cancer, stroke, or asthma, or no medical problems. Subjects where categorized as having 0, 1, 2, or three or more co-morbidities (9.4, 32.1, 26.7, and 21.3 % of the subjects respectively), and were compared using ANOVA on different aspects of perceived functional ability. There was no significant difference between 0 and 1 condition on functional ability measures of walking, stair climbing, light house work, heavy housework, and lifting 10 pounds. However, for these same variables, subjects with 2 conditions had significantly lower functional scores than 0 and 1, and subjects with three or more chronic conditions had significantly lower scores than subjects with 0, 1, or 2 conditions. These results suggest that 1 condition appears to be well tolerated, but as co-morbidities increase functional ability declines.

### DO MOBILITY ASSISTIVE DEVICES PREVENT HOSPITALIZATIONS FOR ACCIDENTAL FALLS OR INJURIES AMONG OLDER ADULTS?

K.A. Pressler, L.P. Sands, K. Ferraro, *Purdue University, West Lafayette, Indiana*

Mobility assistive devices (e.g. walkers, canes, and wheelchairs) are well-known mechanisms for fall prevention. However, to our knowledge, no one has examined whether mobility assistive devices do indeed prevent falls using a nationally representative sample of disabled older adults. Methods: Three waves of the National Long Term Care Survey (NLTCS) with samples exceeding 5,000 cases at each wave were linked to Medicare Inpatient Hospitalization Claims from 1994-2005. A series of logistic regressions were performed where hospitalizations that resulted from an injury or fall in 1995, 2000, and 2005 were the dependent variables. Respondents' self-report of mobility device use was drawn from the 1994, 1999, and 2004 NLTCS surveys, along with lower body Nagi disability level, age, gender, race, and whether the respondent received personal care performing ADLs. Finally, whether respondents experienced a hospitalization in the previous year was also controlled for. Results: Fall and injury risk was highest among older adults who were hospitalized in the previous year, were older, white, had greater lower body disability, and received ADL personal care. Mobility assistive device use in 1994, 1999, and 2004 was not a significant predictor of a subsequent hospitalization resulting from a fall or injury. Respondents who experienced a hospitalization within the past year were 59% (p<.01) more likely in 1994 and 119% (p<.001) more likely in 2004 than those who were not hospitalized to experience a fall/injury hospitalization that following year. Conclusion: The use of mobility assistive devices among older adults has no effect on subsequent fall/injury hospitalization risk.

### FEAR OF FALLING IN COGNITIVELY IMPAIRED OLDER ADULTS: PSYCHOMETRIC PROPERTIES OF THE FES-I

G. Zijlstra[1], G.I. Kempen[1], M. Schwenk[2], L. Yardley[3], N. Beyer[4], C. Todd[5], K.A. Hauer[2], *1. Maastricht University, CAPHRI - School for Public Health and Primary Care, Maastricht, Netherlands, 2. Bethanien-Krankenhaus / Geriatric centre at the University of Heidelberg, Heidelberg, Germany, 3. School of Psychology, University of Southampton, Southampton, United Kingdom, 4. Institute of Sports Medicine, Bispebjerg Hospital, Copenhagen, Copenhagen, Denmark, 5. School of Nursing, Midwifery and Social Work, University of Manchester, Manchester, United Kingdom*

Older adults with cognitive impairment are at high risk of falling and fall-related consequences. To evaluate fall prevention strategies in this population measures with good psychometric properties are needed. The aim of this study was to determine the psychometric properties of two scales that assess concerns about falling: the 16-item Falls Efficacy Scale International (FES-I) and the 7-item Short FES-I. Ceiling and floor effects, internal consistency reliability, and construct and discriminant validity were studied in cross-sectional data from 157 older adults with cognitive impairment. Ceiling effects, i.e. minimum scores indicating no concerns about falling, were more prevalent in the Short FES-I than the FES-I (14.0% vs. 3.2%). No floor effects were detected. Cronbach's alpha's for the FES-I and Short FES-I were .91 and .82, respectively. Non-parametric testing showed significant differences (p<.05) in mean scores of the scales according to sex, dizziness, falls history, ADL, timed-up-and-go, and fear of falling, indicating construct validity. Effect sizes (ES) confirmed good discriminant validity. The results of this study indicate the good psychometric properties of the FES-I and Short FES-I in older adults with cognitive impairment. The application of the 16-item FES-I may be desirable to prevent or minimise ceiling effects.

## SESSION 1015 (SYMPOSIUM)

### HEALTH MANAGEMENT, BEREAVEMENT SUPPORT, AND LATE LIFE AND DEATH PLANNING FOR PERSONS WITH INTELLECTUAL DISABILITIES

Chair: *J. Gray-Stanley, Public Health & Health Education, Northern Illinois University, Dekalb, Illinois*

Co-Chair: *E.A. Perkins, University of South Florida, Tampa, Florida*

This is the official symposium for the Formal Interest Group on Developmental Disabilities. Due to increased longevity in adults with intellectual disabilities (ID), health management, bereavement counseling, and planning for late life and death has become increasingly important. This symposium highlights research examining these issues. Bowers, Webber, and Bigby examined the management of health conditions of older adults with ID who live in group homes. They found that treatment was limited for several reasons, including a lack of information about the health conditions, practical considerations, and protecting residents from being moved to higher levels of care. Clute analyzed data from bereavement counselors working with adults with ID and specifically examined professional roles and responsibilities that social workers and counselors must adopt in serving bereaved individuals with ID. It was found that professional content should be delivered with a sense of empathy and compassion. Williams examined families' planning for late-life care of individuals with ID, at a time when parents would not be able to help with instrumental care, advocacy, or oversight roles. They found that conversations about death were more likely to occur between parents and their children with ID, rather than with their children without disabilities. Different types of late-life and death planning could be related to early developmental trajectories and family structural patterns. All presentations emphasize the necessity of both research and education for staff, families, and clients with respect to health management, bereavement support, and late-life and death planning for persons with ID.

### UNDERSTANDING AND MANAGING HEALTH CONDITIONS IN GROUP HOME RESIDENTS WITH INTELLECTUAL DISABILITY

B.J. Bowers[1], R. Webber[3], C. Bigby[2], *1. Nursing, University of Wisconsin-Madison, Madison, Wisconsin, 2. La Trobe University, Melbourne, Victoria, Australia, 3. Australian Catholic University, Melbourne, Victoria, Australia*

Life expectancy of people with intellectual disability has increased dramatically over the past few decades. As a result, people with intellectual disability are living long enough to develop the health conditions that are common among older adults. As many of these older adults are living in group homes, it is the group home staff who must often respond to age related health changes and their consequences. This paper reports on a longitudinal grounded theory study of 15 group homes and 17 residents with intellectual disability over age 50 in Victoria, Australia. Findings suggest that staff often delay seeking treatment for health conditions for several reasons; 1) protecting the resident from being moved to aged care, 2) assuming symptoms are related to prior conditions, 3) assuming that age related changes are irreversible and, 3) logistical challenges. Implications for staff development and provider education are discussed.

### FAMILY STRUCTURE, DEVELOPMENTAL TRAJECTORIES, AND PLANNING FOR LATE-LIFE AND DEATH IN FAMILIES OF INDIVIDUALS WITH INTELLECTUAL DISABILITIES

A.A. Williams, *University of Colorado at Colorado Springs, Colorado Springs, Colorado*

In a qualitative study involving 33 phenomenological interviews, family members of individuals with intellectual disabilities (ID) revealed three degrees of planning for late-life care of individuals with ID in anticipation of a time when parents would no longer be able to assist with instrumental care, advocacy, or oversight roles for their sons and daughters with ID. When talking about death, family members voiced hopes that those with ID would not suffer with illnesses during late life and that they would not be distressed or afraid of death. In many families, conversations about death had occurred between parents and their sons and daughters with ID, while conversations about illness and death were avoided among parents and their other sons and daughters. Early developmental trajectories and family structural patterns influenced family members' views of late-life care and preparation for death of both parents and family members with ID.

### ACCOMPANYING: MENTORING AND PREPARING BEREAVEMENT COUNSELORS TO BE WITH INDIVIDUALS WITH ID ON THEIR GRIEF JOURNEY

M. Clute, *1. Social Work, Eastern Washington University, Cheney, Washington, 2. Hospice of Spokane, Spokane, Washington*

Qualitative data from interviews with bereavement counselors working with adults with intellectual disabilities (ID) is further analyzed. The original grounded theory analysis included strategies for supporting successful movement through grief for clients with ID. The subsequent focus of the data analysis is on professional roles and responsibilities of social workers and counselors working with bereaved individuals with ID. Finer analysis and focused attention is on data gathered in answer to the following research questions: What has been helpful to you in preparing yourself to work with adults with cognitive disabilities? What would you recommend for other counselors to increase their expertise with this population? It is imperative that MSW students, as well as current practitioners be expected to provide empathetic and competent services to our aging individuals with ID and their families. The data offers not only hope, but suggestions on how to proceed.

## SESSION 1020 (PAPER)

### LEISURE ACTIVITIES FOR PERSONS WITH DEMENTIA

### THE ROLE OF LEISURE WITHIN THE DEMENTIA CONTEXT

R. Genoe[1], S. Dupuis[2], *1. Faculty of Kinesiology and Health Studies, University of Regina, Regina, Saskatchewan, Canada, 2. University of Waterloo, Waterloo, Ontario, Canada*

While our understanding of the subjective experience of dementia is growing, there is limited information on the role of leisure in the lives of persons living with early stage memory loss. This hermeneutic phenomenological study explored the meaning and experience of leisure within the dementia context. Community-dwelling persons living with early stage dementia engaged in four interviews and participant observation over several months to explore what leisure means to them. In addition, using the method of photovoice, participants took photos of subjects, objects, and spaces that were meaningful for their leisure. These photos were used to guide our discussion around leisure and dementia. Data, including interview transcripts, observation field notes, and photos were analyzed in a manner consistent with phenomenology. Findings revealed that participants experienced leisure within a complex paradox of challenge and hope. They struggled with the changes resulting from dementia, experiencing muddled thinking, fluctuating abilities, draining energy, frightening awareness, and disquieting emotions. However, participants counteracted these changes by tackling life with dementia. They were able to remain positive about their situations by reconciling life as it is, battling through by being proactive, living in relationships, being optimistic, and prolonging engagement in meaningful activity. Participants' stories and photos revealed that leisure played a vital role in coping with the changes they experienced as a result of dementia

### EVERYDAY, ENJOYABLE ACTIVITIES OF PERSONS WITH DEMENTIA

H. Menne, J. Johnson, C.J. Whitlatch, S. Schwartz, *Margaret Blenkner Research Institute, Benjamin Rose Institute, Cleveland, Ohio*

Research on persons with dementia has highlighted the importance of personhood and encouraged the continued engagement of persons with dementia in activities that they find enjoyable. Declines in cognitive ability may require that enjoyable activities be modified (e.g., books on tape rather than reading), or that new activities be introduced. Before practitioners and families can modify or introduce new activities, it is necessary to understand what activities persons with dementia are currently enjoying. As part of a longitudinal study on the stress and well-being of caregiving dyads, 267 persons with dementia completed up to 5 in-person interviews. During each interview, persons with dementia were asked: "What kinds of activities do you like to do now?" An iterative coding process was used to categorize the 1,984 responses to this question. From the first wave of data collection (n = 885 responses), over 50% of the responses were in the categories of: Socialize (19.77%), TV/Music/Radio (13.9%), Exercise/Recreation (11.19%), and Cognitive Stimulation (10.28%). Interestingly, the activities reported by persons with dementia are the same as activities reported in previous studies of older adults' leisure activities (Kelly et al., 1986; Verbrugge et al., 1996). Family caregivers and practitioners can ease their burden of providing care as well as enhance the personhood of persons living with dementia by: a) recognizing the everyday activities that persons with dementia already enjoy; b) adapting activities to be at the appropriate level for the person with dementia, and c) engaging persons with dementia in decisions about their daily activities.

### BENEFITS AND BARRIERS OF COMPUTER ACTIVITIES AND GAMES FOR PERSONS WITH DEMENTIA

S.H. Tak, C. Beck, *University of Arkansas for Medical Sciences, Little Rock, Arkansas*

The study examined the feasibility of providing a 12-week computer activity program for cognitively impaired elders in nursing homes. Fourteen residents with dementia completed the computer activity program. Observation data were collected using 462 observational logs of computer sessions. The mean age of participants was 82 years. Their cognitive impairment ranged from severe to mild dementia with a mean Mini Mental State Exam score of 14.9. On average, participants had 33 sessions and spent 936.5 minutes in the program. Sessions lasted 28 minutes on average. Prior to the program, participants neither had previous computer experience nor provided a computer training. All of them required an RA's assistance initially but the level of needed assistance become varied by the end of the program, ranging from simple watching, clicking, to performing simple-to-complicated activities. Participants with mild and moderate dementia preferred playing a cognitively challenging game such as solitaire, while participants with severe dementia tended to prefer simple games. The participants sang along with the music and talked about the pictures in the slideshows. The intensity of participation was high during sessions (mean score of 2.2 out of 3.0). The barriers that influenced participants' levels of engagement in CAG included cognition and physical health, technological problems, computer literacy and interests, and environmental factors. It is important to take into account different levels of cognitive and physical functioning and different interests and use adaptive accessories to increase participation in CAG and satisfaction with these activities.

## SESSION 1025 (PAPER)

## MEXICAN AMERICANS' HEALTH AND WELL-BEING

### SLEEP AND MORTALITY AMONG OLDER MEXICAN AMERICANS

B. Howrey, M. Peek, K. Ottenbacher, M. Raji, *UTMB, Galveston, Texas*

Poor sleep quality has been linked to many negative health outcomes: lower quality of life, poor cognition, falls, and premature death. Yet, little data exist on how poor sleep affects mental and physical health of older adults, especially older ethnic minorities. Older Mexican Americans, in particular, have increased rates of certain comorbidities that are linked to poor sleep quality, such as diabetes. To address this gap in the literature, we examine the effects of sleep problems on mortality over a 12-year period in a population based sample of older Mexican Americans, a fast growing segment of US population. Using five waves of data (1994-2006) on older Mexican Americans (Hispanic Established Population for the Epidemiologic Study of the Elderly – HEPESE) (n = 2,439), we use cox proportional hazard models (STATA 10) to model the risk of death as a function of chronic sleep problems. The results from the unadjusted Kaplan-Meier estimates show that increased chronicity of sleep problems are associated with decreased survival (p<.001). In addition, the cox models showed that having any sleeping problems during the last month is associated with increased risk of mortality (HR=1.20, 95% CI 1.05, 1.36) in models adjusted for age, gender, socioeconomic status, and body mass index. In conclusion, increased problems with sleeping are related to an increased risk of mortality in an older Mexican American sample. These findings have important clinical and public health implications. Sleep problems are under diagnosed among older adults and warrant attention as a risk factor for poor health outcomes.

### STABILITY OF SELF-RATINGS OF HEALTH: DIFFERENCES IN HEALTH OUTCOMES FOR OLDER MEXICAN AMERICANS

M.C. Sutton, G.I. Caskie, K.E. Gunnet-Shoval, *Education, Lehigh University, Bethlehem, Pennsylvania*

Self-rated health (SRH) has been studied as a predictor of physical and mental health outcomes; however, few studies have examined stability of SRH in older Mexican Americans. Data from the Hispanic EPESE were utilized to determine physical (ADL and IADL limitations, co-morbid health conditions) and psychological health (depression, cognition, life satisfaction) differences at an 11-year follow-up assessment, based on the stability/change of self-ratings of health over an 11-year period. The sample (n=1,118) included Mexican Americans aged 70.87 years on average (range=65-92), with a mean of 4.95 years of education (range=0-17). One-way MANOVAs indicated significant differences between SRH stability groups (declined n=402, stable n=478, improved n=238) in ADLs and IADLs as well as depression and life satisfaction (all ps<.001). Age group (65-69, 70-74, 75+) and sex were then examined as potential moderators of the relationship of SRH stability to health outcomes. Significant interactions with SRH stability with age group only were found for ADLs and IADLs (p=.035). Even with age group and sex controlled, all four significant main effects for SRH stability were maintained. Post hoc comparisons indicated that, at the 11-year follow-up, individuals whose SRH declined endorsed significantly greater ADL and IADL limitations and greater depression than individuals whose SRH improved or remained stable; also, those whose SRH improved had lower depression and greater life satisfaction than those whose SRH was stable. Thus, changes in self-ratings of health – declines in particular – may be an important factor in understanding differences in later-life health outcomes for Mexican American elders.

### ACCULTURATION AND SELF-ESTEEM FOR OLDER MEXICAN AMERICANS: DIFFERENCES BY ETHNIC SELF-IDENTIFICATION

G.I. Caskie, B.L. Perkins, C. DeBlaere, *Education and Human Services, Lehigh University, Bethlehem, Pennsylvania*

Although previous studies have found that self-esteem is positively enhanced by increased levels of acculturation among Mexican-American older adults, little research has explored these variables and the relationship between them as a function of ethnic self-identification. Therefore, the present study explores: first, the ways in which Mexican-American older adults differ across ethnic self-identification groups in terms of demographic characteristics and acculturation, and second, how the relationships of language acculturation and biculturality to self esteem differ across ethnic self-identification groups. Secondary analysis was conducted using the baseline Hispanic EPESE data that were available for a sample of 2689 Mexican Americans (1119 males, 1570 females) aged 65 to 99 years. Individuals self-identifying as Mexican (n=1233) had significantly less education (p<.001), less language acculturation, and reported less language biculturality than those self-identifying as Mexican-American (n=1210) or American (n=246) and were less likely to have been born in the US (p<.001), but did not differ in age or by gender. Although Mexican-Americans had significantly less education and language acculturation than Americans, no differences were observed in language biculturality. Both language acculturation and biculturality were significantly related to self-esteem in the total sample (p<.001); however, these relationships differed by ethnic self-identification group. Greater language acculturation was significantly related to higher self-esteem for the Mexican (p<.01) and Mexican-American groups (p<.001); greater language biculturality was significantly related to higher self-esteem only for the Mexican group (p<.05). Thus, how older adults of Mexican heritage choose to identify their ethnic group influences the relationship between acculturation and self-esteem.

### ALLOSTATIC LOAD IN TEXAS CITY: EXPLORING AGE- AND RACE/ETHNICITY-BASED PATTERNS

C. Mair[1], M. Cutchin[2], M. Peek[3], *1. North Carolina State University, Raleigh, North Carolina, 2. University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, 3. The University of Texas Medical Branch, Galveston, Texas*

Allostatic load is a composite physiological measure of the body's ability to adjust to stressors, with higher allostatic load indicating a lower ability to adjust. Theories of allostatic load suggest that racial/ethnic minorities, older adults, and individuals in particularly stressful contexts are likely to have elevated allostatic load. Although few studies have empirically examined race/ethnic differences in allostatic load, prior evidence finds that blacks, U.S.-born Mexican-Americans, and older adults score higher on allostatic load than whites and younger individuals. Foreign-born Mexicans tend to have lower allostatic load compared U.S.-born Mexican Americans. We analyzed data from the Texas City Stress and Health Study, a survey of individuals residing near a cluster of oil refineries (N=1300, aged 25-90 years). Using bivariate analyses and OLS regression of cross-sectional data, we examined age patterns in allostatic load according to racial/ethnic group as well as potential stressors and buffers of allostatic load. Bivariate analyses indicated that non-Hispanic blacks had a higher mean allostatic load compared to non-Hispanic whites (p=0.04) while recent immigrants of Mexican origin exhibited lower allostatic load than non-Hispanic whites (p=0.02) and non-Hispanic blacks (p<0.001). Age showed a curvilinear association with allostatic load (lower allostatic load in youngest and oldest groups), but the association differed by race/ethnic group. Effects of contextual stressors and social support also differed by race/ethnic group. We discuss the implications of these findings vis-à-vis the growing literature on health risk and allostatic load by highlighting the importance of investigating age- and race/ethnic-based patterns of this physiological measure.

## SESSION 1030 (POSTER)

## SEXUALITY AND SEXUAL BEHAVIOR

### THE ASSOCIATION OF SEXUAL TOUCHING WITH SEXUAL PROBLEMS AMONG OLDER ADULTS IN THE UNITED STATES

A. Galinsky, *University of Chicago, Chicago, Illinois*

Theoretical models of human sexual response and evidence from qualitative studies suggest that engaging in intimacy-enhancing, non-penetrative sexual behavior can affect the sexual functioning of both men and women. This study tests the hypothesis that frequency of sexual touching is negatively associated with the probability of experiencing the most common sexual problems. We use data from the 2005-2006 National Social Life Health and Aging Project. Our sample consists of the (N=1,433) respondents ages 57-85 who had sex in the past year. We use logistic regression to model the occurrence of each sexual problem, separately by gender, as a function of sexual touching, controlling for age, race-ethnicity, and health status, and adjusting for survey design. Men who usually engaged in sexual touching had 2.3 (95% CI 1.3, 3.9) times the odds of having trouble getting or maintaining an erection, and 2.1 (95% CI 1.2, 3.7) times the odds of feeling anxious about their ability to perform sexually, compared to men who always engaged in sexual touching. Similar or greater differences were found between men who sometimes, rarely, or never engaged in sexual touching, compared to those who always did, in the odds of experiencing those problems, as well as in the odds of not finding sex pleasurable, being unable to climax, and lacking interest in sex. Very similar results were also found for women. When sexual problems are defined as symptoms about which the respondent is "bothered" (a DSM-IV-TR criteria for diagnosing many sexual disorders), the association with sexual touching persists.

### OLDER MEN'S ATTITUDES ABOUT SEXUAL PERFORMANCE: THE EFFECTS OF ERECTILE DIFFICULTIES

K. Barnes, E.H. Thompson, *Sociology & Anthropology, College of the Holy Cross, Worcester, Massachusetts*

Earlier gerontological research has examined mass media presentations of male sexuality and men's erectile difficulties, older men's sexual behavior, and in small qualitative studies men's experiences with erectile difficulties. But few studies have examined older men's attitudes about the importance of an erection and sexual performance, and no study has compared the attitudes of men with and without ED towards sexual performance/competency. This study was designed to investigate if middle-age and older men perceive an erection and sexual performance as intrinsic to masculinity, and if performance attitudes are effected by men's own erectile ability and competency. Using a community-based sample of mature men (N = 133; age 45-83; mean age: 60) from the New England area, difference in means test initially revealed that men with ED rate their sexual relationship as significantly less satisfying than men without ED, and they also perceive being able to have and maintain an erection significantly more central to masculinity than men without ED. However, regression analyses reveal that it was not the condition of having ED that was central to satisfaction with sexuality, it was confidence with keeping an erection; and, men's gender ideology was the key determinant of men's beliefs about importance of an erection for sexual performance/ competency. These findings demonstrate men with erectile difficulties differ more among themselves than they different from same age men without ED. Clinicians working with men with ED should not assume they approach sexuality any different than men without ED.

### LESBIAN, GAY, BISEXUAL, TRANSGENDER (LGBT) ELDERS IN SENIOR HOUSING: NEED FOR INCLUSION

A. Frankowski, R. Perez, S. Goldman, E. Roth, R. Rubinstein, *UMBC, Baltimore, Maryland*

Long considered underserved and understudied, lesbian, gay, bisexual, and transgender (LGBT) older adults are often ignored, dismissed, and/or discriminated against in senior housing, leaving many feeling isolated and closeted. With the number of LGBT individuals over the age of 60 in the United States estimated to be between 1.75 and 4 million, research on this "invisible" cohort is crucial. To understand the unique cultural needs of this underrepresented population, we examine: 1) administrator, staff, family, and resident values and beliefs toward LGBT elders; 2) the barriers that exist in the culture of senior housing; and 3) the social and medical needs of LGBT elders to ensure their inclusion in residential settings. Two sources of data inform this work. We analyzed over 1500 fieldnotes and ethnographic interviews collected at eighteen senior housing settings for three NIA-funded studies. Sites include one active adult neighborhood, one continuing care retirement community, two independent living residences, and fourteen assisted living settings. Second, we analyzed academic sources and policy reports on LGBT elders to ascertain how they are included by researchers and analysts. Our findings indicate that the health and social needs of LGBT elders in senior housing are not being adequately addressed. We identify problems and offer solutions to preserve LGBT elders' dignity and quality of life. This will inform policy and practice on how to include and care for LGBT elders in these settings.

### THE ASSOCIATION BETWEEN PHYSICAL HEALTH AND SEXUAL ACTIVITY: MEDIATING FACTORS FOR MARRIED OLDER ADULTS

L.A. Snyder, T.M. Cooney, *Human Development and Family Studies, University of Missouri, Columbia, Missouri*

Although research has explored the connection between physical health and sexual activity, factors that mediate this association have received limited attention. Further, rarely does research examine these associations for married older adults and by considering relational and spousal variables. To address these gaps in the literature, this study investigated how married older adults' sexual attitudes and relationship factors, and spouse's health influence the association between their own physical health and sexual activity with their spouse. We broadly define sexual activity to include physical intimacy beyond intercourse, as older adult couples may adapt their intimacy when negotiating issues related to aging or health. The study's sample included 1801 married older adults ages 57 to 85 who participated in the 2005-2006 National Social Life, Health, and Aging Project (NSHAP) conducted by NORC. We use structural equation modeling (SEM) to assess how physical health is linked to sexual activity and the mediating role of the following: values and beliefs about sexuality and sex; marital relationship quality and satisfaction, length of the marriage, rating of the spouse as a confidant; and the spouse's health. Statistical analyses also assess gender differences in mediators of the health-sexual activity connection and offer insight into what factors are related to engagement in marital sexual activity even when people are not in good health. Our findings demonstrate the presence of sexual activity in a marriage regardless of age and health, encouraging researchers and clinicians to consider how couples may adapt their sexual activity to accommodate health challenges.

### THE SEX TALK IN LATER LIFE: MARITAL STATUS AND COMFORT DISCUSSING SEXUALITY WITH A PHYSICIAN

S. Adams, *Case Western Reserve University, Cleveland, Ohio*

Sexuality is an important aspect of well-being in later life, but sexual issues are infrequently discussed between older patients and physicians. Furthermore, little is known about how marital status is related to variation in older adults' comfort discussing sexuality in clinical settings. This paper explores the influence of marital status on level of comfort discussing sexuality with a physician in a sample of non-institutionalized adults between the ages of 57 and 85 residing in the U.S. Results from ordered logistic regression models illustrate that married/partnered (OR = 0.52), widowed (OR = 0.57), and never married (OR = 0.35) respondents have significantly lower odds of reporting greater comfort discussing sexuality relative to divorced respondents. These findings remain robust even after controlling for other factors, including sexual activity and gender, demonstrating the unique influence that the institution of marriage has on the level of comfort discussing sexuality with a physician. Moreover, two non-mutually exclusive hypotheses emerge from these findings that can be explored in more detail through future research. First, older adults have been socialized to regard sexuality as a highly private matter only to be discussed in the context of the marital relationship, but divorce has a liberalizing effect on reticence over sexual-based conversations. Second, older adults who have divorced are more likely to be comfortable discussing sexuality outside of marriage. These results also suggest the presence of unmet sexual health needs associated with marriage, further emphasizing the importance of physicians overcoming any reluctance to discussing sexuality with older patients.

### INAPPROPRIATE SEXUALIZED BEHAVIOR IN THE OLDER DEMENTED PATIENT

N. Javier, K. Kelly, A.O. Troncales, *Medicine/Geriatrics, Brown University, Providence, Rhode Island*

CASE: SG is an 83 year old male with history of depression on medication who presented to the clinic for memory loss secondary to underlying dementia. He was subsequently started on a cholinesterase inhibitor. Six weeks later, his daughter reported that the patient had not been taking his medications. He had exhibited inappropriate sexualized behavior towards another daughter with whom he lives with and who in turn had four children ranging from 2 to 14 years old. The patient would ask his daughter to engage in sexual activity despite her protest. While naked, he would also go to his teenage grandson's room and chat with him. Social work was immediately involved. The two major concerns were managing the patient's hypersexual behavior and protecting the children from potential sexual abuse. The local child protection agency evaluated the situation and instituted a safety plan for the children. The patient who was followed up in the clinic showed remorse and acknowledged that he had no recollection of the matter. He agreed to comply with all his medications with the addition of a low dose antipsychotic. Over the next two weeks, his hypersexual behavior improved. DISCUSSION: Approximately 7% of demented patients exhibit hypersexuality. This is defined as a clinically significant level of desire to engage in sexual behavior manifesting as changes in an individual's sexual appetite, preferences, and capabilities. Management strategies include pharmacologic and nonpharmacologic interventions. Commonly used medications include serotonin-reuptake inhibitors, tricyclic antidepressants, antiandrogens, and antipsychotic agents. Non-pharmacologic treatment includes behavioral therapy, environmental manipulation, counseling, and education.

### SOCIAL SUPPORT AND SEXUAL INTEREST IN OLDER ADULTHOOD: A PROFILE FROM THE NATIONAL SOCIAL LIFE, HEALTH AND AGING PROJECT (NSHAP)

J.L. Griffith, *1. Mount Sinai School of Medicine, Department of Geriatrics and Palliative Medicine, New York, New York, 2. James J. Peters VA Medical Center, Geriatric Research Education and Clinical Center, Bronx, New York*

It is intuitive to believe that having an emotionally supportive partner could positively impact your sexual interest, but a nationally representative evaluation of this relationship has never been examined. Utilizing data from the 2005-2006 National Social Life, Health and Aging Project (NSHAP), a population-based study of community dwelling older North Americans ages 57 to 85, I develop a profile of the relationship between social support and sexual interest among older adults with respect to gender, relationship status and health status. Results suggest that among partnered older adults emotional social support is positively correlated with sexual interest. In addition, health is negatively correlated with sexual interest and women are more likely to lack sexual interest. It is important to note that sexual interest does not vary from the young old to oldest old. These findings suggest having an uncritical partner to open up to is important for older adults in feeling sexual interest. These findings highlight how older adults in relationships with positive emotional social support are more likely to show sexual interest. Life transitions, such as a partner becoming ill, can negatively impact sexual interest. I conclude by urging increased training to interdisciplinary healthcare professionals about the importance of sexuality in older adulthood.

### DIFFERENCES IN HEALTH AND HEALTH CARE: ADDRESSING DIVERSITY IN SEXUALITY AND AGING

N. Orel, C. Stelle, W. Watson, *Gerontology, Bowling Green State University, Bowling Green, Ohio*

The CDC reports that 24% of persons living with HIV/AIDS are over age 50, and people ages 50-64 account for 13% of new HIV diagnoses in the United States (2008). Despite the increasing number of older adults being diagnosed with HIV/AIDS, older adults, health care providers, and society at large continue to view this population as being at low risk for sexually transmitted diseases. Although an adequate sexual history should be part of any comprehensive assessment of the physical/psychosocial needs of older adults in order to provide appropriate health care, often, this is an uncomfortable task for health care professionals. This poster will provide a guide for assessing needs of older clients in the arena of sexual health. Drawing upon the work of Hays (1996), the acronym ADDRESSING will be used to discuss the cultural factors and personal attributes that influence sexuality and the importance of these factors and attributes in health and health care. ADDRESSING includes: Age, Degree of physical ability, Degree of cognitive ability, Religiosity, Ethnicity and race, Socioeconomic status, Sexual orientation, Individualistic life experiences, National origin, and Gender. Additionally, it is important to identify the "dominant discourse" of each of the personal attributes in order to foster an understanding of the diversity that exists in the expression of sexuality. To appropriately and adequately serve older clients, health care providers must seek to understand the client's perspective and how each of these areas of diversity bears on one's attitudes, experiences, and needs regarding sexuality and sexual health.

## SESSION 1035 (PAPER)

## SOCIAL INTERACTION

### GIVING SUPPORT AND MENTAL HEALTH IN OLDER ADULTS: A NOVEL ASPECT OF SOCIAL INTERACTIONS

M. Smith, A. Fiske, *West Virginia University, Morgantown, West Virginia*

Receiving support has been studied extensively, while giving support to others is an overlooked component of social interactions that may have potential to promote better mental health in older adults. Giving support can include formal support giving through volunteer work or informal support giving to family, friends, or neighbors. It is unclear how giving support may relate to positive (well-being, life-satisfaction, positive affect, purpose in life, happiness, self-efficacy, and self-esteem) and negative (depression, negative affect, distress, and loneliness) mental health outcomes. This critical review of twenty-one studies examined the relation between both formal and informal support giving and mental health outcomes in late life. There is consistent evidence that volunteering and informal support giving are related to positive outcomes. Preliminary evidence suggests volunteering is related to fewer negative outcomes, but this relation has not been demonstrated in well-designed intervention studies. Informal support giving does not have a clear relation with fewer negative outcomes. Thus, support giving interventions may be effective in improving positive aspects of mental health in older adults. However, it is not clear whether volunteering or informal support giving can be used to decrease negative mental health outcomes. Recommendations for future research include clarifying the definition of support giving, expanding the number of well-designed intervention studies, identifying potential modifiers like social roles, controlling for confounding variables like disability, and using samples that are more diverse. Providing support is a unique and understudied aspect of social interactions that has potential to improve older adult well-being.

### THE RELATIONSHIP BETWEEN SOCIAL NETWORK TYPE AND NEGATIVE SOCIAL INTERACTION

I. Nam, *School of Social Work, Univeristy of Pittsburgh, Pittsburgh, Pennsylvania*

Despite an increase in research focused on the effects of negative social interaction on emotional health, little is known about the determinants of negative social interaction. Social network has been considered as a buffering factor as well as a stressor. This study examined the effect of social network type on negative social interaction. Data were from the Resources of Enhanced Alzheimer's Caregiver Health project. Participants (N = 793) were asked three questions relating to their social network with relatives and two questions relating to their social network with friends. Participants were also asked three questions concerning negative social interaction with others. A structural equation path model was used to examine the relationship among social network type and negative social interaction. There were good model fits to the observed data (CFI = .94; SRMR = .04; RMSEA = .07). Positive and negative predictions of negative interaction by social network were found to be significant. While a person with bigger social network with relatives is more likely to have negative social interactions, a person with bigger social network with friends is less likely to have negative social interaction. These results revealed that social network played an important and complex role in predicting negative social interaction of dementia caregivers. In addition, the results demonstrated the different effect according the type of social network in explaining the negative social interaction of caregivers of a demented family member. The results added information to our understanding of the structure of social networks.

### CONTINUITY AND CHANGE IN POSITIVE AND NEGATIVE SOCIAL EXCHANGES ACROSS ADULTHOOD

H. Ahn, *SOCIAL WORK, UNIVERSITY OF WISCONSIN MADISON, Madison, Wisconsin*

Research demonstrated substantial changes in social relations over time across adulthood. Socioemotional selectivity theory (Carstensen, 1992) suggests that an individual's pursuit of a social goal that varies as a function of age leads to different patterns of social relations across adulthood. There still remain many ambiguities, however, about the longitudinal patterns of change in social relations. Do positive and negative aspects of social relations (i.e., positive and negative exchanges) show similar patterns of change over time? Do the longitudinal patterns of change in social relations vary by respondents' gender and age? A series of 3(age groups) by 2(gender) by (time) analyses of variance, with repeated measures on time, were conducted to examine these questions. Data were from the Americans' Changing Lives study, for the subgroup of adults aged 24 to 96 (n=2,867) who participated in wave 1 (1986) and wave 2 interviews (1989). Older adults were found to maintain higher levels of positive exchanges with children and spouses than younger and middle-aged adults. In addition, considerable continuity in positive exchanges with children was found among older men and women. Declines in positive exchanges with spouses were observed across all age and gender groups. As expected, older adults reported least frequent experiences of negative exchanges with others, whereas younger adults revealed most frequent experiences of them. Negative social exchanges with children and friends increased over time among older men but not among other groups. Findings demonstrated substantial variability in longitudinal patterns of change in social exchanges across age and gender groups.

### WHAT'S IN A MEAL? RETIREMENT HOME TABLEMATE SOCIAL INTERACTIONS AND THEIR INFLUENCES

H. Keller, L. Curle, *Family Relations and Applied Nutrition, University of Guelph, Guelph, Ontario, Canada*

Social interaction is thought to be important for food intake and may improve consumption by older adults living in facilities. This study describes the social interaction that occurs among tablemates at mealtime in retirement homes, as well as those things that influence resident-to-resident interaction. Fourteen lunch time periods in a medium –sized retirement home (n~100) were the basis for qualitative participant observation. Two or three researchers collected data in each period, with each observing two tables, resulting in 63 individual table observations. The type, extent, and influences on social interactions among tablemates were recorded in detailed field notes. Qualitative thematic analysis, using a constant comparison procedure, was used to summarize and make sense of the data. A variety of social interactions occurred among tablemates including: making conversation, providing assistance, sharing, humouring, non-verbal expressions, appreciation and affection, and rebuffing, ignoring or excluding. Interactions were influenced by apparent tablemate roles (e.g. spectator), resident characteristics (e.g. language, health), staff, and the environment. Social interactions or lack thereof are believed to support or hinder the mealtime environment and thus food intake. Describing the types of interaction and monitoring what influences them is a first step towards promoting positive social engagement and improved food intake among tablemates.

## SESSION 1040 (SYMPOSIUM)

### THE INVOLVEMENT OF WOMEN IN THE WIDOWER'S TRANSITION

Chair: *A.J. Moore, Psychology, Ashland University, Ashland, Ohio*
Co-Chair: *D. Stratton, Psychology, Ashland University, Ashland, Ohio*
Discussant: *L.K. Soulsby, University of Liverpool, Liverpool, United Kingdom*

Widowhood is generally thought to be the province of older women, but many men also face the loss of spouse. Stereotypes of men feeling lost without a woman's care of domestic duties and of men needing a woman's companionship dominate the view of older widowers' needs. Men have a larger pool of available potential mates because of women's greater longevity and the social acceptability of older widowed men marrying younger women. Current research finds that widowed men interact frequently with women and get a variety of needs met in those interactions. This symposium highlights the ways that men interact with women, their motivations for doing so, and the presentation of their masculine selves in such interactions. Complex patterns emerge from the qualitative data collected in three separate studies of older widowed men in the United States, Canada, and the United Kingdom. Moore and Stratton explore numerous ways in which men interact with a "current woman" in their lives for tasks that are instrumental, emotional, or a combination. They consider whether men are protecting their masculinity or broadening it as they relate to the "current woman." Bennett's sample of men valued companionship but not remarriage. They expressed ambivalence about a new relationship, fearing the restrictions of a new marriage and still idealizing their deceased wives. Van den Hoonaard finds widowed men seriously considering new intimate relationships—even with some ambivalence—and doing so with definite beliefs about innate differences based on gender. Soulsby acts as discussant.

### FINDING THE NEW "NORMAL": A WIDOWED MAN AND THE "CURRENT WOMAN"

A.J. Moore, D. Stratton, *Psychology, Ashland University, Ashland, Ohio*

Older men experience loss in reciprocal roles when their wives die. A study of 70 older widowed men reveals a variety of ways in which men adjust to that loss. In almost every case, a "current woman" was involved in helping the man in some "womanly" way, from giving advice to being a good listener to becoming his new partner. Activities involved in a "current woman" relationship are identified as instrumental, emotional, or a combination. Seeking instrumental help can have emotional motivation; also, motives for contact can change. Two interactional patterns with instrumental components emerge. In the first, the "current woman" does tasks commonly seen as feminine, allowing the man to avoid those tasks. In the second, the man appears to seek to broaden his own skills so that he can do something his wife had done. These two patterns may represent different ways of considering one's masculinity.

### YOU HAVE TO HAVE SOMEONE: WIDOWERS TALK ABOUT THEIR EXPERIENCES WITH WOMEN

D.K. van den Hoonaard, *Gerontology, St. Thmas University, Fredericton, New Brunswick, Canada*

One of the most ubiquitous stereotypes regarding widowers is captured in the phrase that upon becoming widowed, "women grieve and men replace." This paper looks at how older widowers talked about their relationships with women as participants in an in-depth interview study of twenty-six widowers in Atlantic Canada and Florida who were between 56 and 91 years of age. The researcher analyzed the interviews using discourse analysis with a symbolic-interactionist perspective. The subject of entering into a relationship with and/or marrying a new woman was a top-of-mind issue for these widowers. Their attitudes about repartnering were diverse, often ambivalent, and reflected beliefs about innate differences based on gender. This paper concludes with the suggestion that masculinity has a noticeable effect on the men's interpretation and relating of their relationships with women. Presentation measurable objective: Participants will be able to give two examples of how widowed men's sense of their masculinity as verbalized in their views on repartnering.

### "YOU'RE NOT GETTING MARRIED FOR THE MOON AND THE STARS": OLDER UK WIDOWERS'S AMBIVALENCE TOWARDS NEW RELATIONSHIPS

K.M. Bennett, *Psychology, University of Liverpool, Liverpool, United Kingdom*

Data suggests that older widowers are more likely to remarry than older widowed women. However, relatively little is known about the attitudes of older widowers to new intimate relationships and remarriage. In this study of 60 widowers, more than half discussed their attitudes to, and experiences of, these relationships. However, none of the widowers had remarried and those who described themselves as repartnered were in LAT relationships. The primary reason that men gave for wanting, or participating in, new relationships, was companionship. Relatively few men discussed the desire for sex or the need for domestic comforts. One striking feature was the ambivalence men expressed towards these relationships. Men often made reference to their deceased wife as an ideal. They were also wary of the restrictions that married life might place on them. Thus, the decisions about making new intimate relationships is not as straightforward as might have been thought.

## SESSION 1045 (SYMPOSIUM)

### TIPS FOR SUCCESSFUL CAREERS IN CLINICAL GEROPSYCHOLOGY: RESEARCH, PRACTICE, AND PUBLIC POLICY

Chair: *J.M. Dzierzewski, Clinical & Health Psychology, University of Florida, Gainesville, Florida*
Co-Chair: *S.M. Foster, Univerity of Colorado at Colorado Springs, Colorado Springs, Colorado*
Discussant: *B.G. Knight, University of Southern California, Los Angeles, California*

Clinical geropsychology is an emerging sub-specialty of clinical psychology. The foci of clinical geropsychology includes investigating age-related psychological function, providing clinical care to older adult patients, and advocating for public policy changes that support the mental health of older adults. This symposium will educate emerging students in geropsychology and junior-level geropsychologist about how to best prepare for successful careers in the field. Leaders in the areas of (1) research, (2) practice, and (3) public policy will explore emerging trends and ways to maximize potential within each of these prospective career trajectories. This symposium is geared toward aspiring geropsychologists with questions about possible career tracks within geropsychology. National leaders in geropsychological research, practice, and public policy will provide sage advice garnered through personal experience. Students and junior-level geropsychologists will not only be presented with information regarding careers options, but will also be exposed to "helpful tips" for success in each of the above-mentioned career tracks. Whether students are at the beginning or nearing the end of their graduate experience, they will gain valuable insight and specific tips for negotiating the transition from student to professional geropsychologist. A nationally recognized discussant will then highlight overarching themes between the various careers paths described. Lastly, opportunity will be provided for questions and interaction with symposium participants.

### A SUCCESSFUL RESEARCH CAREER IN CLINICAL GEROPSYCHOLOGY: BARRIERS AND OPPORTUNITIES

S. Meeks, *Dept. of Psychological & Brain Sciences, University of Louisville, Louisville, Kentucky*

The growing field of clinical geropsychology is in desperate need of academic researchers who will expand our scientific base and improve training for the next generation. Barriers to development of new geropsychology researchers include the availability of excellent clinical positions in the VA system, and lack of awareness of, or interest in, clinical geropsychology among other academic researchers, despite relatively strong postdoctoral training and federal funding opportunities. This talk will address promising areas of research, preparation for academic positions, and survival skills for transition from postdoc to faculty positions.

### "POINTS TO CONSIDER IN PLANNING FOR A SUCCESSFUL CAREER PROVIDING PSYCHOLOGICAL CARE TO OLDER ADULTS"

D. Lane, *1. VA Puget Sound Healthcare System, Geriatrics and Extended Care Service, Tacoma, Washington, 2. Univ of Washington School of Medicine, Dept of Psychiatry, Seattle, Washington*

The increasing size of the older adult segment in our population brings new challenges and opportunities for healthcare providers, including psychologists. In the domain of clinical practice, there is a clear need for more geropsychologists (psychologists who specialize in geriatric mental health care). Furthermore, there is an even greater need for general psychologists who are prepared to incorporate working with older adults into their overall practice. As a practicing geropsychologist, the presenter has first-hand knowledge (gained through both didactic coursework and professional experiences) of providing clinical care to older patients. In this talk the presenter will discuss the characteristics that best enable a psychologist to work clinically with older adults, and will share insights gained through years of working with this population. The goal of this talk is to encourage students considering geropsychological practice through providing a balanced and realistic view of what may be expected in practicing as a clinical geropsychologist.

### ADVOCATING FOR PUBLIC POLICIES TO SECURE FUTURE SUCCESSFUL CAREERS IN GEROPSYCHOLOGY

M.P. Norris, *Independent Practice, College Station, Texas*

Whether early career geropsychologists will focus their careers in research or clinical practice, it is imperative that they learn how to advocate for their profession and the recipients of geropsychology services. This presentation will cover: (1) the reasons we need to focus on public policy, (2) fundamentals about the structure and policies of Medicare and Medicaid, (3) recent examples of successes and failures in advocating for public policies that improve geriatric mental health care, and (4) actions that all geropsychologists should take to improve older adults' access to mental health services.

## SESSION 1050 (SYMPOSIUM)

### TRANSITIONS ACROSS THE LIFESPAN AMONG A GROWING RACIAL AND ETHNICALLY DIVERSE POPULATION: ADDRESSING THE HEALTH, SOCIAL, PSYCHOLOGICAL NEEDS, AND POLICY IMPLICATIONS OF AN AGING SOCIETY

Chair: *T. Baker, University of South Florida, Tampa, Florida*

There is a renewed commitment to addressing the health, social and psychological well-being of racial and ethnic elderly minority populations. This is a critical undertaking considering that many minority adults are disproportionately diagnosed with more severe and debilitating physical and psychological illnesses, experience a greater impact on social well-being and financial burdens cross the lifespan, and experience more transitions across the lifespan than majority populations. These processes and transitions of adult development are complex, multifaceted and interrelated. The Task Force on Minority Issues in Gerontology will present a symposium focusing on social, financial, and psychological transitions that impact our growing racial and ethnically diverse aging society. It will highlight on levels of analysis and issues on how various factors are predicated by the relationship and impact on adult development and aging, with policy implications. Presenters will offer a level of expertise on the issues surrounding transitions among various racial and ethnic populations throughout the United States. Dr. David Chiriboga will discuss theoretical models and stages of transitions, while addressing immigration and acculturation experiences among racially diverse groups. Dr. Angelica Herrera will offer information on long-term care needs and policy implications for elderly Mexican-Americans. Dr. Mindi Spencer will provide an overview of health-related quality of life and caregiving and social needs among elderly American Indians. Finally, Ms. Sontra Carmouche will discuss the challenges facing social and psychological transitions, post hurricane Katrina, experienced by local elderly minority communities in New Orleans.

### TRANSITIONS ACROSS TIME AND SPACE

D.A. Chiriboga, Y. Jang, *Aging and Mental Health Disparities, University of South Florida, Tampa, Florida*

The concept of transitions originated in the early 1900s, with studies of how agrarian societies handled comprehensive role and status changes associated with such normative and public circumstances as reaching adulthood, marriage, and death. The three stages in the classic transitions model include (1) letting go, (2) learning what how to behave in the new set of roles, and (3) re-entering society. More recently the concept has been applied to unexpected as well as expected changes in more developed societies such as the United States. This presentation begins with a consideration of theoretical models of transitions, and then presents findings from three studies of transitions. The first is a life span study of marital separation that included non-Hispanic Whites, Blacks, Hispanics, and Asians. The second and third consider the immigration experiences of Mexican American and Korean elders, from the perspective of acculturation as a marker of the transitional experience.

### MEXICAN AMERICAN FAMILIES' LONG-TERM CARE PREFERENCES: POLICY IMPLICATIONS OF COMPETING CULTURAL TRADITIONS, NEED, AND STRUCTURAL BARRIERS

A.P. Herrera[1], J.L. Angel[2], *1. Geriatric Psychiatry, UCSD, La Jolla, California, 2. University of Texas at Austin, Austin, Texas*

For Mexican-American families, taking care of frail and disabled relatives at home has been a time-honored cultural tradition. Reliance on family caregivers for long-term care, however, is being challenged by increasing rates of disability, changing family dynamics, diminishing resources, and geographic mobility. The national trend toward cost-saving home and community based services (HCBS) offer promising alternatives. We draw on epidemiologic and qualitative data to inform an overarching framework of Mexican Americans' use of and preferences for a range of institutional long-term care and HCBS (e.g. hospice, ADHCs). Our findings indicate that long-term care use is driven by caregivers' complex negotiation between cultural norms (e.g., familism, gender roles), caregiver burden, accessibility of linguistically and culturally congruent services, family support, and elders' eligibility for public sources of long-term care funding, such as Medicaid. Additional model testing is critically needed to ensure accurate projections of long-term care needs and costs in this community.

### THE CHALLENGES FACING THE ELDERLY DISPLACED AFTER HURRICANE KATRINA AND ISSUES ASSOCIATED WITH REBUILDING

T. Baker[2], S.M. Carmouche[1], *1. New Orleans Council on Aging, New Orleans, Louisiana, 2. University of South Florida, Tampa, Florida*

The elderly in New Orleans enjoyed an array of social, recreational, and nutritional services provided by the New Orleans Council on Aging (NOCOA) /Orleans Area Agency on Aging to remain independent. Outreach efforts to locate seniors, who were displaced after Hurricane Katrina made landfall on August 29, 2005, in the neighboring communities included working with shelters that were operated by community organizations, churches, the American Red Cross and the Federal Emergency Management Agency. When NOCOA returned to New Orleans in January 2006, it begin to re-build programs that were previously offered while creating new services to deal with some of the challenges facing seniors who had returned to the sparsely populated neighborhoods with limited resources. While it has been over four years since the storm, challenges facing the elderly and the agency are still constant.

### HEALTH-RELATED QUALITY OF LIFE AMONG AMERICAN INDIANS ACROSS DIFFERENT CAREGIVING TYPES: LESSONS FROM THE EARTH STUDY

S. Spencer[1], R. Goins[2], L.C. McGuire[3], J.A. Henderson[4], J. Goldberg[5], *1. Health Promotion, Education, and Behavior, University of South Carolina, Columbia, South Carolina, 2. West Virginia University, Morgantown, West Virginia, 3. Centers for Disease Control and Prevention, Atlanta, Georgia, 4. Black Hills Center for American Indian Health, Rapid City, South Dakota, 5. University of Washington and Seattle Department of Veterans Affairs, Seattle, Washington*

Data from the Education and Research Towards Health (EARTH) study were used to examine health-related quality of life (HRQoL) as measured by the SF-12 among a large sample of American Indian caregivers and noncaregivers to investigate variations in mental and physical HRQoL based on care recipient characteristics. We classified participants as noncaregivers (n = 3610); routine caregivers, who provide personal care to an adult (n = 467); or specialized caregivers, who provide personal care to an adult with mental or physical difficulties (n = 286). Results indicated that noncaregivers reported significantly better mental health than either routine or specialized caregivers ($p < 0.01$), while specialized caregivers had the worst physical health ($p < .01$). These results suggested that mental health might be compromised by providing care to an adult, regardless of care recipient need. However, specialized caregivers are at greatest risk for the deleterious physical effects associated with caregiving.

## SESSION 1055 (PAPER)

## WELL-BEING OF OLDER IMMIGRANTS

### MENTAL HEALTH AND CULTURAL IDENTITY AMONG OLDER NEW AMERICANS: A CROSS-SECTIONAL STUDY OF BOSNIAN REFUGEES IN ST. LOUIS

H. Matsuo[1], A. Karamehic-Muratovic[2], L. Willoughby[1], W. Cheah[3], *1. Saint Louis University, St. Louis, Missouri, 2. Missouri Institute of Mental Health, St. Louis, Missouri, 3. Southern Illinois University at Edwardsville, Edwardsville, Illinois*

Previous studies with refugees and immigrants suggest that poorer mental health is associated with lower levels of ethnic identity and higher levels of acculturative stress. Few studies have, however, examined these relationships among older refugees. The goal of this study was to examine the relationship between psychological distress and indicators of cultural identity among older adults within the St. Louis Bosnian refugee community, as well as to compare this relationship with the same one for a younger cohort of adults. Secondary analyses were performed on a sample of Bosnian refugees in St. Louis who responded to a mail-in and in person mental health and substance abuse assessment. The sample included individuals who have resided in the U.S. for at least 5 years, arrived in the U.S. at age 45 or older, and completed cultural identity indicator questions. Compared with younger adults (age 50-59 years, n=43), the older adults (age 60 and above, n=22) had higher levels of depression, paranoia, and somatic symptoms (all M-W-U $Ps<.05$). Correlation analyses revealed that while stronger ethnic identity was associated with lower levels of depression and anxiety symptoms among young adults, this relationship was not observed with older adults. Instead, identity with U.S. values among older adults was positively correlated with symptoms of depression and anxiety. Future research should highlight the importance of ethnic identity and integration when considering the mental health of older refugees.

### VULNERABILITY OF LATINO AND ASIAN IMMIGRANT ELDERS WITH LIMITED ENGLISH PROFICIENCY: RESULTS FROM THE CALIFORNIA HEALTH INTERVIEW SURVEY

C.B. Worley[1,2], G. Kim[1,2], R.S. Allen[1,2], L.D. Vinson[1,2], M.R. Crowther[1], P. Parmelee[1,2], *1. Department of Psychology, University of Alabama, Tuscaloosa, Alabama, 2. Center for Mental Health and Aging, Tuscaloosa, Alabama*

Language barriers pose problems in health care for foreign-born individuals in the United States. The purpose of this study was to explore linguistic disparities in health status and health service use among Latino and Asian immigrant older adults. Drawn from the California Health Interview Survey (CHIS), Latino and Asian immigrant adults aged 60 or older (n = 1,745) were included in the present analysis. Background characteristics, health status, and health service use and barriers to service use were compared across three language groups in Latinos and Asians. These three groups included 1) older adults who have limited English proficiency (LEP), 2) older adults who are proficient in English but also speak another language at home (EP), and 3) older adults who speak English only. Results showed that Latino and Asian elders with LEP tended to have poorer self-rated health and higher psychological distress compared with EP and English only groups. Latino and Asian elders with LEP were less likely than EP and English only groups to use health services. Barriers to service use (e.g., difficulty understanding written information at doctor's office) were evident among Latino and Asian LEP elders. Findings from these results suggest that Latino and Asian elders with LEP are at high risk for poor physical and mental health outcomes and inadequate health care. Health care systems must be poised to address language needs of older immigrant adults in order to reduce linguistic disparities, improve access to care, and ultimately improve health status for these vulnerable populations.

### EXPLORING THE LOCAL, NATIONAL AND TRANSNATIONAL SOCIAL NETWORKS OF OLDER PEOPLE FROM BANGLADESHI AND PAKISTANI COMMUNITIES LIVING IN THE UK

C. Victor[1], W. Martin[1], M. Zubair[2], *1. Brunel University, Uxbridge, United Kingdom, 2. University of Reading, Reading, United Kingdom*

Introduction: Within the next 20 years the proportion of older people living in minority black and ethnic communities within the UK will significantly increase and this rise will be especially notable within Bangladeshi and Pakistani communities. However, we know little about growing older within these transnational communities. In particular, there is limited evidence documenting the family and social networks of these groups and how these relationships are experienced and mediated across both time and space. Methods: In this paper we draw on data from our ESRC New Dynamics of Ageing project: Families and Caring in South Asian Communities to explore our participants' social networks and family relationships using both our 110 semi-structured interviews conducted with a diverse group of Bangladeshi and Pakistani men and women aged 50+ years and the social network 'maps' created by 109 of these participants. Findings and Conclusions: We first examine the range of styles within which participants created their network maps which ranged from 'traditional' networks diagrams to 'lists' of the geographical location of network members. Of the 109 network maps, 42 were drawn as spidergrams/maps and the remaining 67 as lists or other textual forms. We then explore the social networks depicted in these maps and consider the interconnections between the descriptions of participants' social networks and their spatial location provided in the interviews with those derived from the social network maps. This process highlights the complex spatial dimension of family and social relationships which are expressed at local, national and transnational levels.

### PRIMARY CARE AND RECEIPT OF PREVENTIVE SERVICES AMONG OLDER IMMIGRANTS IN CALIFORNIA

A. Chattopadhyay, *University of California at San Francisco, San Francisco, California*

This study examines the effects of race/ethnicity and U.S. nativity on utilization and outcome of primary care services to determine whether immigration status is associated with increased racial/ethnic disparities in primary care. The data come from the 2001 California Health Interview Survey. Access to primary care is measured by presence of a usual source of care; utilization is measured by physician visits in the past year, receipt of flu vaccination and other age appropriate tests. Also examined are rates of hospitalization and emergency department (ED) visits for ambulatory care sensitive conditions (ACS) as a marker for quality of primary care. Hospitalization and ED visits for ACS conditions such as Diabetes and Asthma indicate inadequate primary care. Elderly persons who self report the presence of these conditions constitute the population at risk for this analysis. Bi-variate analysis reveals that immigrants are significantly less likely to have access to a usual source of care and utilize less primary care services, including fewer physician visits. Despite the seeming inadequacy of primary care services, immigrants have lower rates of ACS hospitalization and ED visits. Multivariate logistic regression with race/ethnicity and nativity as predictors of ACS hospitalization/ED visit, adjusting for demographic, socioeconomic status (education, poverty level), insurance status and having a usual source or care also revealed relatively better outcome for the foreign-born population

### DOES AGE MODERATE BARRIERS TO THE PUBLIC INCORPORATION OF LATINO AND ASIAN IMMIGRANTS IN THE UNITED STATES?

Y. Fan, M. Silverstein, *University of Southern California, Los Angeles, California*

Since1965 sources of immigration to the United States have shifted from European points of origin to those in Latin American, Asia, and the Caribbean. However, little is known about the experience of older immigrants from these regions and their successful incorporation and acculturation to U.S. society. This paper examines how a different perception of social fear among older Asian and Latino immigrants is formed by acculturation factors, such as preferred language use, and by demographic factors such as race, national origin and age. Social fear is defined as being socially excluded by being treated dismissively in public life. We use data from the National Latino and Asian American Study conducted from 2001 to 2003, selecting those over 50 years of age (N=1285). We find that aging immigrants' race and language base predict how strongly aging immigrants feel they have been treated without courtesy in daily life. Aging immigrants from Vietnam and Cuba feel they have been treated more courteously than immigrants from Mexico and China. Age and number of years in the U.S. are negatively related to respondents' perception of public hostility. Results suggest that the age moderates the effect of race and poor English language proficiency on the risk of experiencing a hostile public environment. Age may temper race- and language-based barriers to the public incorporation of immigrants through social interaction. Whether this effect is due to greater respect accorded elders or their marginalized (i.e., non-threatening) status is a question discussed in terms of competing explanations.

## SESSION 1060 (SYMPOSIUM)

### BODY COMPOSITION IN OLD AGE: CAUSES AND CONSEQUENCES

Chair: *A. Koster, National Institute on Aging, Bethesda, Maryland*
Co-Chair: *S. Steholm, National Institute for Health and Welfare, Turku, Finland*
Discussant: *S.B. Kritchevsky, Sticht Center on Aging, Wake Forest University School of Medicine, Winston-Salem, North Carolina*

Body composition changes with age with a tendency to gain fat mass and lose muscle mass and strength. These changes in body composition have been linked to increased risk of disability and poor health. This symposium will explore some causes and consequences of an unfavorable body composition in old age. Low muscle strength is a stronger predictor of functional limitations and poor health than low muscle mass. Therefore, it is important to understand what factors are associated with muscle weakness. Stenholm and colleagues evaluate the association between obesity duration and muscle strength in old age in a representative Finish population. Body fat distribution also changes with age with increases in abdominal visceral fat and intramuscular fat and declines in subcutaneous fat. In particular, visceral fat has been strongly associated with metabolic risk while subcutaneous thigh fat has been associated with a more favorable metabolic profile. Kim and colleagues present the combined relations of visceral fat and thigh subcutaneous fat with metabolic syndrome in the AGES-Reykjavik Study. The association between fat distribution and mortality has not been studied extensively and is the focus of the last two presentations. The associations between specific fat depots in the abdomen and thigh with mortality are evaluated by Koster and colleagues in the AGES-Reykjavik Study and by Harris and colleagues in the Health ABC Study. This symposium provides a better understanding in how obesity duration is related muscle weakness in old age and how specific fat depots are related to metabolic syndrome and mortality.

### ASSOCIATION BETWEEN WEIGHT HISTORY AND MUSCLE STRENGTH IN OLDER ADULTS

S. Steholm[1], J. Sallinen[2], A. Koster[3], T. Rantanen[2], P. Sainio[1], M. Heliövaara[1], S. Koskinen[1], *1. Department of Health, Functional Capacity and Welfare, National Institute for Health and Welfare, Turku, Finland, 2. University of Jyväskylä, The Gerontology Research Centre, Jyväskylä, Finland, 3. National Institute on Aging, Laboratory for Epidemiology, Demography and Biometry, Bethesda, Maryland*

This study aims to examine the association between weight history and muscle strength, and whether the association is mediated by inflammation and insulin resistance. Based on a nationally representative sample of the Finnish population of 55 years and older (1138 women and 883 men), body mass and body height, maximal hand grip strength, C-reactive protein (CRP), insulin resistance, were measured. Recalled weight at 20, 30, 40, and 50 years of age were recorded. Earlier onset of obesity was associated with lower hand grip strength ($p < 0.001$) after controlling for age, sex, education, smoking, alcohol use, physical activity, several chronic diseases and current body weight. The associations remained highly significant even after adjusting for current CRP and insulin resistance and these variables had only minor role in explaining the association between weight history and hand grip strength. In conclusion, long-term exposure to obesity is associated with processes leading to declined muscle strength.

### JOINT ASSOCIATION OF VISCERAL AND THIGH SUBCUTANEOUS FAT WITH THE METABOLIC SYNDROME: THE AGES-REYKJAVIK STUDY

L. Kim[1,3], A. Koster[1], G. Eiriksdottir[2], S. Sigurdsson[2], P.H. Chaves[3], L.J. Launer[1], V. Gudnason[2,4], T. Harris[1], *1. National Institute on Aging/ NIH, Bethesda, Maryland, 2. Icelandic Heart Association, Kopavogur, Iceland, 3. Johns Hopkins University, Baltimore, Maryland, 4. University of Iceland, Kopavogur, Iceland*

This study examined the joint association of visceral adipose tissue (VAT) and thigh subcutaneous adipose tissue (ThSAT) with the metabolic syndrome (MetS). We analyzed data from 1169 obese older adults (BMI>30kg/m2) in the AGES-Reykjavik Study. VAT and ThSAT were measured by CT, with high and low levels defined by the highest and lowest tertiles, respectively. Prevalence of MetS in the low VAT/ high ThSAT group was 34% among women and 46% in men, and markedly higher in the high VAT/ low ThSAT group, with 71% of women and 75% of men affected. After adjusting for age and other key factors, the odds of MetS in the high VAT/ low ThSAT group was significantly higher compared to the low VAT/ high ThSAT group (women: OR=5.14, 95%CI 2.76-9.59; and men: OR=3.88, 95%CI1.48-10.16). In the obese, a regional fat distribution of higher VAT and lower ThSAT is associated with increased metabolic risk.

### FAT DISTRIBUTION AND MORTALITY: THE AGES-REYKJAVIK STUDY

A. Koster[1], L.J. Kim[1], G. Eiriksdottir[2], V. Gudnason[2], T. Aspelund[2], L.J. Launer[1], T. Harris[1], *1. National Institute on Aging, Bethesda, Maryland, 2. The Icelandic Heart Association, Reykjavik, Iceland*

This study examined associations between fat distribution and all-cause mortality. Data were from 2207 men and 2940 women, aged 66-96 years in AGES-Reykjavik Study. Abdominal visceral fat (VAT) and subcutaneous fat (SAT), and thigh intermuscular fat (ThIMF) and subcutaneous fat (ThSAT) were measured by CT. Over on average 4.8 years of follow-up, 401 men and 335 women died. In men, every standard deviation (SD) increase in ThIMF was related to a significantly greater mortality risk (HR:1.18, 95%CI:1.05-1.31) after adjustment for age, education, smoking status, height, and BMI. The abdominal fat depots were not associated with mortality risk in men. In women, a 41% increased mortality risk was found per SD increase in VAT (HR:1.41, 95%CI:1.21-1.63) while fat depots in the thigh were not associated with mortality. Fat distribution related to mortality differed between men and women in that the significantly predictive depot was ThIMF in men and VAT in women.

### MAKING SENSE OF BODY MASS INDEX AND BODY COMPOSITION RISK IN OLD AGE: THE HEALTH AGING, AND BODY COMPOSITION STUDY

T.B. Harris[1], A.B. Newman[2], B. Goodpaster[2], S.B. Kritchevsky[3], S. Satterfield[4], S.R. Cummings[5], M. Visser[6], *1. Laboratory of Epidemiology, Demography, and Biometry, IRP, NIA, Bethesda, Maryland, 2. University of Pittsburgh, Pittsburgh, Pennsylvania, 3. Wake Forest University, Winston-Salem, North Carolina, 4. U of Tennessee-Memphis, Memphis, Tennessee, 5. San Francisco Pacific Medical Center, San Francisco, California, 6. Vjre University, Amsterdam, Netherlands*

The relationship of body mass index (BMI) to mortality in old age is controversial. Associations show greater, no, or inverse risk for heavier versus thinner persons. We used data on BMI and body composition (fat percent (F%), leg lean (LL) mass from dual x-ray absorptiometry; visceral fat (VF), thigh muscle mass (TM), thigh muscle infiltrating fat (TMI), thigh muscle density (TMD), and thigh subcutaneous fat (TS). BMI was inversely related to mortality in men; there was no risk in women. BMI risk became positive when adjusted for TM, but TM was no longer significant when adjusted for strength. VF was associated with death, but health conditions and cigarette smoking attenuated these risks, especially in men. BMI in old age is a surrogate for factors that are more proximate causes of mortality. As a result, with age, it is increasingly complex to understand risk of mortality related to simple body weight.

## SESSION 1065 (PAPER)

## EPIDEMIOLOGY OF FUNCTIONAL STATUS

### USING LINKED MEDICARE CURRENT BENEFICIARY SURVEY (MCBS) AND MEDICARE CLAIMS HISTORY DATA FOR RETROSPECTIVE ACTIVE COHORT STUDIES OF CHRONIC CONDITIONS AND FUNCTIONAL DIFFICULTIES

M. Loeb, Y. Gorina, N. Elgaddal, M. Eberhardt, *National Center for Health Statistics, Hyattsville, Maryland*

The number of older persons living with chronic conditions, such as diabetes, heart disease, and dementia has increased significantly. About 83 % of Medicare beneficiaries have at least one chronic condition. Since 1991, The Center for Medicare and Medicaid Services (CMS) has conducted the MCBS (an active cohort survey), and collects Medicare claims data available at the time of the survey. The recent development of the Chronic Condition Warehouse (CCW) and linkage to Medicare claims submitted prior to and after the survey for more than 92,000 MCBS participants allowed us to build an analytic database and compare changes in functional difficulties among persons with and without specific chronic conditions. Diabetes was selected as pilot condition because, if improperly managed, it may lead to debilitating complications and hasten the loss of functional activities. We used data collected by CMS from 1991 to 2006. Preliminary findings indicate that about 27% of cohort participants aged 65 and over either self-reported diabetes during their MCBS interviews or had Medicare claims data indicating diabetes based on the current CCW algorithm. About 55% of non-diabetic cohort members had severe functional difficulties versus 75% of diabetic cohort members. The difference in the percent with severe complex activities limitations is about 10% (25% vs. 35% for non-diabetic versus diabetic cohort members respectively). The steps involved in building the database and defining functional and diabetic status will be described. The limitations and benefits of using linked data from the interviews with available claims records will also be discussed.

### OVERT AND COVERT BRAIN IMAGING CHARACTERISTICS OF ADULTS WHO MAINTAIN COGNITIVE FUNCTION VERY LATE IN LIFE

C. Rosano[1], H. Aizenstein[1], A.J. Fiocco[2], A.B. Newman[1], Y. Du[1], V. Venkatraman[1], T. Harris[3], K. Yaffe[2], *1. University of Pittsburgh, Pittsburgh, Pennsylvania, 2. University of California, San Francisco, San Francisco, California, 3. National Institutes of Health, Bethesda, Maryland*

We previously found that half of community-dwelling older adults age without substantial cognitive decline. We now examine the brain characteristics of adults maintaining cognitive function late in life. Brain magnetic resonance imaging (MRI) with diffusion tensor were obtained in 274 participants of the Health Aging, Body Composition Study (82.9 years, 56% women, 42% blacks) who had received regular cognitive evaluation during 10 years prior to the MRI. Overt and covert MRI abnormalities (atrophy and mean diffusivity) were quantified for regions important for memory (hippocampus, entorhinal cortex, parahippocampus) and executive control function (middle frontal gyrus, anterior cingulate, posterior parietal). Random effects models classified participants as maintainers (Modified Minimental State test change: slope> 0), minor decliners (slope: 0-1 SD below mean) or major decliners (slope< 1SD below mean). Between-groups mean differences in MRI measures (units: standard deviation=SD) and p-values were adjusted for age, intracranial and total brain volume. Over 10 years, 59% maintained cognitive function, 36% showed minor decline, and 5% had major cognitive decline. Maintainers had significantly less atrophy in memory-related regions, as compared to the minor decliners (adjusted mean volume difference [95% CI]: 1.3 SD [0.7, 2.3], p<0.0001) and the major decliners (5.9 SD [2.4, 9.5], p=0.001). Compared to the major decliners, maintainers also had less covert abnormalities within memory- and executive control-related networks (adjusted mean MD difference: 5.3 SD [1.8, 8.7], p=0.003). Associations were independent of race, gender, education, smoking and physical activity. Covert characteristics of memory- and executive control function-related regions seems to protect from faster cognitive decline.

### CHRONIC MUSCULOSKELETAL PAIN CONTRIBUTES TO ONSET OR WORSENING OF DISABILITY IN AN OLDER POPULATION

S.G. Leveille[1,2], D. Kiely[3], R. Jones[3,2], R.H. Shmerling[4,2], J. Guralnik[5], J.F. Bean[6,2], *1. University of Massachusetts Boston, Boston, Massachusetts, 2. Harvard Medical School, Boston, Massachusetts, 3. Hebrew SeniorLife, Boston, Massachusetts, 4. Beth Israel Deaconess Medical Center, Boston, Massachusetts, 5. National Institute on Aging, Bethesda, Maryland, 6. Spaulding Cambridge Outpatient Center, Cambridge, Massachusetts*

Chronic pain is associated with disability but few studies have examined the disabling impact of chronic pain over time in an older population. The MOBILIZE Boston Study, a population-based longitudinal study, enrolled 765 community-living adults aged >64y. Participants were assessed at baseline and 18 months, and asked about chronic joint pain locations using a 13-item instrument and pain severity using a subscale of the Brief Pain Inventory (BPI). We used multivariable logistic regression models to determine the relationship between baseline pain and subsequent disability (any difficulty in ADL, IADL and mobility). The onset of new or worsening ADL disability at 18-months was 5.4% of persons reporting no joint pain at baseline, 10.3% of those reporting 1 joint pain site, 16.5% of persons reporting >2 joint pain sites, and 20.2% of those reporting widespread pain at baseline (trend, p-value <0.0001). After multivariable adjustment (sociodemographics, chronic conditions, analgesic and psychoactive medications, physical performance, and baseline disability), for new/worsening ADL disability, the OR for >2 pain sites at baseline was 3.87 (95%CI, 1.81-8.29) and for widespread pain, OR=3.64 (95%CI, 1.49-8.88). Significant associations also were observed for IADL and mobility disability. Baseline pain severity, scored 0-10, showed a linear association with likelihood for new or worsening ADL disability (adjusted OR=1.17 per unit increase, 95% CI, 1.02-1.34). In conclusion, chronic pain location and severity were associated with increased risk for developing new or worsening disability at 18 months. Greater attention to prevention and management of chronic pain may reduce disability in the older population.

### AN ACTIVITY PROFILE OF SENIORS IN CANADA WITH CO-EXISTING VISION AND MOBILITY IMPAIRMENTS

J. Huber[1], J. Miller Polgar[1], B. Chesworth[1], J. Strong[2], J.W. Jutai[3], *1. University of Western Ontario, London, Ontario, Canada, 2. University of Waterloo, Waterloo, Ontario, Canada, 3. University of Ottawa, Ottawa, Ontario, Canada*

Purpose: To examine the prevalence of Canadians over 65 years of age who report a vision impairment, mobility impairment, and both a vision and mobility impairment. We describe the subsequent impact of co-existing health conditions on self-perceived health and restrictions to daily activities in order to better understand the interaction of two health conditions for intervention purposes. Method: Secondary analyses are conducted of the National Population Health Survey (NPHS Cycle 7). Weights are applied to obtain population estimates. Results/Discussion: Self-perceived health in individuals reporting no vision or mobility impairment ("Excellent" confident interval (CI) = 0.943 to 0.944) compared to those reporting both a vision and mobility impairment ("Excellent" CI = 0 to 0) indicates an overall decrease in self-perceived health among individuals living with co-existing vision and mobility impairments. There is a higher reliance on assistance from others in activities of daily when living with co-existing vision and mobility impairments. For example, the mean number of activities requiring help from another person as reported from individuals who have no vision and mobility impairment (Meal prep, mean = 0.039) is decreased compared to individuals with both health conditions (Meal prep, mean = 0.484). Conclusion: From analysis of the NPHS survey, we understand that intervention methods must jointly target vision and mobility impairments since the combined interaction of vision and mobility impairment increases the perception of poorer health and reliance on assistance for activities of daily living compared to individuals reporting one or neither health condition.

## SESSION 1070 (PAPER)

## GETTING AROUND WITH DEMENTIA: INTERVENTIONS TO WATCH

### EFFECTIVENESS OF AN INSTITUTION-BASED GROUP WALKING PROGRAM FOR WANDERERS: A PILOT STUDY

J. Song, J. Park, *College of Nursing, Korea University, Seoul, Republic of Korea*

As one of the non-pharmacological interventions to reduce wandering, walking/exercise group has been suggested to be acceptable and helpful. However, it is mostly based on carers' perception rather than empirical evidence. The purpose of this study was to develop an Institution-based Group Walking Program (IGWP) and examine its effects on behaviors, sleeping, mood, and affect of persons with dementia (PWDs) who wander. The study design was a single case experimental design (n=10) with ABAB type (i.e., baseline-intervention-baseline-intervention). Participants (mean MMSE=11.11; mean age=81; 90% female) were encouraged to walk in a group every evening after meal for 30 minutes from Monday to Friday. The route for walking consisted of slopes and hallways in the facility, and front and back yards outside the facility. Data was collected for four weeks: everyday for affect and sleeping; every week for behaviors (i.e., wandering, agitation, neuropsychiatric symptoms) and mood (i.e., depression). Using repeated ANOVA, within subject effects and within subject contrasts were evaluated. Effect of the IGWP was found on participants' depression (F=5.26, p=.005), neuropsychiatric symptoms (F=5.87, p=.016), total sleeping hours (F=3.99, p=.018), sleeping efficiency (F=3.99, p=.018), frequency of wake-ups (F=5.05, p=.007), and affect (F=12.73, p=.001). Results of this study imply that regular walking program may be beneficial for improving night time behaviors of wanderers rather than decreasing their wandering during the day. Randomized controlled studies and longitudinal studies are necessary to confirm the findings obtained from this study.

### BECOMING LOST IN THE COMMUNITY WHILE DRIVING: ANALYSIS OF THE USE OF THE SILVER ALERT PROGRAM

M. Rowe[1,2], K. Rispaud[3], E. Sheehan[3], *1. Veterans Administration, Tampa, Florida, 2. U. of Florida, Gainesville, Florida, 3. Lantana Police Department, Lantana, Florida*

One event that occurs across all ages of persons with dementia (PWD) is the phenomenon of becoming lost in the community. Commonly called 'wandering', for community-dwelling PWD it rarely is associated with wandering behavior. The purpose of this paper is to describe the phenomenon of becoming lost while driving using data from the Florida Silver Alert program. In the first 8 months of the program, 81 alerts were issued or approximately 2 alerts per week. Most alerts were issued for male drivers (73%) who left in their own car from their home. Males lived predominantly with their spouse (93%), but females who became lost while driving were either living alone (50%), or with adult children or spouse (25% each). Ages ranged from 63 to 92 (mean=78.27) with no significant age difference by gender. Two-thirds became lost when they were driving on a planned, normal outing followed by leaving when the caregiver was sleeping (19%). All but 4 individuals were found alive, most often were at least one county away with 7 in a different state. Dangerous situations encountered included: driving the wrong way on highway, motor vehicle crash, found in woods, lying in interstate median, and stopped on train tracks. One individual drowned after driving into a canal, and another died of exposure after driving into remote woods. Two committed suicide. These data highlight the fact that this phenomenon is not wandering and the dangers of not restricting driving after dementia is diagnosed, particularly of males living with their spouse.

### A RANDOMIZED CLINICAL TRIAL OF THEORY-BASED ACTIVITIES FOR BEHAVIORAL SYMPTOMS OF DEMENTIA

A.M. Kolanowski[1], M. Litaker[2], L. Buettner[3], J. Moeller[1], *1. Penn State University, University Park, Pennsylvania, 2. University of Alabama, Birmingham, Alabama, 3. University of North Carolina, Greensboro, New York*

Objective: To test the efficacy of activities derived from the Need-driven Dementia-compromised Behavior model for responding to behavioral symptoms of dementia in nursing home residents. Design: Randomized clinical trial, double-blind. Setting: Nine nursing homes. Participants: One hundred and twenty eight cognitively impaired residents were randomly assigned to three weeks of activities tailored to: functional level only (n= 32), style of interest only (n= 33), both functional level and style of interest (n= 31): or active control (n= 32). Intervention: Three weeks of tailored activities were provided twice daily for up to 20 minutes each session. Measurements: Research assistants blinded to group assignment assessed agitation, passivity, engagement, affect, and obtained measures of self-reported mood during baseline, treatment, random times outside of treatment, and one week post-treatment. Results: The tailored to style of interest group demonstrated less passivity (p= .02), greater engagement (time on task (p= .004) and level of participation (p= .000), alertness (p=. 003), and attention (p=. 02) than the other groups. The tailored to both functional level and style of interest group demonstrated greater pleasure than the other groups (p = .035). There were no differences in agitation, anger, anxiety or mood by group. Conclusions: Style of interest is a critical component of activity prescription. Exposure to activities that meet needs expressed by personality style of interest may be sufficient to capture attention and reduce passivity in nursing home residents regardless of their ability to actively participate in activities.

### EFFECTS OF PHYSICAL TRAINING ON MOTOR PERFORMANCE IN PATIENTS WITH DEMENTIA (RCT)

K.A. Hauer[1], M. Schwenk[1], T. Zieschang[1], C. Becker[2], P. Oster[1], *1. Geriatric Research, Bethanien-Hospital at the University of Heidelberg, Heidelberg, Germany, 2. Robert Bosch Hospital, Stuttgart, Germany*

Study aim: The aim of this study was to determine the effects of a standardized physical training on motor performance in patients with diagnostically confirmed mild- to moderate-level dementia (N=122). Methods: Effects of a 3 months progressive strength- and functional training (intervention group IG) were compared to a motor placebo activity (control group CG) with a 3-months follow up in a randomized, controlled trial (RCT). Relative increase (%) of functional performance (5 chair stand; 5CS) and maximal strength (1 Repetition Maximum; 1RM) represented primary study endpoints. Established, validated test for function and strength represented secondary study endpoints. Results: Functional performance (5CS: CG: +4.1±25.8 vs. IG: -26.3±14.9; p>0.001) and maximal strength (1RM CG.-1.1±28.6 vs. IG:+56,6 ±42.2%: p<0.001) increased significantly. All tested strength and functional parameters showed significant, overall improvements during training. Group differences were remained significant (5CS: CG: +12.6±63.2 vs. IG:-18.6±20.8; p=0.008. 1RM:CG:+6.6±33.6 vs. IG:44.0±48.3; p=0.001) during follow-up. Linear Regression analysis identified low baseline motor performance (1 RM: p=0.007; beta:-0.375; 5-Chair rise: p<0.001; beta: 0.635) but not level of cognitive impairment (MMSE; p=n.s.), form of dementia (Alzheimer vs. vascular vs. other: p=n.s.) or performance in specific cognitive sub-domains (trail making test, verbal fluency, early /late recall, discrimination; all tests n.s.) as significant predictors of training gains in the IG. Conclusion: The presented training regimen showed high effectiveness to improve overall motor performance independent of level or form of cognitive impairment in patients with dementia. Patients with lower baseline motor performance profited most and improvements gained during training remained during follow up.

## SESSION 1075 (SYMPOSIUM)

### HARMONIZING COHORT STUDIES TO ADVANCE THE SCIENCE OF AGING: THE CANADIAN LONGITUDINAL STUDY ON AGING

Chair: *S. Kirkland, Community Health and Epidemiology, Dalhousie University, Halifax, Nova Scotia, Canada*

Over the next twenty years, the Canadian Longitudinal Study on Aging (CLSA) will generate a wealth of information from 50,000 men and women that will contribute to the advancement of the science of aging and to policy development. In addition to its significant value as a research study, the CLSA team also envisions that it has a key role to play in harmonizing with other national and international studies to conduct cross national comparisons to answer questions related to the impact of varying social policies such as retirement and savings or to join with many research platforms to increase the sample sizes to elucidate the interplay between genes and environment. Such collaborations will allow us to utilize longitudinal cohort studies and population-based biobanks to their fullest potential, ultimately achieving major scientific gains and innovations that would not otherwise be possible. However, comparative or pooled analyses can only be fully realized through the harmonization and sharing of tools, measures and methods. Priority areas of development in harmonization include accounting for variations in study design, data/sample collection and processing, and ethics and governance considerations. Bringing together international leaders in large scale studies and harmonization, the objectives of this symposium are to: (1) highlight the potential benefits, opportunities, and challenges for cross-national harmonization; (2) define the concepts and scope of prospective and retrospective harmonization; (3) discuss harmonization tools and technologies that may enable harmonization between studies; (4) describe ongoing harmonization efforts between the CLSA and other national and international cohorts.

### ADVANCING THE SCIENCE OF POPULATION HEALTH AND AGING THROUGH INTERDISCIPLINARY RESEARCH

C. Wolfson[1], P.S. Raina[2], S. Kirkland[3], *1. McGill University, Montreal, Quebec, Canada, 2. Clinical Epidemiology, McMaster University, Hamilton, Ontario, Canada, 3. Dalhousie University, Halifax, Nova Scotia, Canada*

Canadians are living longer, and older persons are making up a larger share of the population (14% in 2006, projected to rise to 20 % by 2021). The Canadian Longitudinal Study on Aging (CLSA) is a national longitudinal study of adult development and aging that will recruit 50,000 Canadians aged 45 to 85 years of age and follow them for at least 20 years. All participants will provide a common set of information concerning many aspects of health and aging, and 30,000 will undergo an additional in-depth examination coupled with the donation of biological specimens (blood and urine). The CLSA will become a rich data source for the study of the complex interrelationship among the biological, physical, psychosocial, and societal factors that affect healthy aging.

### DATA SETS ON HEALTH AND RETIREMENT: DATA COLLECTION AND SHARING FOR POLICY DESIGN

J. Lee, *RAND, Santa Monica, California*

A growing number of countries are developing or reforming pension and health policies in preparation for population aging and to enhance welfare of their citizens. The adoption of different policies by different countries has resulted in several natural experiments, offering unusual opportunities to examine the effects of varying policies on health and retirement, individual and family behavior, and ultimate well-being. To realize the research opportunities these natural experiments afford, data collection efforts in these countries must be harmonized to the extent possible. An increasing number of countries have agreed to provide harmonized data, particularly with the Health and Retirement Study in the United States. I will introduce a set of internationally harmonized data sets and discuss opportunities for cross-national studies and implications for policy evaluation and design.

### DATASHAPER: IS THERE A POTENTIAL TO SHARE HARMONIZED HIGH QUALITY DATA BETWEEN LARGE POPULATION-BASED STUDIES ACROSS THE WORLD?

I. Fortier[1,2], D. Doiron[1], F. L'Heurex[1], M. Deschênes[1], P.R. Burton[3], *1. P3G Consortium, Montreal, Quebec, Canada, 2. Université de Montréal, Montréal, Quebec, Canada, 3. University of Leicester, Leicester, United Kingdom*

In order to properly understand the role and interaction of genetic, lifestyle, environmental and social factors in modulating the risk and/or progression of chronic diseases, it is critical to have access to very large number of study participants. Thus, although major technical, ethico-legal and scientific challenges are still to be faced, pooling of information between studies is becoming increasingly important. The DataSHaPER (Data Schema and Harmonization Platform for Epidemiological Research (www.p3gobservatory.org) is developed to provide a flexible, but structured approach to the harmonization and pooling of information between studies. A total of 50 large population-based studies (> 5.5 million participants), a third enrolling only participants older than 40, have been part of an initial DataSHaPER project. The project assessed the potential to harmonize 150 core variables selected by international experts. The ability to recreate the variables and answer to specific scientific questions using the platform will be discussed.

### DATASHIELD: INDIVIDUAL-LEVEL META-ANALYSIS WITHOUT SHARING THE DATA

P.R. Burton[1,4], M. Wolfson[2,4], N. Masca[1], N.A. Sheehan[1], I. Fortier[3,4], *1. Departments of Health Sciences and Genetics, University of Leicester, Leicester, United Kingdom, 2. University of Ottowa, Ottowa, Ontario, Canada, 3. University of Montreal, Montreal, Quebec, Canada, 4. Public Population Project in Genomics (P3G), Montreal, Quebec, Canada*

Contemporary research in biosocial science can demand vast sample sizes. Often, data must be aggregated across several studies or data sources to provide adequate power. When a pooled analysis is required, analytic efficiency and flexibility are typically best served by combining the individual-level data from all sources and analysing them as a single large data set. But valid ethico-legal constraints can prohibit or discourage the sharing of individual-level data, particularly across jurisdictional boundaries. This leads to a fundamental conflict between competing public goods. DataSHIELD (Data Aggregation Through Anonymous Summary-statistics from Harmonized Individual-levEL Databases) provides a simple approach to analysing pooled data that circumvents this conflict. Modern distributed computing is used and advantage taken of the properties of the algorithm that iteratively updates parameter estimates in generalized linear modelling (GLM). The presentation will cover the need for DataSHIELD, its theoretic basis, opportunities and challenges, and how to find out more.

## SESSION 1080 (POSTER)

## HEALTH CARE ISSUES AND INTERVENTIONS

### EFFECTS OF MULTIPLE PHYSICIAN PRESCRIBING PATTERNS ON TOTAL NUMBER OF MEDICATIONS AND BEER'S LIST MEDICATIONS IN ELDERS, BEFORE AND AFTER ENROLLMENT IN A MEDICAID HOME AND COMMUNITY BASED WAIVER PROGRAM

R. Haque[1], C.W. Given[1], M. You[2], *1. Department of Family Medicine, Geriatrics, Michigan State University, East Lansing, Michigan, 2. College of Human Medicine, East Lansing, Michigan*

Elders receive scripts for multiple medications from multiple physicians. The poor elderly may receive new scripts when they enroll in a Medicaid Home and Community Based Waiver program. To determine how waiver enrollment is related to changes in prescription medications, we compared scripts prior to and following enrollment for 13,102 patients enrolled in a waiver program between 2002 and 2007. Comparing scripts written 60 days prior, 60 following enrollment, and medications that are on the Beer's list, which is a guide for medications that place the elderly at greater risk for poor outcomes, we found that: First, in the 90 days prior to enrollment patients received 5.74 (6.19) scripts, and 6.31 (5.98) scripts 90 days after. Beer's medications increased from .60(.94) to .66 (.94). Further increase in Beer's medications is mediated by the total number of medications. Second, patients who retained the same physician prior to and following entry actually had a decrease in medications following enrollment, 5.49 (4.46) compared to 3.98 (.08). Those having physicians prescribing prior and following and new physicians following enrollment had 10.22 (5.40) prior and 8.40 (.06) after enrollment. Those with only new physicians gained over two medications, and the pattern was the same for increase in Beer's list medications. These data clearly indicate that waiver agents who manage the care of persons following entry into the waver program need to evaluate carefully patients and their medications at entry and immediately following to assure each is clinically indicated and possible adverse drug reactions are minimized.

### RURAL/FRONTIER HEALTH PROFESSIONALS: NEEDS AND PREFERENCES FOR TRAINING IN GERIATRICS

C. McKibbin[1,2], D. Welsh[1], D. Fleming[1,2], A. Lavery Benson[1,2], B. Morrow[2], K. Kitchen[1], *1. University of Wyoming, Laramie, Wyoming, 2. Wyoming Geriatric Education Center, Laramie, Wyoming*

There is a dearth of geriatric trained providers in rural/frontier communities. The purpose of this study was to seek input from health professionals practicing in a rural/frontier state on their perceived training needs, interests, as well as preferred content and format for geriatric training. Two-hundred sixty three health professionals, currently practicing in the state of Wyoming, completed the survey. Nursing professionals represented the largest proportion of respondents (n=104, 39.6%). Other professions represented included medicine, social work, dentistry, pharmacy, and physicians. All participants were recruited from existing lists maintained by Wyoming professional licensing boards. Results showed that a majority had no formal training in geriatrics (n=196, 74.5%) and many (i.e., n=73, 27.8%) had not had any geriatric-related continuing education in five or more years. Motivation for training was "high" or "very high" for nearly one-half of respondents (n=130, 49.5%), though the majority do not have opportunities to attend educational offering in geriatrics (n=141, 53.6%). The largest barrier to obtaining geriatric training was proximity to training sites (n=111, 42.2%). Training format preferences included internet or web-based training, professional conferences, and/or self-study written materials. Professionals were most interested in receiving training in adapting treatments to older patients, knowledge of age-related diseases (e.g., dementias), geriatric assessment, medication use and misuse, mental health and depression, and end of life/palliative care. These data can be helpful in preparing curriculum for continuous education programs in geriatrics that meet the needs (e.g., content, delivery type) of health care professionals in Wyoming.

### EARLY EFFECT OF A PREVENTIVE HOME VISIT PROGRAM FOR AMBULATORY FRAIL ELDERS IN JAPAN: A RANDOMIZED CONTROLLED TRIAL

A. Kono[1], Y. Kanaya[1], T. Fujita[1], C. Tsumura[2], T. Kondo[3], K. Kushiyama[4], L. Rubenstein[5], *1. School of Nursing. Osaka City University, Osaka, Japan, 2. School of Nursing & Rehablitation, Konan Women's University, Kobe, Japan, 3. Municipal Community-based Comprehensive Care Center, Izumi Otsu, Japan, 4. Department of Health and Welfare, Misaki Local Goverment Office, Misaki, Japan, 5. Sepulveda VA GRECC, School of Medicine, UCLA, Los Angeles, California*

Programs of preventive home visits for ambulatory frail elders certified as eligible for long-term care services in the Japanese public long-term care insurance system, but who are not yet using these services, are not widely available. The aim of the present analysis from a randomized controlled trial was to identify early effects of a pilot preventive home visitprogram for such elders living in three communities. Eligible and willing subjects (n=323) were randomly assigned to intervention (n=161) or control group (n=162). Community health nurses and care managers provided structured preventive home visits to intervention group subjects every six months over one year. Outcome measures including ADLs, IADLs, depression, and social support were collected via mail questionnaire at baseline and at the 12-month follow-up point. At follow-up, 5.0% of intervention group subjects had died vs 6.8% of control group subjects, and 2.5% of intervention group subjects were in nursing homes vs 1.0% of control group subjects (NS). Two-way ANCOVA adjusting for each baseline score of outcome measures, has shown that scores of depression in the intervention group had improved significantly more than those in the control group (p=0.014). These results suggest that the preventive home visitation in one year might be beneficial in preventing depressive symptoms in the present population. We are continuing the trial for another two years to test longer-term effects.

### MEDICATION-RELATED PROBLEMS EXPERIENCED BY PATIENTS IN A TRANSITIONAL CARE PROGRAM

J.E. Edgell[1], K.A. Cappuzzo[2], B. Hungate[3], P. Slattum[1], *1. Department of Pharmacotherapy and Outcomes Science, Virginia Commonwealth University, Richmond, Virginia, 2. Amgen Scientific Affairs, Providence Forge, Virginia, 3. Virginia Commonwealth University Medical Center, Richmond, Virginia*

Background: Frail older adults with multiple co-morbidities are especially prone to frequent emergency department visits and hospitalizations. Fragmented medical care for the older adult contributes to repeated utilization of resources. Hospital-based transitional care programs are attempting to reduce these avoidable encounters and improve patient outcomes. Two Nurse Practitioners in the transitional care program at Virginia Commonwealth University Medical Center in Richmond, Virginia visit high risk patients in their home post hospital discharge. Primary care medical management is provided, including medication management. Objective: The objective was to characterize patients participating in a transitional care program, focusing on medication-related problems experienced by these patients. Methods: Charts were reviewed for all patients enrolled in the transitional care program in 2005. Demographic information, reason for initial hospital admission, co-morbidities, discharge medications, and issues related to medications were obtained from documentation of the first home visit after discharge. Medication-related problems were classified as nonadherence, underuse, overuse, inappropriate medication, adverse drug event or drug-drug interaction. Results: Forty-one patients (average age 75.5 years; 69% female) participated in the program in 2005. The most prevalent comorbid conditions among participants were hypertension (17%), diabetes (11%) and CHF (11%). Nonadherence was the most commonly reported medication-related problem (40%). Underuse (29%) and overuse (17%) also were common. Many of the problems identified are preventable. Conclusion: Medication-related problems are a common source of complications in transitional care patients. Pharmacists are uniquely trained to evaluate medication regimens, and have the potential to improve outcomes as part of the transitional care team.

### RISK FACTORS ASSOCIATED WITH 30 DAY HOSPITAL READMISSION IN NURSING HOME RESIDENTS

A. Chandra, S.J. Crane, S.S. Cha, P.Y. Takahashi, *Mayo Clinic, Rochester, Minnesota*

Objective: To identify risk factors associated with 30 day hospital readmission in patients dismissed to skilled nursing facilities (SNF). Design: This was a retrospective cohort study. Patient demographic, comorbid and functional status were collected from the electronic medical record. Readmission to the hospital within 30 days was the primary outcome. An initial univariate evaluation determined significant variables for a multivariable model. A Bayesian approach with simulation from 1000 bootstrap samples was performed to confirm risk factors and validate the final model. Setting: Primary and long term care practice of a teaching institution. Participants: Adults over the age of 60 living in Olmsted County being followed by an academic primary care medical practice on January 1, 2005 and were admitted to a SNF between 1/1/ 2005 to 12/31/2006. Results: 2261 patients dismissed to a SNF in the 2 years following 1/1/2005, were included in the cohort. Of these, 347 (15.3%) were readmitted to the hospital within 30 days. Significant predictors of readmission in the final multivariable model included male gender, advanced age, dementia, chronic obstructive pulmonary disease, hypertension, history of falls, dependence in transfers, and previous emergency room visits. Conclusions: Functional status, prior health care utilization in the form of emergency room visits and comorbid health factors were associated with readmission to the hospital within 30 days in patients from SNF. These risk factors identify the highest risk group in this frail population and could potentially suggest a different care model for patients as they transition across care settings.

### VETERANS HEALTH ADMINISTRATION TELEHEALTH INTERVENTIONS FOR AGING VETERANS: A SYSTEMATIC REVIEW

M. Luptak[1,2], B.L. Hicken[2], R. Hill[3,2], N.K. Dailey[2], R. Rupper[2], C. Peterson[2], B. Bair[2], *1. University of Utah College of Social Work, Salt Lake City, Utah, 2. Veterans Rural Health Resource Center - Western Region, VA Office of Rural Health, Salt Lake City, Utah, 3. University of Utah Department of Educational Psychology, Salt Lake City, Utah*

For well over a decade, the Veterans Health Administration (VHA) has been a leader in the development and implementation of innovative healthcare delivery technologies that have benefited the rapidly aging veteran population. The VHA's leadership in advancing these technologies, along with the establishment of the Office of Rural Health in 2006 to address the care needs of rural veterans (3/4ths of whom are 65 years and older), has positioned telehealth at the front line of healthcare delivery tools within the VHA system. This presentation describes the current state of the research on telehealth interventions initiated and completed under the auspices of the VHA as determined by a systematic literature search of published studies from 2000 to 2009 in four databases (PubMed, CINAHL, NLM, and PSYCINFO). Standard systematic review methods were used to identify replicable controlled empirical trials of telehealth delivery interventions with at least one outcome assessment administered at post-test and at a follow-up interval. Nineteen studies met our inclusion criteria. Themes highlighted across these studies—in which the average age of participants was 65—include the employment of telehealth technology in the management of chronic illness conditions, in addressing mental health concerns through in-home monitoring and treatment, and in facilitating interdisciplinary treatment. These studies suggest that telehealth can facilitate collaborative treatment for aging veterans diagnosed with multiple co-morbidities that make access to facility-based care difficult—particularly in rural and remote regions. Challenges in maintaining stand-alone telehealth interventions within the VHA infrastructure will be addressed along with future directions.

### OLDER PERSONS TRANSITIONS IN CARE – THE OPTIC STUDY

G. Cummings[1], C. Reid[2], N. Keating[1], J. Konnert[3], C. Estabrooks[1], P. Norton[4], A.S. Wagg[1], O. Team[1,2,3], *1. University of Alberta, Edmonton, Alberta, Canada, 2. University of British Columbia, Okanagan, Kelowna, British Columbia, Canada, 3. Interior Health, Kelowna, British Columbia, Canada, 4. University of Calgary, Calgary, Alberta, Canada*

Nursing home residents are predominantly over age 80, female and suffering from dementia, with complex needs and high dependency on care providers. Changes in health status triggered by common events such as illness and injury may necessitate transfer to an emergency department (ED). During these transitions, care often is made more difficult by compromised communication among residential and healthcare facilities, families and clinicians. During transitions, residents are vulnerable to experience care that is delayed, fragmented and potentially unsafe. OPTIC is a comprehensive, multidisciplinary program of research on efficacy of nursing home-ED transfers in two Canadian provinces. Its goal is to improve care for frail elderly nursing home residents. Objectives are: to understand multiple perspectives on what constitutes a successful transfer; to determine costs of transfers from system and family/resident perspectives; to develop a practical tool to assess transfer success, in terms of quality of care and avoidable complications; and to analyze the influence of organizational factors in key practice locations (nursing homes, pre-hospital transport services, and emergency departments) on transfer success. Data collection occurs in two waves: Phase 1 semi-structured interviews with residents and family caregivers who have experienced such transitions and focus groups with care providers in the three practice locations; and Phase 2 real-time case tracking of over 400 transitions during a 12 month period. In this poster, we present the OPTIC model of the transition process, and results of Phase 1 interviews and focus groups, highlighting how they inform development of the Phase 2 tracking tool.

### INSTITUTE OF MEDICINE'S (IOM) "RETOOLING FOR AN AGING AMERICA" – NATIONAL INSTITUTES OF HEALTH (NIH)'S INVESTMENT IN DEVELOPING INNOVATIVE MODELS OF CARE (MOCS)

M. Bernard[1], C. Liggins[1], G. Niederehe[2], C. Hafner-Eaton[3], *1. National Institute on Aging, Bethesda, Maryland, 2. National Institute of Mental Health, Bethesda, Maryland, 3. National Institute of Nursing Research, Bethesda, Maryland*

In 2008, the IOM recommended the inclusion of specific innovative features in new MOCs for older adults to improve patient outcomes. These features include interdisciplinary team care (ITC), care management (CM), chronic disease self-management (CDSM), pharmaceutical management (PM), preventive home visits (PHV), proactive rehabilitation (PR), and transitional care (TC). An analysis was conducted of the extent to which NIH from 1999-2008 has provided support for developing new MOCs that included such innovative features, to determine research gaps and identify opportunities for collaboration. NIH-supported internal grant databases were queried using a variety of search terms related to MOCs. Initially, 369 grants were identified, with 98% funded by National Institute on Aging (NIA), National Institute of Mental Health (NIMH), and National Institute of Nursing Research (NINR). Grants were then reviewed by at least two knowledgeable staff, and excluded if they did not develop interventions and include at least one innovative feature. 194 grants developed and tested MOCs with at least one innovative feature - NIA (33%), NIMH (28%), and NINR (39%). The largest investment was in 'CDSM' (39%), 'PR' (36%), and 'CM' (29%). There was considerable investment in 'ITC' (13%) and 'PHV (7%). The lowest investment was in 'PM' (4%) and 'TC' (2%). Analysis of NIH's efforts provides evidence of significant investment in the development of models of care that incorporate IOM-recommended innovative features. However, there are gaps in some areas that provide opportunities for additional research, and the potential for collaboration with other public and private entities.

### DELIRIUM, IMPAIRED COMMUNICATION, AND DISABILITY INCREASE RISK FOR FAILED TRANSITION FROM HOSPITAL

A.A. Borrud, D.E. Holland, *Mayo College of Medicine, Rochester, Minnesota*

Unplanned emergency department (ED) visits and hospital readmissions within 30 days of discharge may reflect poor quality transitions from hospital. Identifying risk factors for return may improve discharge planning. Many high risk conditions have been identified, but few studies evaluated the contribution of functional impairment. This study sought to identify predictors of unplanned 30 day ED visits and readmissions from information available at the bedside. The unit of analysis was discharge from a hospitalist general medical service during 2008. Only patients residing within a 25 mile catchment area were included to more accurately capture readmissions. Following 911 discharges, there were 42 unplanned ED visits and an additional 165 unplanned readmissions within 30 days. Two-thirds of discharges involved patients 65 and older. Odds ratios ($p < .05$) for an association between unplanned return to hospital and the following factors were found through multivariate regression analysis: age (0.99), moderate to severe disability by the Rankin (1.73), delirium by the Confusion Assessment Method (3.74), verbal communication difficulties (2.81), CHF (1.52), diabetes (1.60), metastatic cancer (2.21), and renal (2.06) and severe liver disease (2.55). This study finds delirium, impaired ability to communicate, and disability associated with failed transitions and confirms prior work identifying high risk diagnoses. Coleman's Care Transition Measure gauges the quality of discharges by patients active participation in the discharge process and their understanding of medication and self-care instructions. This work suggests that delirium and difficulty communicating pose unique obstacles to achieving a patient-centered safe transition from hospital.

### DEVELOPMENT AND EVALUATION OF A SELF-MANAGEMENT PROGRAM INTEGRATED WITH EXERCISE CLASSES FOR THE OLDER ADULTS WITH DIABETES IN KOREA

M. Song[1], Y. Park[1], W. Song[2], B. Cho[3], J. Lim[3], S. Kim[1], W. So[2], *1. College of Nursing, Seoul National University, Seoul, Republic of Korea, 2. Dept of physical education, Seoul National University, Seoul, Republic of Korea, 3. College of Medicine, Seoul National University, Seoul, Republic of Korea*

Background: Long-term self-management is imperative to prevent complications and disabilities for people with diabetes. Although regular exercise is an integral part of self-management, poor-exercise practices have been an issue in diabetes care. Objectives: To develop and test a self-management training program which contain diabetes self-management lecture classes and exercise classes for older adults with diabetes. Method: The authors developed a 12-week-long, diabetes self-management program includes biweekly Thera-band exercise classes and weekly lecture classes based on literature review and field experience. Program evaluation methodology was applied for this action study. Steps of the program evaluation process were: 1) need assessment, 2) process analysis, and 3) outcome evaluation. Outcome evaluation was done by comparing the baseline data with the data from the 13th week of Fasting Blood Glucose (FBG), cholesterol, blood pressure (BP), level of diabetes self-care, and qualitative data from the focus group interviews. Data from the 29 participants recruited from a senior center were utilized for final analysis. Results: Outcome analysis by Wilcoxon Signed Rank test showed significant improvement in FBG (p=.021), diabetes self-care (p=.003), and diastolic BP (p=.042), but no difference was seen in the other variables. The participants reported high satisfaction in the qualitative data. The mean attendance rate of the exercise classes and lecture classes were 91.25% (± 8.31) and 83.09 % (± 13.25) respectively. Conclusion: The results of this study showed some promising effects of the program. The long-term effect of the program on exercise maintenance should be evaluated with a larger sample in the future.

### EFFECTS OF A SIMPLIFIED HOSPITAL ELDER LIFE PROGRAM AT A GASTROINTESTINAL SURGICAL UNIT

C. Chen, M. Lin, *National Taiwan University College of Medicine, Taipei, Taiwan*

Studies have revealed that 34-50% of older patients experienced functional decline during hospitalization. The aim of this study was to evaluate the effects of a simplified Hospital Elder Life Program (HELP) implemented at a Gastrointestinal Surgical Unit, on the prevention of functional decline, defined as a decrement in cognitive, nutritional, and activity of daily living (ADL) functions, during hospitalization and 3 months after surgery. A pre- and post controlled clinical trial design was employed to enroll subjects aged 65 years and older who scheduled for an elective gastrointestinal surgery at a 2000-bed medical center in Taipei, Taiwan. Subjects enrolled during 8/07 to 4/08 were served as the controls (n=82) and subjects enrolled since 5/08 to 4/09 served as the experimental group (n=107). For the experimental group, a simplified HELP protocol including early mobilization, cognitive stimulation, and nutritional assistance (oral care/diet education) was implemented by a trained research nurse during hospitalization. Subjects in the control group received usual care. Functional measures were taken at three points: before surgery, at discharge and 3 months after surgery. Analyses were performed to examine the group differences using SPSS. Preliminary results shown that, at discharge, patients at experimental group had significant less body weight loss (2.2 vs. 3.1 kg, p=0.016), less decline in hand grip strength (1.1 vs. 2.6 kg, p=0.016), and better cognitive, nutritional, and ADL status compared to the controls. The findings support effects of this simplified HELP protocol in preventing functional decline for older patients who underwent elective gastrointestinal surgery.

### THE EFFECT OF TAILORED ACTIVITY PACING ON STIFFNESS IN ADULTS WITH KNEE OR HIP OSTEOARTHRITIS

M.E. Braun[1], S.L. Murphy[2], *1. Psychology, University of Notre Dame, South Bend, Indiana, 2. University of Michigan, Ann Arbor, Michigan*

Osteoarthritis (OA) is a leading cause of disability in older adults. Whereas many rehabilitation interventions for OA are designed to reduce joint pain to increase day-to-day functioning, less is known about the impact of interventions on other symptoms, such as OA fatigue and stiffness. In a recent pilot study, we found that instruction in activity pacing (i.e., balancing activity with rest) that was individually tailored based on how symptoms related to physical activity was effective at reducing fatigue compared to a general approach. The purpose of this analysis was to examine if tailored activity pacing also had an effect on OA joint stiffness. Thirty-two adults with symptomatic knee or hip OA (M=61.9, SD=7.9 years) were randomly stratified by age and gender into the tailored or general activity pacing intervention. All participants met individually with an occupational therapist for two weekly sessions and participated in performance testing and home monitoring of symptoms and physical activity. Stiffness was measured using the Western Ontario MacMaster (WOMAC) stiffness scale, which was completed at pretest, posttest and 10 weeks follow-up. Results indicated that participants in the tailored group reported less stiffness (M=2.73) at 10 week follow-up than those in the general group (M=4.43). This difference trended towards significance in a linear mixed model [F(2, 26)=2.87, p=.075]. Although replication in a larger sample is warranted, the initial results provide preliminary support for individually tailoring activity pacing instruction on joint stiffness in OA.

## SESSION 1085 (SYMPOSIUM)

### MEASURING PERSON-CENTERED COMMUNICATION

Chair: *K.N. Williams, School of Nursing, University of Kansas, Kansas City, Kansas*
Co-Chair: *L.J. Medvene, Wichita State University, Wichita, Kansas*

The nursing home culture change movement is underway with goals of transforming long-term care to be more home like and less institutional as a residential care setting for older adults who require supportive care. Long-term care facilities are adopting person-centered care practices such as allowing resident choice in scheduling meals and care activities, allowing menu selections for meals, including plants and animals in the environment, and reconfiguring unit structures into neighborhoods. As operational definitions for person-centered care are refined, measuring the achievement of person-centered care remains a challenge for clinicians and researchers alike. Because communication is an integral part of person-centered care, it provides an important outcome measure. Caregivers need to be able to elicit information from residents and engage them in conversation about their preferences and personal histories. Caregivers need to communicate respect for residents to develop supportive relationships. This symposium will present an overview of how person-centered communication fits within a framework of person-centered care at the nursing home facility level. Four different approaches currently being utilized to measure person-centered communication between nursing home staff and residents will be presented and illustrated for participants. Each presenter will demonstrate the application of their measurement system to communication samples and will report on their use of the measures in analyzing data from current research studies. Strengths and weaknesses of each approach will be highlighted and challenges and direction for future research will be identified through audience discussion.

### COMMUNICATION CHALLENGES AND OPPORTUNITIES IN ESTABLISHING PERSON-DIRECTED ENVIRONMENTS IN LONG-TERM CARE

D. White, *Portland State University, Portland, Oregon*

This paper reports on person-directed care (PDC) measures developed with residents in Assisted Living and their family members. Like PDC measures developed previously with long-term care staff, these measures focus on 5 domains: Personhood, knowing the person, nurturing relationships, comfort care, and autonomy/choice. Multiple methods were used in the development of resident measures including interviews and observations. Survey data were used for family measures. Areas of congruence were noted between staff actions and resident and family reports (e.g., residents are treated with respect, staff are easy to talk to). However, areas of divergence were also apparent, often due to poor communication (e.g., family members did not know whether caregivers knew preferred routines or about important people in their lives; residents did not have access to favorite activities, facility routines were at odds with resident preferences). Implications for policies and training to improve communication in support of PDC practices are presented.

### MEASURING NURSE AIDES' PERSON-CENTEREDNESS USING BEHAVIORAL CODING AND GLOBAL RATING INSTRUMENTS

L.J. Medvene, C. Coleman, H. Lann-Wolcott, *Psychology, Wichita State University, 1845 Fairmount, Kansas*

There is increasing interest in promoting person-centered caregiving within gerontology. However, few observational instruments have been developed to measure person-centered caregiving behaviors. In this study, two innovative coding instruments – the Person-Centered Behavior Inventory (PCBI) and the Global Behavior Scale (GBS) - were used to test the hypothesis that caregivers' person-centeredness would be positively correlated with residents' satisfaction with care. The PCBI is a behavioral observational tool and the GBS is a global rating scale. Both tools were developed based on the literatures in person-centeredness. The hypothesis was tested by coding 50 videotaped interactions between nurse aides and residents in two nursing homes. Caregivers' person-centeredness during caregiving was measured by the PCBI and the GBS. Residents' and aides' satisfaction with caregiving relationships and their ratings of the relationship "mutuality" were assessed by self-report, using paper-and-pencil measures. Initial results demonstrate a correlation between aides' GBS scores and ratings of relationship satisfaction.

### MEASURING PERSON-CENTERED COMMUNICATION: TOPICS OF CONVERSATION

K.N. Williams, B. Harris, K. Ward, A. Weber, *School of Nursing, University of Kansas, Kansas City, Kansas*

Nursing home settings present a variety of barriers to person-centered communication. Heavy workloads focus staff on tasks, rather than interpersonal topics of importance to older adult residents. A system of qualitative content analysis, using coding developed in a prior study, was applied to measure interpersonal versus task-focused topics of communication in staff-resident morning care conversations (N=76) collected before and after a communication intervention. The intervention utilized digital photo frame displays as reminders to cue staff to the personhood of residents (N=6). Each staff utterance was coded for primary topic: superficial, interpersonal, focused on ADL, focused on technical aspects of care, or assessing the resident's condition. Comparison of baseline and post-intervention staff-resident interactions revealed a decrease in the proportion of staff task-focused communication with a 25% increase in the proportion of interpersonal content in specific staff-resident dyads. Changes in resident participation in communication with nursing staff will also be reported.

### PERSON-CENTERED COMMUNICATION AND MISSED OPPORTUNITIES IN THE NURSING HOME CONTEXT

M.Y. Savundranayagam, S. Kruschke, B.L. Overholt, D.M. Regalado, *Helen Bader School of Social Welfare, University of Wisconsin-Milwaukee, Milwaukee, Wisconsin*

The personhood of residents with dementia is threatened in social contexts that highlight dependency, such as nursing homes. Kitwood, a proponent of person-centered care, developed four personhood indicators of effective communication with persons with dementia: recognition, negotiation, facilitation, and validation. These indicators were based on Dementia Care Mapping, an observational method which codes the quality of dementia care in terms of well- and ill-being. This study illustrates the application of the four indicators as measures of person-centered communication by nursing home staff. Conversations (N=23) between six staff-resident dyads were audio-recorded during routine care tasks over a 9-week period. Conversations were coded for (a) person-centered communication and for (b) missed opportunities where person-centered communication could have been facilitated. Examples of revised personhood affirming statements are illustrated. Findings revealed that missed opportunities tend to negate the positive impact of person-centered communication. Implications for staff training and self-monitoring of communication behaviors are discussed.

### USING AN ADAPTED ROTER INTERACTION ANALYSIS SYSTEM (RIAS) TO MEASURE NURSING AIDE-RESIDENT PERSON-CENTERED COMMUNICATION DURING MEALTIME AFTER AN INTERVENTION

L. Levy-Storms, G. Chung, T. Vandenberg, *Soc Wel, UCLA, Los Angeles, California*

The purpose of this paper is to present results from an intervention to improve certified nursing assistants' (CNAs) person-centered communication (i.e., non-task oriented talk) with nursing home residents. All CNAs in the study received a total of four hours of therapeutic communication training during one month. The core aspect of the intervention was a facilitator-led viewing of a DVD containing examples of real CNAs engaging in specific person-centered communication techniques. Before and after the intervention, 16 unique CNA-resident dyads were videotaped during mealtimes with nursing home residents. From the videos at both pre- and post-tests, coders used an adapted version of the RIAS to code the proportion of total utterances that were "affective" (non-task oriented) or "instrumental" (task-oriented). The results indicate that on average positive affective communication increased (38% at pre-test vs. 46% at post-test) following the intervention and instrumental communication decreased (60% at pre-test vs. 53% at post-test).

## SESSION 1090 (SYMPOSIUM)

### RESILIENCE AND TRAJECTORIES OF HEALTH AND FUNCTION

Chair: *E.S. Strotmeyer, Epidemiology, University of Pittsburgh, Graduate School of Public Health, Pittsburgh, Pennsylvania*
Co-Chair: *A.B. Newman, Epidemiology, University of Pittsburgh, Graduate School of Public Health, Pittsburgh, Pennsylvania*
Discussant: *T.M. Gill, Yale University, New Haven, Connecticut*

Resilience is defined as an adaptation to physiologic or psychological burden. Many older adults maintain physical and cognitive function in spite of health issues. However, the characteristics of resilient older adults have not been well examined. Longitudinal epidemiologic studies are uniquely poised to examine resilience and trajectories of health and function in aging populations. The Health, Aging and Body Composition (Health ABC) Study enrolled 3075 Medicare-eligible, well-functioning ambulatory adults aged 70-79 years old (52% women, 42% black) in Pittsburgh, PA & Memphis, TN in 1997-98, with contacts every 6 months and annual exams through 2000-01 and bi-annually thereafter. The Cardiovascular Health Study (CHS) enrolled 5888 Medicare-eligible, non-institutionalized ambulatory adults aged 65-100 years (58% women; 16% black) at 4 U.S. centers in 1989-90/1992-93 with contacts every 6 months and annual exams through 1999. The Study of Osteoporotic Fractures in Men (MrOS) enrolled 5,995 community-dwelling, ambulatory men aged 64-92 years in 2000-02 from 6 U.S. centers with a follow-up exam 4.6±0.3 years later. This symposium will describe the relationship of cognitive and physical performance declines to mortality (Dr. Watson) and the relationship of depression trajectories to mobility (Dr. Barry) in the Health ABC Study. Predictors of recovery from pain and exhaustion will be defined from the CHS (Dr. Thielke) and the role of vitamin D in frailty will be characterized for MrOS (Dr. Ensrud). The discussion will focus on factors/conditions associated with resilience and future directions for research in longitudinal epidemiologic studies.

### RATES OF DECLINE IN COGNITIVE AND PHYSICAL PERFORMANCE PREDICT MORTALITY IN OLDER ADULTS

N.L. Watson[1], C. Rosano[1], S.E. Hardy[2], R. Boudreau[1], E.M. Simonsick[3], S. Satterfield[4], H.N. Ayonayon[5], A.B. Newman[1,2], *1. Department of Epidemiology, University of Pittsburgh, Pittsburgh, Pennsylvania, 2. Department of Medicine, University of Pittsburgh, Pittsburgh, Pennsylvania, 3. Intramural Research Program, National Institute on Aging, Baltimore, Maryland, 4. University of Tennessee Health Science Center, Memphis, Tennessee, 5. University of California San Francisco, San Francisco, California*

Rates of cognitive and physical decline may be important prognostic factors among initially well-functioning older adults. Cognitive function (Modified Mini-Mental State Examination [3MS]) and gait speed (m/s) were assessed at baseline and after four years in the Health, Aging, and Body Composition study. Subsequent mortality was ascertained in 2,345 participants who had 3MS and gait speed data at baseline and followup (mean age ± SD 73.5 ± 2.8 yrs; 47% men; 38% black). 521 deaths occurred by the end of follow-up (median of 5.4 years). In a Cox proportional hazards model predicting mortality, greater rates of cognitive and physical decline were independently associated with higher risk: HR (95%CI) 1.18 (1.04, 1.35) per SD decrease in 3MS score; 1.59 (1.39, 1.81) per SD decrease in gait speed after adjustment for baseline performance and risk factors. Accelerated decline in cognitive and physical performance predicted mortality in this community-dwelling cohort.

### THE RELATIONSHIP BETWEEN DEPRESSIVE SYMPTOMS AND PERFORMANCE-BASED MOBILITY IN OLDER PERSONS

L.C. Barry[1], K. Yaffe[4], B. Penninx[3], H.N. Ayonayon[4], N. de Rekeneire[1], T.M. Gill[1], A.B. Newman[2], *1. Yale University School of Medicine, New Haven, Connecticut, 2. University of Pittsburgh, Pittsburgh, Pennsylvania, 3. VU University Medical Center, Amsterdam, Netherlands, 4. University of California, San Francisco, San Francisco, California*

Depression and mobility disability are dynamic conditions, yet little is known regarding the association between depressive symptoms and performance-based mobility function over time. Participants included the 2,324 members of the Health, Aging, and Body Composition study (52% female; 38% black; mean age 73.5±2.9 years) who underwent assessments of the 10-item Center for Epidemiologic Studies – Depression scale (CES-D), 400 meter walk, and 2 minute walk at years 1, 4, 6, 8, and 10 over the 10-year study period. Using generalized linear mixed models adjusted for demographics, chronic conditions, body mass index, and cognitive status, we found that as depressive symptom score increased, time to walk 400 meters increased ($\beta=0.42$; $\rho=0.02$) and number of meters walked in 2 minutes decreased ($\beta=-0.44$; $\rho<0.001$). Our findings help to elucidate the relationship between depression and mobility function and further highlight a mind-body connection. Additional research is needed to evaluate the reciprocal nature of these conditions.

### RECOVERY FROM PAIN AND EXHAUSTION IN OLDER ADULTS: THE CARDIOVASCULAR HEALTH STUDY

S.M. Thielke[1], H. Whitson[2], P. Diehr[1], A. O'Hare[1], P.H. Chaves[3], N. Zakai[4], A. Arnold[1], A.B. Newman[5], *1. University of Washington, Seattle, Washington, 2. Duke University, Durham, North Carolina, 3. Johns Hopkins University, Baltimore, Maryland, 4. University of Vermont, Burlington, Vermont, 5. University of Pittsburgh, Pittsburgh, Pennsylvania*

Little research has characterized how exhaustion and pain persist or remit over time. We analyzed the Cardiovascular Health Study to ascertain their course. Musculoskeletal pain was identified by a single Yes/No question. Exhaustion was defined using two items from the CES-D. We estimated the likelihood of recovery from these symptoms over six years. 40.3% of subjects reported pain and 21.0% exhaustion. 11.2% had complete remission of pain, and 16.5% of exhaustion. The symptoms remitted during at least one subsequent year in 56.2% of pain and 72.5% of exhaustion reporters. During all measured one-year intervals, 30.6% of pain and 48.6% of exhaustion reports remitted. Fewer depressive symptoms and lower BMI were consistently associated with recovery from musculoskeletal pain and exhaustion. Both symptoms are common in older adults but are not intractable. Both remitted at least temporarily in most subjects. This analysis clarifies prognosis and encourages efforts to modify these symptoms.

### CROSS-SECTIONAL AND LONGITUDINAL ASSOCIATIONS BETWEEN 25(OH)D LEVELS AND FRAILTY STATUS IN OLDER MEN

K. Ensrud[1], T. Blackwell[2], J.A. Cauley[3], S.R. Cummings[2], E. Barrett-Connor[4], T.L. Dam[5], P. Cawthon[2], *1. VA Medical Center / University of Minnesota, Minneapolis, Minnesota, 2. California Pacific Medical Center, San Francisco, California, 3. University of Pittsburgh, Pittsbhurgh, Pennsylvania, 4. University of California - San Diego, San Diego, California, 5. Columbia University, New York, New York*

Vitamin D deficiency and frailty are common with aging, but the association between these conditions is uncertain. To determine the cross-sectional and longitudinal associations of 25-hydroxyvitamin D (25(OH)D) levels with frailty status, we examined 1606 men ≥65 years with 25(OH)D levels and frailty status (robust, intermediate, frail) at baseline; 1354 men had frailty status (robust, intermediate, frail, deceased) reassessed 4.6 years later. After adjustment, men with 25(OH)D levels <20.0 ng/mL had a 1.5-fold higher odds of greater frailty status at baseline compared with men with 25(OH)D levels ≥30.0 ng/mL (referent), while frailty status was similar between men with 25(OH)D levels 20.0-29.9 ng/mL and those in referent group. There was no association between baseline 25(OH)D level and odds of greater frailty status at follow-up. Low 25(OH)D levels (<20 ng/mL) were independently associated with greater frailty status at baseline, but did not predict increased risk of greater frailty status at 4.6 years.

## SESSION 1095 (PAPER)

### A GLOBAL VIEW OF END OF LIFE RESEARCH

### PALLIATIVE CARE AROUND THE WORLD: AN EXAMINATION OF STANDARDS AND GUIDELINES

S.M. Mwangi, *Gerontology, Miami University, Oxford, Ohio*

Palliative and hospice care have gained acceptance in many corners of the world as a way of improving the quality of life for older patients and families facing life-limiting illnesses. During the past two decades, professional and national associations have embarked on the development of guidelines and standards for care. The bases on which these standards are created, and their level of development and acceptance vary from country to country. For instance, in the World Health Organization's definition of palliative care, four facets of physical, social, psychological and spiritual needs are emphasized. In countries such as U.S., additional aspects of palliative care are incorporated into standards. This study analyzed standards and guideline documents from 20 countries to better understand the evolution of palliative care around the world. Findings showed disparities and commonalities. Pain relief and emotional support to those suffering is advocated in all the countries, but attention to support the imminent process of dying for palliation patients and bereavement for the families is less consistent. The findings also show that the authority developing standards differs, with national and professional associations regulating the services in some countries, while groups of physicians serve that role in others. Finally, the importance of multidisciplinary teams varies across countries, with Australia, Germany, U.S., and U.K. placing significant emphasis on this approach. Disparities are mainly due level of development of healthcare systems, integration of palliative care into the mainstream healthcare systems and availability of multidisciplinary staff to cater for different aspects of palliative care.

### TERMINAL DECLINE AND SUBJECTIVE WELL-BEING CHANGES: EVIDENCE FROM THE SWISS CONTEXT

R. Valerie-Anne[1], M. Girardin[2], D. Spini[3], *1. FORS- Swiss Centre of Expertise in the Social Sciences, Lausanne, Switzerland, 2. CIG-Center for Interdisciplinary Gerontology, Geneva, Switzerland, 3. Labo Pavie, Lausanne, Switzerland*

We know that despite the increase of frailty with the aging process, subjective well-being remains quite stable in old and very old age. Several studies have already explained this subjective well-being stability through both personal resources (such as income, education, health) and processes of regulation (such as social and temporal comparison). Previous research demonstrates that social and temporal comparison are particularly efficient in maintaining the stability of both cognitive and affective well-being among octogenarians and nonagenarians. But despite the effectiveness of such personal resources and processes of regulation it has been shown that psychological change at the end of life reflects a combination of age, mortality and pathology related processes. The aim of this paper is to provide information about the well-being deterioration as a function of distance to death. To explore how impeding death contributes to changes in subjective well-being, we based our Multilevel Analysis on longitudinal data from both the Swiss Household Panel (SHP) and the Swiss Longitudinal Study on the Oldest Old (SWILSOO). Our first Multilevel Model demonstrates that even if both cognitive and affective well-being are affected by death proximity, it is the process of frailty which affects the level of subjective well-being. These first results suggest that late life changes are driven by mortality related mechanism like biological decline.

### TRANSITIONS IN THE LAST YEAR OF LIFE FOR CANADIANS IN ALBERTA

D. Mohankumar, D.M. Wilson, *University of Alberta, Edmonton, Alberta, Canada*

The issue of transitions in the location of end-of-life care has not been a major focus in hospice-palliative care research. Little information is therefore available on the numbers of admissions or readmissions to hospital, and the number of transfers between hospitals, ambulatory care settings, and home over the last year of life. The purpose of this study was to compare the use of hospitals in the last year of life for rural and urban Albertans. Secondary analyses were conducted on the two most recent years of provincial inpatient hospital and ambulatory care (ER, daysurgery, and outpatient clinic) data (April 2005 through March 2008). Each individual who had lived in the province for one complete year during this timeframe was retained in the analyses, with each having a full year of data reflected. Differences between rural and urban Albertans who died during that period (N = 19,398), on the number of hospitalizations, number of care transitions, highest users of hospitals, and age were examined. This study revealed that rural Albertans, as compared to urban Albertans had more care setting transitions (M = 4.23 vs. 3.37) and inpatient discharges (M = 2.05 vs. 1.70) during the last year of life. Data from the individuals who lived were also examined and will be discussed. These findings have implications for interventions targeted to these specific groups and suggest the importance of documenting end-of-life care preferences and home-based palliative care.

### BURDEN OF CAREGIVING AT THE END-OF-LIFE: AN EXPLORATORY STUDY AMONG THE SINGAPORE CHINESE

A. Chan[1,2], C. Malhotra[2], I.M. Woo[3], C. Goh[3], *1. Sociology, National University of Singapore, Singapore, Singapore, 2. Duke-National University of Singapore Graduate Medical School, Singapore, Singapore, 3. Lien Centre for Palliative Care, Duke-National University of Singapore Graduate Medical School, Singapore, Singapore*

End of life caregiving, in particular caregiving for terminally ill patients is a conventionally neglected perspective particularly in Asian settings. In this paper, we present data from Singapore to understand caregiver burden among caregivers caring for the terminally ill. Previous literature has shown that, in general, caregiving burden impacts not only the individual but families, employment and the existing healthcare system. Less is known about the impact of caregiving on the family members of terminally ill patients. In addition, most research on the burden of caregiving has been conducted outside Asia and to our knowledge there is currently no data (quantitative or qualitative) from Singapore assessing caregiver burden for terminally ill patients. Our study is an exploratory study to document the important elements for individuals caring for a person nearing end of life in Singapore. Patient-centred, caregiver-centred and contextual elements were found to contribute to well-being of end-of-life caregivers, with high importance given to 1) well-being of dying loved ones, 2) involvement of caregivers in patient-doctor communication and 3) closure with dying loved ones. These findings suggest that caregiver burden may be relieved by better patient-doctor communication with families in hospitals and the provision of more information on support services for caregivers.

## SESSION 1100 (PAPER)

### AGING ACROSS NEIGHBORHOODS AND COMMUNITIES

### THE SALIENCE OF NEIGHBORHOOD CONTEXT ACROSS THE AGES: SELF-RATED HEALTH OF YOUNG, MIDDLE-AGED, AND OLDER ADULTS IN NEW YORK CITY

E. Gaumer, *University of Chicago, Chicago, Illinois*

While there has been sustained attention to residential context as a potential source of risk or resilience for individual health and well-being, research has overwhelmingly focused on the consequences of concentrated poverty and the risks that such disadvantage represents for children and young adults. Recent work suggests that community context may be especially salient for older adults who experience higher levels of exposure to the residential environment due to life-cycle changes in daily round, health changes that impair physical mobility, and altered social networks. This paper uses data from a sample of more than 30,000 New York City householders to investigate whether neighborhood characteristics such as structural disadvantage and social cohesion are tied to the probability of reporting poor or fair health. By stratifying the analysis across three age groups: young adult (ages 18-29), middle-aged (40-64) and older adult (65-90), I investigate if, and how, these relationships differ across age strata. Findings show that among young adults, neighborhood poverty is not a significant predictor of poor health; however, for middle-aged and older adults, higher rates of poverty are associated with substantially higher risk. Social cohesion, on the other hand, matters to both young and older adults but in opposite ways: among younger adults, trust and helpfulness of neighbors reduces the risk of poor health but increases risk among seniors. These findings are net of individual-level characteristics and show that existing theories of neighborhood effects on health should be refined to identify the age-specific pathways through which neighborhoods convey risk or bolster resilience.

### THE EFFECT OF CLOSURE ON QUALITY: THE CASE OF RURAL NURSING HOME CLOSURES

J.R. Bowblis, *Economics, Miami University, Oxford, Ohio*

Due to structural changes in the market for nursing home care, nursing homes have experienced a decline in occupancy rates since the middle of the 1990s. The closing of a nursing facility when there is excess capacity can benefit the other non-closing facilities. However, facilities prefer if a competitor closes first, and may engaged in activities and business practices that allow the facility to not be the first in the local area to close. This war of attrition may lead to occupancy rates that are below the optimal level for efficient production of nursing home services. As a result, quality of care of all nursing home in the local area may be lower than facilities in areas with less excess capacity. This paper extends the literature on closures by studying the effects of rural nursing home closures on the quality of care provided by nursing homes that remain open and are in close proximity to the closed facility. A difference-in-difference estimator is used to determine how the treatment group, facilities within 15 miles of the closed facility, change quality between 1998 and 2004 compared to a control group of facilities that are within 15 to 45 miles of the closed facility. On average, facilities that are nearby the closed facility have higher quality after the closure. Furthermore, the occupancy rates of nearby facilities are 3.7 to 5.7 percentage points higher after the closure. These improvements occur because of efficiency gains in the remaining facilities from higher occupancy rates.

### KNOWLEDGE, PREFERENCES, AND ARRANGEMENT OF END-OF-LIFE CARE AND DECISION-MAKING AMONG JAPANESE AMERICAN OLDER ADULTS: COMMUNITY SURVEY FINDINGS

K.C. Nakao, *Mukogawa Women's University, Nishinomiya, Hyogo, Japan*

The purpose of the current exploratory and descriptive study was to understand the state of knowledge, preferences, and arrangement of end-of-life care and decision-making among Japanese American older adults. Using a self-administered mail-in survey questionnaire, the study collected data from 248 Japanese Americans age 50 and older residing in Southern California. The survey included questions on "Will/Living Trust," "Advance Health Care Directive," "Health Care Agent," "Life Prolonging Treatment," "Hospice Care," "Organ Donation," and "Funeral Planning." The participants showed a high level of awareness and knowledge about each type of end-of-life care. Although most respondents were favorable about making end-of-life plans in advance, particularly on the issues of "Will/Living Trust," "Advance Health Care Directive," and "Health Care Agent," to which the family-centered value played a crucial role, a remarkably fewer number of participants favored advance planning for "Life Prolonging Treatment" and "Organ Donation." The natural death and family-oriented thinking were shared values and strongly supported by the current participants. The respondents had a higher completion rate for end-of-life arrangements relative to that of the general public. To meet the needs of rapidly graying and diversifying older Americans including Japanese American elderly, the study recommends more community outreach and education to provide accurate information about end-of-life issues and more professional training for culturally-sensitive approaches at life's end. Study limitations and implications for public policy will be discussed, as well as implication for future research to identify within and between group differences of older adults from diverse backgrounds.

### THE RELATIONSHIP OF NURSING HOME RACIAL/ETHNIC COMPOSITION TO RESIDENTIAL SEGREGATION

J.A. Davis[1], R. Weech-Maldonado[3], A. Laberge[2], K. Lapane[4], *1. Management and Marketing, The University of Alabama, Tuscaloosa, Alabama, 2. The University of Florida, Gainesville, Florida, 3. The University of Alabama, Birmingham, Birmingham, Alabama, 4. Virginia Commonwealth University, Richmond, Virginia*

The purpose of this project was to explore the relationship between residential and institutional racial/ethnic mix in an attempt to determine whether institutional diversity is consistent with residential diversity. "We compile statistics on segregation in housing, schools, and employment," however outside of periodic studies on segregation, there are no national databases on segregation patterns in nursing homes (Smith, 1999). Given the increasing focus on health care disparities and racial inequalities in health care, expanding our knowledge of nursing home segregation is necessary to adequately understand the access challenges to nursing home services faced by minority elders. The purpose of this study is to: (1) further refine our measurement of nursing home segregation; and (2) to expand our understanding of the association of organizational and market factors to area-wide diversity patterns. We used data from Medicare's Online Survey Certification Automated Report, the Minimum Data Set, and the Area Resource File. The dependent variable quantifies multiracial segregation as an area-based phenomenon. Our findings reveal that not-for-profit nursing homes were more segregated than for profit nursing homes. Larger nursing homes, nursing homes located in more competitive markets, and nursing homes located in states with higher Medicaid per diem rates were less likely to be segregated. Although, these findings suggest that nursing home segregation follows a pattern similar to that of residential segregation, in light of the market and organizational association with segregation, there is room for policy changes to improve access for minority elders.

### PROLIFERATION OF THE "VILLAGE" MODEL: NEIGHBORHOOD ASSOCIATIONS FOR AGING IN PLACE

A.E. Scharlach[1], A.J. Lehning[2], C. Graham[3], *1. Social Welfare, University of California, Berkeley, California, 2. University of California, Berkeley, California, 3. University of California, Berkeley, California*

Since the creation of Beacon Hill Village in 2001, at least 45 similar grassroots neighborhood-based associations have emerged across the United States, and hundreds of others currently are in formation. In return for annual dues, members of these "Villages" receive a variety of services and support designed to help them age in place. While these "Villages" have received substantial media attention, to date there have been no empirical examinations of the model's implementation or its potential feasibility or effectiveness as a transitional form of care for and by older adults. Our online survey of 24 of these 45 "Villages" found that older adults are highly involved in these associations, including developing and overseeing the initiatives, as well as providing services and peer support. Substantial variations were found among respondents regarding organizational structures, services, and goals. For example, one-third enroll members who are under the age of 65. Nearly all have some kind of membership dues or fees, but less than half report that these fees are their primary source of funding, and the majority indicates that funding is a major challenge to their survival. One quarter are focused primarily on building peer support networks, while another 25% emphasize primarily service provision. The "Village" model appears to be an important new consumer-driven approach designed to help individuals to age in place, at a time of shrinking public resources.

These findings prompt questions regarding the feasibility of this model, and the potential relationships between operational characteristics and member outcomes.

## SESSION 1105 (SYMPOSIUM)

### DEMISE OF THE TRADITIONAL NURSING HOME – WHAT WILL THE BOOMERS DO?

Chair: *L. Polivka-West, Florida Health Care Association, Tallahassee, Florida, Florida State University, Tallahassee, Florida*
Co-Chair: *L. Polivka, Florida State University, Tallahassee, Florida*
Discussant: *R. Kane, University of Minnesota, Minneapolis, Minnesota*

Presenters will engage in a point/counterpoint discussion of rebalancing and the Medicaid reductions across the states leaving the long term care population of vulnerable elders with dementia and minority elders with co-morbidities without the traditional nursing home. On the corporate nursing home side, there is keen interest in replacing Medicaid with Medicare funded care and targeting short term rehab, subacute stays because of higher reimbursement. The states are supportive because of growing Medicaid deficits. Meanwhile, managed care corporate entities see long term care as the last health care frontier in the US and are making expansive proposals to state legislatures about how they will be able to contain and even reduce overall long term care Medicaid costs – what they don't say is by limiting choice and reducing care opportunities. Available research outcomes on cost effective alternatives to long term nursing home placements and state comparisons of demographics and cost projections will be presented. The changing roles of residential and home and community-based services will be closely examined with predictions for future long term care models. Alzheimer's caregivers, in the absence of consistently supportive services, are far more likely to relinquish the caregiving role than non-Alzheimer's caregivers and to permit their loved ones to be institutionalized. This is a major reason that Alzheimer's is one of the leading predictors of nursing home placement. The future for Alzheimers care without the nursing home will be discussed for the traditional nursing home may no longer be available.

### WHO WILL CARE IF NURSING HOMES DISAPPEAR

L. Polivka, *The Claude Pepper Foundation, Inc., Tallahassee, Florida*

Given today's political climate there is little chance that state or national legislators will provide a cohesive, rebalanced model of long-term care that addresses both institutional and community-based needs for people in need of long-term care. This presenter will discuss how long-term care raises complex economic, social and ethical issues that influence the question of nursing home vs. home and community-based care. An individual's risk status is in constant fluctuation as life circumstances change so that a measure of status at any one point in time is not a very accurate predictor of future problems. That is one of the major problems in getting public support for a national debate on long-term care. It is when the need arises that most people get involved in long-term care. This is also why the demise of the traditional nursing home may not garner much concern.

### DIFFICULT DECISION-MAKING WITH NURSING HOME PLACEMENT

C. Fahey, *Fordham University, New York, New York*

This presenter will focus on difficult decision-making and the complexities faced in the long term care placement decisions. Today 85% of the nursing home admissions come from the hospital meaning the acuity meets the level of care for 24 hour skilled nursing care. The liabilities and risks encountered by providers of care are inexplicable to the general public and yet are a reality for the nursing home. This panelist will discuss the difficulties to be anticipated with reduced access to the traditional nursing home. Staffing shortages, pressures to hire more trained, experienced staff, and quality of care concerns continue to put nursing homes in a national spotlight of mistrust and apprehension. The nursing home is held accountable for meeting the professional, moral and legal responsibilities of being a licensed long term care provider. However, too often there are inexact outcomes that may be anticipated by decision-makers in nursing homes.

## SESSION 1110 (POSTER)

### FINANCIAL ISSUES IN AGING

### DISABILITY TRAJECTORY AMONG THE ELDERLY WITH A FUNCTIONAL LIMITATION: DIFFERENCES BY SOCIAL ECONOMIC STATUS

Y.H. Yeo, *UNC-CH, Chapel Hill, North Carolina*

Although there are many studies examining risk/protective factors of disability among the elderly, most studies are limited to their regional samples, the lack of important predictors, and their cross-sectional designs. Further most previous studies did not recognize the difference between disability and functional limitation, which was underscored by Verbruge and Jette's disablement process model. Thus, the role of SES on the progression of disability among the elderly has not been clearly known. By using the HRS 1998 through 2006, this study focuses on the moderating role of social economic status in the causal relationship from the level of functional limitation to disability severity among the elderly (aged 65 and older) having a functional limitation at the HRS 1998 (N=7,561). This study employs growth curve modeling (HGLM with negative binomial distribution) with age as time scale method to predict changes of disability severity (a composite score of ADLs and IADLs) by SES (income, education, wealth), with controlling for functional limitation (Nagi scores), health behavioral factors (BMI, alcohol, smoking, mental health), and a set of demographics (gender, race, marital status). This study finds that all of SES measures are significant predictors of disability trajectory. Further the causal relationship between functional limitation and disability is moderated by the level of income ($p<.01$) and wealth ($p<.05$). These findings underscore that SES, especially financial characteristics, is an important determinant of progression of disability among the elderly even after controlling for individual capacity measured by functional limitation.

### MULTIVARIATE ANALYSIS OF RACE AND WEALTH DISPARITIES AMONG OLDER ADULTS

B.R. Haimowitz, *Gerontology, UMass Boston, Boston, Massachusetts*

Wealth is unevenly distributed among older adults in the United States. On average, the median net worth of White non-Hispanics households 50 years and older is $239,000 while the median net-worth of non-White households is $53,000. Among non-White households there is tremendous variability in wealth. For example, Black households older than the age of 50 have a median net worth of $47,000 and Hispanic households have a median net worth of $42,000. In other words, for every dollar in wealth that White households held Black households held less than 25 cents of net worth and Hispanic households held less than 20 cents of net worth (Bucks et al., 2006). This poster proposal uses the 2006 GSS (General Social Survey) data set to determine the extent of racial wealth disparities after controlling for typical socioeconomic factors such as age, education, and income plus demographic factors such as home-ownership and marital status. Second, I analyzed which socioeconomic factor has the largest influence on wealth. Multivariate analysis identified two socioeconomic factors which were associated with wealth: family income and race. Family income was a statistically significant variable on wealth ($p < .05$). Race was nearly statistically significant ($p < .07$). Further analysis showed that family income acted as mediating variable between race, home-ownership, education and wealth. -

### METHODOLOGY TO ESTIMATE ECONOMIC IMPACT OF ELIMINATING ADULT DAY CARE SERVICE IN THE COMMUNITY

S. Shen, L. Alecxih, B. Wright, S.W. Baxter, *The Lewin Group, Falls Church, Virginia*

Adult day care services provide critical support for seniors and people with disabilities when their families cannot afford to care for them. However, California has proposed significant cuts in long term care programs and the complete elimination of ADHC as a part of plan to address budget shortfalls. We conducted analysis and estimates that the elimination of the ADHC program would produce a first year loss of $112 million to the state. We examines the direct and indirect costs by assessing the literature for evidence of the impact of adult day services on nursing home use and employment of family members; analyzing 2004-2008 MSIS data for historical trends in Medicaid use and spending to predict service use in the absence of ADHC program; estimating lost tax revenue as a result of cutting the jobs of 7,600 ADHC employees in the state based on their occupation code, median wage, and median duration of unemployment; and estimating the number and characteristics of new informal caregivers who would leave the workforce or reduce their hours in order to care for a relative based on a national 2009 caregiver survey. Our analysis found that economic loss is $112 million to the state in the first year of funding cut. Ultimately, decisions to cut ADHC programs can adversely impact state revenue streams and cause participants to shift into more expensive services. States' fiscal decision of these programs should factor in indirect costs identified in this study when determining program viability.

### THE IMPACT OF SENSE OF CONTROL ON FINANCIAL STRAIN EXPERIENCED BY OLDER AMERICANS

K.A. Zurlo, *Rutgers University, New Brunswick, New Jersey*

The government and employers have become less accountable for the provision of retirement income. As a result, older adults are expected to take greater control of their financial circumstances as they age, but often do no have the knowledge nor skill to exercise this control. By not exercising adequate control over their finances, adults may be exposed to financial risk in retirement, which can have adverse and long-term consequences. A cross-sectional, quantitative analysis utilizing data from the Health and Retirement Study was used to assess the levels of control Americans (aged 51 and greater) exercise over their financial circumstances. Results from nested regression models predicting financial strain highlight that gender is not a significant determinant of financial strain. The general and domain-specific sense of control of older adults significantly influenced the size and magnitudes of the linkages between the demographic factors of older adults, namely education, race, and income and financial strain. Control beliefs boosted explained variance in financial strain by over 70 percent. Interventions that influence an individual's sense of control could potentially decrease financial strain experienced by older Americans. This study used the psychological construct of sense of control as a factor impacting the relationship between the attributes of older adults and self-assessed financial strain. As front-line workers who can implement, manage, and assess psychosocial interventions, social workers will be in a position to advance our field by advocating and implementing policy and practice interventions that improve older adults' levels of control over their financial circumstances.

### THE WEALTH OF LATINO BABY BOOMERS: DISPARITIES ARE DRIVEN BY SOCIODEMOGRAPHICS

Z.D. Gassoumis[1], K. Wilber[1], F. Torres-Gil[2], *1. Davis School of Gerontology, University of Southern California, Los Angeles, California, 2. University of California, Los Angeles, Los Angeles, California*

The racially and ethnically diverse baby boom population became eligible for early retirement under Social Security in 2008. However, as this generation enters its retirement years, little is known about the financial prospects of its minority members. Specifically, there is a dearth of information regarding the economic security of Latino baby boomers, who account for 10% of the boomer generation. This poster presents data on the wealth of an early baby boom cohort (born from 1946 to 1953) as they approach retirement, focusing specifically on the holdings of its Latino members. Data come from the Health and Retirement Study's 2008 wave, which contains 3,414 early baby boomers. An oversampling of Latinos yielded 414 Latino participants (12%); however, weights are applied to make the sample representative of this age group within the U.S. population. The dependent variable is household wealth, including all assets net of all liabilities, which is weighted for household size. In two nested models, wealth is regressed first on age, sex, race, and ethnicity, then with various other sociodemographic and economic characteristics. Preliminary analyses indicate that being Latino has a negative effect on wealth when adjusting only for age and sex, but education, health, and other markers of SES fully explain this Latino effect. Unlike African Americans, who exhibit wealth effects in both models, there is no wealth-based disadvantage directly attributable to being Latino. The discussion presents policy implications for saving and wealth building among minority communities, with an aim to securing financial security in retirement.

## SESSION 1115 (SYMPOSIUM)

### GROWING OLDER IN RURAL UNITED STATES: SOME CHALLENGES AND POTENTIAL SOLUTIONS

Chair: *S.S. Butler, University of Maine, Orono, Maine*
Discussant: *S.A. Eisenhandler, University of Connecticut, Storrs, Connecticut*

Rural elders have lower incomes, are less healthy, and have higher rates of chronic diseases than their urban counterparts. These elders face particular challenges based on the rural nature of where they live. Generally, there are fewer services and fewer service providers. Moreover, physical barriers to accessing services include limited public transportation, difficult terrain and long distances (Turner & Krout, 2006). The papers in this symposium identify some of the current challenges faced by older adults living in rural regions of the country and offer potential solutions to these pervasive problems. The opening paper by Ford, Crowther and Parmelee discusses the health disparities experienced by rural elders with a particular focus on African Americans and the need to develop culturally appropriate prevention programs. The second paper, by Call and Erickson, reports on a study examining the consequences of declining healthcare infrastructure for the elder residents of rural communities, and how to address this problem. The third paper, by Sharkey, Johnson and Dean, takes up the issue of low daily consumption of fruits and vegetables for elders in rural regions where great distances exist between food stores. The symposium concludes with a paper by Maiden and Rummel which describes an innovative service-learning project involving gerontology and marketing students, which focused on increasing awareness of a single point of entry agency for longterm care services in a rural community. Together these papers illustrate some of the unique challenges faced by rural elders, as well as promising approaches to addressing their particular needs.

### HEALTH DISPARITIES, PREVENTION AND RURAL OLDER ADULTS

C.D. Ford[1], M.R. Crowther[2], P. Parmelee[3], *1. The University of Alabama - College of Nursing, Assistant Professor, Tuscaloosa, Alabama, 2. The University of Alabama - Clinical Psychology Program, Director, Tuscaloosa, Alabama, 3. The University of Alabama - Center for Mental Health & Aging, Director, Tuscaloosa, Alabama*

Rural elders are one of the greatest at-risk groups for experiencing health disparities. Although it is not clear exactly what characteristics of poverty contribute to health disparities, several explanations have been suggested including neighborhood or residential stability and its isolating effects; lack of community resources and health services; and lack of social support. As the first set of baby boomers reach the age of 65 in the next few years, the impact of income and health education will grow in importance as we devise strategies to address health disparities among this next cohort of older African Americans. Programs are generally geared toward younger populations, however, as people age it is important that programs are offered to help prevent the development of disease and co-morbid conditions. The focus of this paper is to discuss emerging issues regarding methods for developing and enhancing culturally appropriate prevention programs for rural African American elders.

### MARKETING A SINGLE POINT OF ENTRY SERVICE IN A RURAL COMMUNITY

R. Maiden, A. Rummel, *Psychology, Alfred University, Alfred, New York*

This paper reports on a business course, which congregated gerontology and marketing disciplines to solve a community-based problem: how to increase awareness of a single point of entry (SPE) agency for long-term care services. Fifteen undergraduates in marketing labored on solving this problem as part of the course's service-learning component. They were charged with going into the rural community in four groups to survey 100 participants each from four targeted sectors primarily composed of caregivers of different types of disabilities. The four targeted community groups had been preselected after the class interviewed a focus group of employees at the SPE agency, titled NYConnect. Based on the survey, the business students proposed changing the brand of NYConnect and developed a new marketing strategy, which was adopted.

### COMMUNITY AND HOUSEHOLD FOOD ENVIRONMENT: CHALLENGES TO FRUIT AND VEGETABLE INTAKE IN RURAL SENIORS

J. Sharkey, C. Johnson, W.R. Dean, *SRPH-TAMHSC, College Station, Texas*

The purpose of this study is to examine the challenges to fruit and vegetable intake faced by rural seniors. Data came from the 2006 Brazos Valley Health Assessment for 589 rural seniors (perceived food access, household food environment, and fruit/vegetable intake) and food store data from the 2006-2007 Brazos Valley Food Environment Project (objective measures of food access). Our analyses revealed that increased distance to the nearest supermarket, food store with a good variety of fresh and processed fruit, or food store with a good variety of fresh and processed vegetables was associated with decreased daily consumption of fruit and vegetables, after controlling for the influence of individual characteristics and perceptions of community and home food resources. Findings suggest that interventions designed to increase fruit and vegetable consumption among rural seniors should consider strategies to ameliorate differential access to healthy food due to food store distance.

### HEALTH CARE ACCESS CHALLENGES FOR ELDERLY LIVING IN RURAL COMMUNITIES

V. Call, L. Erickson, *Brigham Young University, Provo, Utah*

A major challenge facing the elderly living in rural communities is the substantial decline in rural health care infrastructures (Morton, 2003). Rural elderly have difficulty accessing primary care and obtaining specialized services. This study examines patterns of health care usage relative to service options, reasons for health care choices, and the evaluation of service quality by rural elderly residents. Data come from the 2008 Rural Utah Community study (24 rural communities, n=1,282). Perceived access to primary care varied with the level of medical services in the rural community but the choice to stay or leave their community for services is mitigated by the distance to urban areas with more extensive services. Only 43% of rural residents use local primary care. Most left their community for specialized care (92%). Veterans have different use and travel patterns. The policy implications for access to quality health care by rural elderly are discussed.

## SESSION 1120 (SYMPOSIUM)

### HEALTH AND AGING POLICY FELLOWS: LESSONS LEARNED

Chair: *G.A. Hinrichsen, Office of Mental Health Services, Dept. of Veterans Affairs, New York, New York*

Discussant: *B.W. Lindberg, Gerontological Society of America, Washington, District of Columbia*

The Health and Aging Policy Fellowship Program offers gerontological professionals 9-12 month residential and non-residential opportunities to participate directly in the policy making process. In this symposium, the inaugural class of fellows will discuss policy initiatives on which they worked during the fellowship year, offer insights into the policy making process, and provide concrete recommendations to gerontological researchers and practitioners about ways to advance public policy and aging. Presentations will primarily focus on the United States Senate where most of the fellows had placements in Senate personal offices or committees or partnered with personal offices. Fellows worked on a wide range of aging-relevant policy issues including health care reform, long-term care, end-of-life, mental health, Medicaid, the geriatric workforce, and community-based services. Observations about the legislative and policy process include the structure and dynamics of Senate offices and committees, formal pathways to influencing policy, and informal "less visible" processes by which policy initiatives are developed. Recommendations for advancing the aging policy agenda include specific ways by which gerontologists can establish productive and mutually beneficial relationships with legislative staff and the means by which gerontologists can partner with local, state, and national professional and advocacy organizations.

### "ALL POLITICS ARE LOCAL" AND OTHER MAXIMS OF A WASHINGTON, DC FELLOWSHIP EXPERIENCE

G.E. Alkema, *The SCAN Foundation, Long Beach, California*

It has been said that aging is everybody's business. The deeper meaning and application of this motto to the policy process is substantial, especially since decisions are made regularly on age-related policies with little apparent connectedness to a gerontological perspective and the heterogeneity of older people whom such policies affect. Acknowledging a disconnect, this presentation will describe one gerontological fellow's perspective on ways to heighten the visibility of aging issues to legislators across policy platforms regardless of whether a particular policy appears to be "aging relevant." Several methods will be discussed including listening to legislators with a gerontological ear, connecting stated policy interests to an aging agenda, and emphasizing the value and relevance of local issues and relationships in federal policy making. The presentation will conclude by describing tangible ways that gerontologists within their area of expertise can raise awareness among policymakers on aging issues and their policy impacts.

### POSITIONING OURSELVES TO ENGAGE IN MUTUALLY PRODUCTIVE DISCUSSIONS OF AGING POLICY

K.G. Kietzman, *1. Partners in Care Foundation, San Fernando, California, 2. Health and Aging Policy Fellow, Washington, District of Columbia*

Establishing relationships with legislators and their staff is one important way in which gerontologists can begin to advance aging policy at the local, state, and national level. Working in the United States Senate as a Health and Aging Policy Fellow offered an exceptional opportunity to gain an insider's view of the types of communication that are best received and used by policy makers. The fellowship experience further revealed how the relationships developed between scholars, health and social service professionals, and legislators can become mutually productive and begin to bridge the silos represented by the oftentimes disparate worlds of academia, professional practice, and policy making. Through these collaborative relationships, members of the gerontological community will be better positioned to provide the expertise needed to demystify aging, to demonstrate its diversity and relevance across a wide array of social issues, and to maximize attention to aging within broader public policy debates.

### HEALTH INEQUALITIES: POLITICS AND POLICY IN THE LEGISLATIVE PROCESS

T.P. Miles, *Kent School of Social Work, University of Louisville, Louisville, Kentucky*

This presentation examines the politics surrounding development of policy designed to address health inequalities. New legislation evolves through a consensus process. This process begins with need and only progresses if there is sufficient political will. If this progression takes place in an atmosphere of harmony, then the process of implementation begins with united political will. On the other hand, legislation formed via a contentious route will meet with opposition at each stage of its implementation. Legislation reforming the U.S. health care markets was crafted in a politically polarized atmosphere. Any potential that this legislation has to reduce health disparities will be influenced by this larger societal argument over the process of policy development. In this speculative discussion, we examine political discord and its impact on implementation of policy designed to reduce or eliminate health inequalities.

### CREATING AND MAINTAINING RELATIONSHIPS ON THE FEDERAL AND STATE LEVEL

J.T. Zerzan, *1. General Internal Medicine, University of Colorado Denver, Aurora, Colorado, 2. Colorado Department of Health Care Policy and Financing, Denver, Colorado*

Working with local groups and finding new organizational partners to create a collaborative network can enhance your policy impact. As a non-residential fellow, I worked a few days a month in a Washington, DC Senate office, and since fellowship now work in Colorado Medicaid. Seeing both the federal and state views of health care reform have highlighted the different perspectives in health care financing and delivery and different approaches to policy in each venue. It is striking to note the gaps in federal and state program communication and coordination of benefits for Medicare and Medicaid. By working with a network of local groups, your local and national audience and policy impact are increased. Finding areas of policy overlap and ideas that can build on each other moves gerontological policy issues forward. In addition, these relationships help encourage the creative process of advocacy, sustain energy, and increase satisfaction.

### CONNECTION POWER INFLUENCING HEALTH WORKFORCE POLICY FOR THE AGED

E.J. Bragg, *Public Health Sciences, University of Cincinnati, Cincinnati, Ohio*

As a non-residential fellow, one does not have positional power, i.e., a placement in a congressional office. You are a hidden participant in the policy process. Therefore, it becomes very important to develop connections and to build reciprocal relationships so that in the future you are considered as a resource of information and new knowledge. Being an active member of the Gerontological Society of American or the American Geriatrics Society's policy committees not only allows you to review and comment on proposed bills or regulations, but educates you even more about the political processes and gives you opportunities to build credibility. Volunteering to be a contact for these organizations when they get questions from reporters is another way. This volunteer work may lead to being involved in the organization's "Hill Lobbying Day". Another avenue is to connect with other fellows who are working [or have worked] on congressional staff, government entities, or organizations.

## SESSION 1125 (SYMPOSIUM)

### HEALTH INFORMATION TECHNOLOGY (HIT) IN NURSING HOMES

Chair: *H.B. Degenholtz, University of Pittsburgh, Pittsburgh, Pennsylvania*

Co-Chair: *A.L. Resnick, University of Pittsburgh, Pittsburgh, Pennsylvania*

This panel will present new research findings from an innovative, national study of the availability and use of HIT. Previous studies of HIT adoption reports on generic technologies, such as 'electronic medical records.' Our approach has been to develop a very granular model of the ways that HIT can be used to support decision- making and quality improvement for specific clinical conditions. Our focus has been on the nursing home setting; an oft overlooked component of the health care system from the perspective of HIT. There are major gains to be had from greater and more effective use of HIT in nursing homes with regard to improving quality and efficiency. In addition, nursing home HIT is not just about interoperability with acute and ambulatory care; even though transitions to and from the nursing home are high risk events that can be improved with better and more timely information, there must be processes for that information to be used internally by the nursing home. Finally, nursing homes offer an excellent 'laboratory' to study organizational factors such as culture and leadership related to successful adoption and implementation of HIT. The panelists will present qualitative and quantitative data from multiple perspectives that address the current state of adoption, barriers to further adoption, and potential benefits and costs. Data on the use of HIT were collected from professionals (medical directors, consultant pharmacists, and advance practitioners) who are not necessarily employed by facilities, as well as nursing home administrators, directors of nursing and front-line staff.

### THE HEALTH INFORMATION TECHNOLOGY SOFTWARE MARKETPLACE

H.B. Degenholtz, M.K. Lin, S.M. Handler, A.L. Resnick, *University of Pittsburgh, Pittsburgh, Pennsylvania*

Research Objective: The goal of this study was to characterize the HIT market for nursing homes. We analyzed the vendor landscape, market dynamics, vendor motivations, and perceived adoption barriers. Study Design: Four methods were used: (1) A thorough review of content from vendor and industry websites including product collateral and customer case studies; (2) Secondary analysis of published reports in industry journals; (3) In-depth, open-ended interviews with 17 vendors, consultant, and experts across 12 organizations; and (4) A quantitative survey of software vendor representatives to rate barriers to adoption. Population Studied: Primary population was software vendors in the nursing home HIT marketplace. Secondarily, we studied consultants who advise purchasers and industry experts. Principal Findings: The HIT landscape is crowded with many vendors and lack of a clear market share leader. There is no trusted 3rd party that can validate vendor claims about their customer base. Vendors are not meaningfully differentiated on capabilities or focus. Advantages and limitations of products are not readily apparent in vendor marketing materials. HIT software for nursing homes shows signs of being an immature technology at an early stage of adoption. Conclusions: While there are some signs of maturation in the marketplace, vendors report a number of barriers to further adoption. Our quantitative findings suggest that assistance with purchasing decisions and implementation are key factors, rather than mandates or proof of return on investment. Implications for Policy, Delivery or Practice: Many software vendors are hesitant in the face of regulatory uncertainty, however, purchasing is delayed more by organizational factors than the lack of a clear mandate. Policy makers should focus on supporting purchasing decisions and transition costs of implementation.

### DEVELOPING A FRAMEWORK FOR UNDERSTANDING USE OF HIT IN NURSING HOMES

S.M. Handler, H.B. Degenholtz, M.K. Lin, A.L. Resnick*, University of Pittsburgh, Pittsburgh, Pennsylvania*

Research Objective: The goal of this study was to identify care processes that could benefit from HIT. Study Design: We used the Nominal Group Technique (NGT); a highly structured method designed to generate and rank order concepts. All participants responded to the same question, "What care process could benefit from the use of HIT?" Answers were reviewed, coded, categorized and combined to create a conceptual framework. Population Studied: Sessions were held with: medical directors, consultant pharmacists, advance practitioners, nursing home administrators, directors of nursing, and certified nurse aides. Principal Findings: A total of 144 comments were recorded, and coded into 330 distinct 'uses' of HIT; 236 were ranked in the 'top ten' priority. The study team combined concepts based on an iterative consensus process. Cross-cutting uses of HIT that emerged were: knowledge management, operations, and infrastructure needs. Care process domains included: hand-off communication, medication use process, clinical documentation, QI, regulatory functions, and transferring data. Clinical areas that can be affected by HIT are: skin care, falls, nutrition and hydration, infections, changes in physical and behavioral status, and continence. Conclusions: Participants identified a large number of specific uses of HIT that do not fit into traditional product categories. Participants see the potential for HIT to improve the efficiency and effectiveness of their work, and expect a lot from technology. Implications for Policy, Delivery or Practice: We need to move beyond discussion of 'EMR' or 'order-entry systems' and address how front-line clinicians envision using HIT.

### IMPLEMENTING HEALTH INFORMATION TECHNOLOGY IN US NURSING HOMES: A REPORT ON CHANGE MANAGEMENT

M.K. Lin, S.M. Handler, H.B. Degenholtz, A.L. Resnick*, University of Pittsburgh, Pittsburgh, Pennsylvania*

We surveyed a sample of health care professionals located in 12 states using professional association membership criteria. Our final sample consists of 423 professionals working in a nursing home setting. Using Roger's (1962) stages of innovation model, one-third of our sample indicated that the primary nursing home in which they work is in the "agenda-setting" stage of technology adoption. This stage is characterized by an active search for HIT solutions to clinical challenges confronting the nursing home. Only 8.5% indicate their facility is in the "routinizing" stage. Although two-thirds of respondents indicate that administration is the primary driver behind the adoption of HIT solutions, our results suggest that senior leadership has not facilitated on-going efforts to implement technology. Given the limited progress towards routine use of HIT solutions, our study identifies reasons why implementation across most nursing homes is still in the agenda-setting, matching, or restructuring stages.

### IMPLEMENTING HEALTH INFORMATION TECHNOLOGY IN US NURSING HOMES: A REPORT ON ADOPTION AND USE

H.B. Degenholtz, M.K. Lin, S.M. Handler, A.L. Resnick*, University of Pittsburgh, Pittsburgh, Pennsylvania*

We surveyed health care professionals (n=423) and administrators (n=154) in 12 states regarding the availability and use of HIT for specific clinical care processes. Approximately 33% of professionals and 20% of administrators indicated that they cannot identify either trends or individuals at risk for infections, falls, poor nutrition, behavioral problems, or functional decline; about 40% indicate that their facility cannot generate alerts or reminders for those clinical areas. A majority indicate that their facility either lacks functionality, or does not use HIT, for messaging, identification of orders contrary to advance directives, or point-of-care charting. Nearly 40% of professionals, but only 25% of administrators, indicated their HIT system generates warnings about potential adverse drug reactions; use of HIT for other aspects of the medication use process was limited. We found that a range of HIT features are available, however, there is a significant gap between the potential and reality of HIT.

## SESSION 1130 (POSTER)

## MENTAL, PHYSICAL, FUNCTIONAL HEALTH

### ASSESSMENT FOR CAREGIVER NEGLECT: WHAT CAN WE LEARN FROM ADULT PROTECTIVE SERVICES CASE NARRATIVES?

J.S. Ernst*, Dept. of Sociology and Social Work, Hood College, Frederick, Maryland*

Elder neglect is the most common and least understood type of elder mistreatment reported to Adult Protective Services (APS). Victims of neglect are often hidden and embedded in complex circumstances that may include dependent adult offspring, limited resources for long term care, caregivers with poor health, inadequate support, and reluctance to engage with outside health and social service agencies. This qualitative content analysis of APS records sought to characterize risk factors for neglect by caregivers. Using a risk and vulnerability framework, the author developed a list of codes that related to vulnerabilities of older adults, and risk factors characteristic of caregivers, the family context, and the wider social context. The author and a trained research assistant coded the opening and closing summaries and risk assessment reports for each case; differences were resolved through discussion. The coded passages were categorized, grouped, and summarized. Common themes that emerged related to the older adults' vulnerabilities and the risks connected to the caregivers and to their physical and social environments. The 23 older adults (mean age 82; 59% female) shared characteristics of medical frailty (including chronic conditions such as congestive heart failure, diabetes, and arthritis), functional limitations, and dementia. The caregivers (28% spouses, 28% adult children, 42% other) also had numerous health and psychiatric problems. Environmental and social network stressors included factors related to transitions in care including family disagreements over caregiving, financial needs that kept the vulnerable adult alone while caregivers went to work, lack of appropriate community supports, and housing needs.

### AGING OF DOMESTIC VIOLENCE (DV) IN JAPAN: AN EXPLORATORY STUDY OF DV VICTIMS WHO ARE GETTING OLDER

T. Tatara, A. Katsumata*, Shukutoku University, Urayasu, Chiba, Japan*

According to anecdots discussed among practicing professionals in the fields of domestic violence and elder abuse, it is evident that domestic violence (DV) is aging in Japan. For example, DV counselors report that therre has been an increase in the number of middle age victims of DV seeking assistancer. Recently, this author watched a presentation of an elder abuse expert who stated that nearly 20% of the elder abuse victims last year in a middle-sized city outside Tokyo had been DV victims who got older. There are more stories like these everywhere, lately. Given this sort of background, this author and his assistant started the nation's first exploratory study of the aging of DV in October 2009. The objectives of the study are three, but the space is here to present only one, which is to find out about the changes in the nature and extent of abuse as DV gets older. The data have been gathered from victims of DV participating in varous counseling programs across the country, and data collection is still continuing. An interim report shows that the median age of DV victims (N=90)is 52.0, and most of the survey respondents

(87.6%) stated that the resolution of DV problems will become much harder as victims and abusers get older. In this presentation, there will be a full discussion of the study's findings, along with a review of the data from of the U.S. National Resource Center on Abuse in Later Life.

### HOW DO SELF-DIRECTED PARTICIPANTS USE THE ARTHRITIS FOUNDATION WALK WITH EASE PROGRAM?

M. Altpeter[1,2], B. Schoster[2], A. Meier[2], B. Charnock[2], L. Houenou[2], L. Callahan[2], *1. Institute on Aging, UNC at Chapel Hill, Chapel Hill, North Carolina, 2. UNC Thurston Arthritis Research Center, Chapel Hill, North Carolina*

In 2008, we revised the six-week Arthritis Foundation Walk With Ease (WWE) program and offered it to diverse adults with arthritis in two delivery formats: instructor-led group and self-directed. To identify rates of adherence among self-directed participants, we examined the extent to which they used their WWE workbooks and complied with the recommended program schedule. A total of 276 participants self-selected at baseline for the self-directed format. A post-WWE program satisfaction survey was administered, with an 83% follow-up rate. About 80% of self-directed participants reported reading at least some of their workbooks; of which 42% skimmed sections, 16% read chapters out of order, and 25% read the chapters in order. Nearly half (46%) reported not using any of the self-assessment or motivational tools and about 40% did not use the walking diary. Of those who used these tools: 39% used the starting point self-test; 28% use the knowledge and self-confidence self-checks at the end of each chapter; 36% used the diary to record times/distances walked, 26% used it for motivation and 13% to record challenges. Between 30-40% did not follow the prescribed exercises or walking schedule. Despite wide variation in self-directed use of the workbook and exercise activity, 38% reported overall that the workbook was very helpful, and between 80 - 90% reported that they learned about exercising safely and comfortably with arthritis, how to become and stay motivated, and how to address challenges. Overall, 87% of self-directed participants reported benefitting from their participation in the WWE program.

### COMPARING THE GROUP VERSUS INDEPENDENT FORMAT OF THE ARTHRITIS FOUNDATION WALK WITH EASE PROGRAM: DO BOTH FORMATS WORK?

M. Altpeter[1], B. Schoster[2], J. Shreffler[2], K.R. Martin[2], L. Houenou[2], J.M. Hootman[3], L. Callahan[2], *1. Institute on Aging, UNC at Chapel Hill, Chapel Hill, North Carolina, 2. UNC Thurston Arthritis Research Center, Chapel Hill, North Carolina, 3. CDC Arthritis Program, Atlanta, Georgia*

A quasi-experimental pretest-posttest evaluation of the revised 6 week the Arthritis Foundation Walk With Ease (WWE) program was conducted in 468 individuals with self-reported arthritis from 27 urban and rural communities. Participants selected either instructor-led group (n=192) or self-directed (n=276) formats. Baseline and post-WWE program assessments were administered, with 93% group and 83% self-directed participant follow-up rates. Adjusted mean outcome values for the group and self-directed participants posttest were determined using regression models, adjusting for baseline outcome, age, gender, race, and education. Effect sizes (ES) and 95% confidence intervals (CI) were computed. Self-directed participants were on average younger, better educated, in better health and performed better on functional tests than their group counterparts. For both delivery formats, significant adjusted mean improvements ($p<0.05$) were seen for all of the self-report and performance measures, except for arthritis self-efficacy (ASE) and the 2 min step; moderate effects were also seen for disability, pain, fatigue, stiffness and helpfulness; and self-efficacy (SE) scales had modest improvements as did performance measures; ES ranged from .09 to .39. There were no significant differences in the outcomes between the two groups. The AF's revised WWE program appears to decrease disability and improve arthritis symptoms, self-efficacy and perceived control, balance, strength, and walking pace in individuals with self-reported arthritis regardless of whether they are taking an instructor-led group class or doing the program on their own as self-directed walkers.

### NUTRITION STATUS IN A VETERANS' SETTING: A PILOT STUDY

A. Boström[1], D. Van Soest[2], B.K. Kolewaski[2], D.L. Milke[2,1], C. Estabrooks[1], *1. Faculty of Nursing, University of Alberta, Edmonton, Alberta, Canada, 2. CapitalCare Edmonton Area, Edmonton, Alberta, Canada*

Background: Many European studies have showed that older persons living in long term care (LTC) are at risk for malnutrition. Objectives: To examine the nutrition status of elders living in a LTC facility for Canadian Veterans, to explore determinants of malnutrition, and to compare the nutrition status with the results of LTC settings in Europe. Methods: The study sample consisted of 55 elders (response rate 53%). Mean age was 86.5 years for the 50 men and 88.4 years for the five women. The Mini Nutritional Assessment (MNA) tool (18 items) was used to examine the nutrition status, and selected items and scales from the MDS 2.0 substituted 10 MNA items. Data were analysed using descriptive statistics and regression models. Results: The assessment found 6 (11%) elders to be well nourished, 32 (58%) at risk for malnutrition, and 17 (31%) to be malnourished. Malnutrition were associated with depression ($p=0.002$), instability in health ($p=0.004$), and cognitive function ($p=0.010$). Conclusion: Like the LTC settings in Europe that use the MNA for nutrition assessment, the majority of elders in the Canadian facility were found to be at risk or actually malnourished. Staff and managers need to pay extra attention to residents with depression and dementia, and those who have an unstable health condition. There is a substantial knowledge base on interventions to prevent malnutrition (modifying food, assistance during meals and environmental factors), but research is needed on methods of knowledge translation for nutrition interventions that would succeed in putting these into practice in LTC.

### PATIENT PAIN FOLLOWING IN-PATIENT PALLIATIVE CARE CONSULTS: THE IMPORTANCE OF CONTINUED CARE

J.R. Laguna[1], E. Vesper[2], P. Jamison[2], S. Enguidanos[1], *1. Davis School of Gerontology, University of Southern California, Los Angeles, California, 2. Kaiser Permanente, Downey, California*

The efficacy of inpatient palliative care (IPC) teams in the management of pain symptoms of seriously ill hospitalized patients has been well documented (Ciemins, Blum, Nunley, Lasher, Newman, 2007; O'Mahony, Blank, Zallman, Selwyn, 2005; Jack, Hillier, Williams, & Oldham, 2003). However, little is known about patient pain-levels following IPC consultations after hospital discharge. This study examines pain levels among 130 managed care patients, ages 65 years or older, receiving IPC consults and subsequently discharged from the hospital. Patients were asked to rate their level of pain on a scale from zero ("no pain") to ten ("excruciating pain") at five different times (prior to IPC consult, 2 and 24 hours following consult, at hospital discharge, and 10 days post discharge). Results indicate that while study participants experienced a decrease in pain levels across the first four measurement points during hospitalization (mean pain change from admission to discharge = -0.94, SD=2.18; t=9.91, $p<.001$), participant pain levels increased significantly following discharge (mean pain change from discharge to 10 days = 1.72, SD=2.74; t=7.91, $p<.001$). Additionally, factors associated with higher post-discharge pain levels are also discussed. While this research confirms the efficacy of IPC teams in managing pain within the hospital setting, it also illuminates the need for more effective pain management following hospital discharge. Future research should focus on improving transitions in care settings and continuity of care to address gaps associated with the episodic nature of inpatient palliative care programs.

## THE INTERACTION OF AGING, THE MASCULINE GENDER SCRIPT, AND MALE HEALTH BEHAVIORS

T.L. Peak, J. Gast, *Social Work Program, Utah State University, Logan, Utah*

After over a decade of focus on women's health, the time has come to attend to the health needs of men. Men have become both an underserved and a difficult-to-serve population and there is growing recognition that male gender is now a health disparity that merits a public health response. More research in the area of men's health is needed for a number of reasons. First, on average, men die six years younger than women (US DHHS, 2000). Second, as compared with women, mortality rates for men (and boys) from the top 15 causes of death (except Alzheimer's disease) in the United States are higher (US DHHS, 2000). Also, men tend to seek out health care and preventive health services significantly less often than women (Courtenay, 2003). Masculine gender scripts may be an important factor in the differential response by men to health issues. Few studies have examined how masculine gender scripts impact men's health promotion behaviors and attitudes, especially as men age. The masculine script may be challenged when men can no longer ignore physical decline due to the aging process. Our study used focus group methodology with four diverse groups of white men (N=32) to explore if and/or how men adapted the masculine gender script related to aging. In our qualitative results, we found that men did change their gender scripts based in aging-related experiences. Acknowledging and accommodating the effects of masculine gender scripts in future social work practice with men may help decrease the disparities in men's health outcomes.

## FIT AND STRONG!: BOLSTERING MAINTENANCE OF PHYSICAL ACTIVITY AMONG OLDER ADULTS WITH LOWER-EXTREMITY OSTEOARTHRITIS

S.L. Hughes[1], R. Seymour[1], R. Campbell[1], P. Desai[1], G. Huber[2], H. Chang[3], *1. Center for Research on Health and Aging, University of Illinois Chicago, Chicago, Illinois, 2. Northwestern University, Chicago, Illinois, 3. JAMA, Chicago, Illinois*

Little is known about effective ways of motivating older adults to maintain physical activity after a formal training program ends. Fit and Strong! is an award winning, evidence-based multiple-component physical activity/ behavior change program for older adults with osteoarthritis. This study used a multi-site comparative effectiveness trial (N=486) with repeated measures to compare the impact of negotiated vs. mainstreamed follow-up with and without telephone reinforcement (TR) on maintenance of physical activity (PA) after the 8-week Fit and Strong! program ended. Random effects analyses for the total sample showed significant improvements at 2,6,12, and 18 months on PA maintenance that were accompanied by decreased lower-extremity (LE) pain and stiffness, improved LE function, sit-stand, and 6-minute distance walk and decreased anxiety and anxiety/depression. Analyses by treatment condition showed that persons in the negotiated group who received TR maintained a 21% increase in caloric expenditures over baseline, with lesser benefits seen in the mainstreamed with TR, negotiated only, and mainstreamed only groups. Significant benefits of telephone dose were also seen on lower-extremity joint stiffness, pain, and function as well as anxiety and anxiety/depression. The negotiated follow-up contract that Fit and Strong! uses, bolstered by TR, is associated with enhanced long-term PA maintenance and associated health outcomes. While TR was effective, it is not inexpensive, which may impede its translation and dissemination into community-based settings. Other forms of reinforcement, like participant and instructor videos will also be important to test if we are to maximize the successful translation of evidence-based programs in the future.

## POLYPHARMACY PREDICTS MINI MENTAL STATE EXAM DECLINE OVER 12 YEARS: DATA FROM THE HISPANIC EPESE

R.F. Palmer[1], C. Mouton[2], D. Royall[1], K. Markides[3], D. Espino[1], *1. Family & Community Medicine, University of Texas Health Science Center at San Antonio, San Antonio, Texas, 2. Howard University - College of Medicine, Department of Community Health and Family Practice, Washington DC, District of Columbia, 3. Univesity of Texas Medical Branch- Sealy Center on Aging -Preventative Medicine & Community Health, Galveston, Texas*

Objective: To evaluate the impact of multiple medication use on Mini Mental State Exam (MMSE) scores over five waves (12 years) of the Hispanic EPESE study. Participants: 3050 older Mexican Americans from the southwestern states of Texas, New Mexico, Arizona, Colorado and California were followed over five waves (1993-94, 1995-96, 1998-99, 2000-01, 2004-05). Measurements & Analysis: Analytic variables included age, gender, socio economic status- education and annual household income, native vs. foreign born, body mass index, total CES-D score, total MMSE score, hypertension, diabetes, Beer's inappropriate medication use, potential major drug-drug interactions and polypharmacy (≥5 drugs). Structural equation modeling was used to assess change over time in cognitive function with the aforementioned predictors. Results: Average baseline MMSE scores were 25.4, with an average decline of 0.64 MMSE points per year. There was also significant variation around these averages. After adjusting for relevant covariates, polypharmacy was an independent predictor of the MMSE rate of change, accounting for 6.5 percent of the total variability in MMSE rate of change over 12 years. Inappropriate drug use and drug interactions were not significant predictors. Compared to those who did not classify as having polypharmacy, those who did had significantly worse decline in cognitive function over the 12 year period. Conclusions: Among older Mexican Americans in this sample, polypharmacy is a significant predictor of decline in MMSE scores over 12 years. Further studies are needed to determine if specific medication classes are contributing disproportionally to this decline. Key Words: polypharmacy, elderly, Mexican-American.

## EXERCISE INTERVENTIONS TO IMPROVE BALANCE AMONG COMMUNITY-DWELLING OLDER ADULTS: A SYSTEMATIC REVIEW

P. Allen, W. Auslander, *The George Warren Brown School of Social Work, Washington University in St. Louis, St. Louis, Missouri*

Background. Clinical trials in controlled settings have shown exercise interventions to be efficacious in improving balance among older adults, yet less is known about the effectiveness of such interventions in real world settings. To address this gap, this study will ask what types of interventions are most effective, delivered in which settings and by whom? Methods. A systematic review was conducted of studies published July 2007 through April 2009 that tested effectiveness of exercise interventions to improve balance in community-dwelling adults aged 60 and over with or without a fall in the past year. Studies published prior to July 2007 had been reviewed elsewhere. A methodological quality rating scale (MQRS) was used to rate the rigor of the studies, and outcomes were evaluated and summarized with an outcome attainment scale. Results. Fourteen studies met inclusion criteria, 12 were RCTs and 2 used quasi-experimental designs. Interventions lasting 6-weeks to 6-months included balance exercises only, or combinations of walking, leg strengthening, and balance exercises. The median MQRS score was 10, out of a possible range of 0 to 17 (rigorous methods) and actual scores of 5 to 15. Outcome balance measures varied, so no pooled effect sizes were calculated. Evidence of effectiveness was stronger for community-based supervised group exercise interventions than unsupervised home-based exercise. Interventions with trained non-licensed interventionists were as effective as those delivered by licensed personnel. Conclusions. Combination community-based group exercise sessions led by trained non-licensed personnel may be promising and cost effective to improve balance among older adults.

### THE ROLE OF SOCIAL SUPPORT AND BUILT ENVIRONMENT IN THE PATHWAY FROM FUNCTIONAL LIMITATION TO DISABILITY AMONG THE ELDERLY

Y.H. Yeo, *UNC-CH, Chapel Hill, North Carolina*

Verbruge and Jette's disablement process model posits that disability (the gap between individual capacity and the role expected in society) is different from functional limitation (individual capacity) with highlighting several important internal/external factors impacting on disability. Although there are many studies examining the role of internal individual factors (i.e., SES, race) in the disablement process model, there are limited studies focusing on external individual factors using a national representative sample of the elderly in the U.S. Using the core and topical module of 2004 SIPP wave 5, this study investigates the role of two important external individual factors, social support and built environment in the pathway from functional limitation to disability among the elderly aged 65 and older (N=12,248). This study employs zero-inflated count models to predict disability (a composite score of ADLs and IADLs). Independent variables include functional limitation (Nagi scores), social support (expectations to get help from friends, family, and others), built environment (housing satisfaction, and neighborhood satisfaction), and a set of demographics (i.e., race, age, income, marital status, education, metro residency). This study finds that social support ($p<.01$) and built environment ($p<.05$) are significant predictors of disability after controlling for functional limitation. There are also significant interactions between functional limitation and built environment ($p<.05$). The findings imply that disability among the elderly is explained not only by individual capacity but also by social supports and built environments. Further the effect of individual capacity to disability differs by the level of built environemnt.

### OLDER ADULTS AND SUBSTANCE ABUSE: PREPARING SOCIAL WORK STUDENTS FOR PRACTICE

I.A. Gutheil, J.C. Heyman, M. Hanson, L. White-Ryan, *Graduate School of Social Service, Fordham University, West Harrison, New York*

Substance abuse disorders among older adults are projected to double by 2020. Social workers need the knowledge and skills to address this growing concern. Increasingly, researchers have used narratives to help convey the lived experiences of individuals to teach students. This study developed educational vignettes from oral histories of older adults with current or past substance abuse problems to teach social work students about older adults and substance abuse. A vignette and related teaching materials were used in one session of a 15-week course on substance abuse offered several times over three semesters. A pre-test post-test design evaluated the impact of using this educational material on MSW students' knowledge and self-rated competency related to older adults and substance abuse (N=120). A repeated measure MANOVA showed a significant improvement in students' knowledge and competency between pre and post-test. It was striking that one class session was able to make a substantial difference. Implications for preparing students to work with older adults with substance abuse concerns will be addressed.

### DYING AT HOME: A CONCEPTUAL FRAMEWORK

S. Lysaght, M. Ersek, *School of Nursing, University of Pennsylvania, Philadelphia, Pennsylvania*

Most older Americans express a strong preference for dying at home. Hospice services have long promoted this goal. However, recent dramatic increases in hospice inpatient facilities suggest that dying at home is a concept needing re-clarification. The purpose of this concept analysis was to develop a literature-based definition of the concept dying at home and to construct a preliminary conceptual framework which could be used to guide further research. The method used was Walker and Avant's (2005) eight-step iterative methodology. In addition to lexicon-derived definitions, 168 articles were identified through a search of three electronic databases. A total of 35 articles were analyzed to derive the final framework. Antecedents identified include adequate resources, physical location of care, patient preference, caregiver preference, and awareness of prognosis. Essential attributes of dying at home include caregiver support, a time-limited course, access to symptom management, and feeling "at home". The consequences include transitions, intensity of care, caregiver health, and place of death. There are complicated patient and caregiver meanings around the experience of dying at home that encourage a more cautious view of dying at home as a gold standard. Clinically relevant research in this area calls for a better understanding of needs, appropriateness, and evaluation of the role of dying at home in patient and caregiver outcomes.

### EXPLORING THE HOSPICE DECISION

D. Waldrop, *School of Social Work, University at Buffalo, Buffalo, New York*

Hospices provide comprehensive, high quality care that eases suffering when curative treatment has ended and death is anticipated within 6 months. However, most hospice admissions occur only during the final days of a terminal illness and 30% of all patients die within 7 days of admission. Understanding the factors that influence the decision to elect hospice is a priority in the field of end-of-life and palliative care. The purpose of the study was to investigate the factors that contribute to the decision to enter hospice care and the timing of that decision. In-depth interviews were conducted with hospice patients and their caregivers (N=64 families). Participants were contacted after they had been in hospice home care for 2 weeks, demonstrated a Palliative Performance Scale Score (PPS) of >40 and remained at home. The purpose for this selection strategy was to gather participants' perspectives in "real time." Interviews were audiotaped, transcribed and coded to identify emergent themes. The results indicate clear differences in decision-making by diagnosis (cancer vs. other [e.g. COPD, CHF]). In addition, specific physical and functional changes become triggers for hospice admission (e.g. increased care needs; symptom exacerbations [pain, shortness of breath]). The decision to enter hospice was made differentially. Decision-makers included: (a) the physician, (b) the family with or without the physician's approval and (c) the patient. Key factors in the decision process were: (a) previous experience with hospice, (b) learning about hospice through "word of mouth", and (c) the desire no further hospitalizations.

### SOCIAL WORKERS' INVOLVEMENT IN END-OF-LIFE PLANNING AND ETHICAL DILEMMAS

I.A. Gutheil, J.C. Heyman, M. Morrissey, *Graduate Social Service, Fordham University, West Harrison, New York*

Social workers often play an important role in meeting the needs of individuals and their families around end-of-life planning. This research used a correlational, cross-sectional design to ascertain social workers' professional experiences in end-of-life planning and related ethical issues. A mailed survey was sent to 2,000 National Association of Social Workers members: 1,000 in the fields of health and aging; and 1,000 in other than health and aging. Of the social workers who responded from the health and aging fields (n=495), 56.2% indicated they were involved in end-of-life planning. Of those from other than health and aging (n=329), 19.8% indicated they were involved in end-of-life planning. For social workers who indicated they were involved in end-of-life planning, 73.7% stated that they often help facilitate discussions about the health care proxy between clients and their families, and 70.4% indicated they were involved in discussing health care proxies with clients. When asked what types of ethical dilemmas they were confronted with, frequently identified areas included: confusion or conflict because there is no health care proxy; no discussion has ever taken place regarding the patient's wishes between patient and family; disagreement between patient and family; question of competency of patient; and the lack of discussion between physicians and patient regarding patient's wishes. These issues underscore the importance of training social workers and other professionals on end-of-life planning and ethical issues. Implications for education based on this research will be discussed.

### STATE VARIATIONS IN PERCEIVED QUALITY OF DYING AMONG THOSE DYING FROM DEMENTIA

S. Kuo[1], J.M. Teno[1], J. Lima[1], S. Mitchell[2], P.L. Gozalo[1], *1. Community Health, Brown University, Providence, Rhode Island, 2. Harvard Medical School, Boston, Massachusetts*

Objective: To examine whether bereaved family members in states with lower rates of feeding tube insertions (FTI) perceived better quality of end-of-life care than those in states with higher rates. Methods: A mortality followback survey of bereaved family members of persons who died of dementia in five states with "low" (MA, MN) and "high" (AL, FL, TX) FTI was used. It included the Family Evaluation of Hospice Care Instrument to examine quality of dying in the last week of life (LWOL). Ordered logit models examined the state effect adjusting for age, gender, relationship of respondent, and hospice use on overall satisfaction with care and a composite measure of quality of care based on counts of unmet needs and concerns. Results: Among 531 respondents, 46% reported having at least one problem in the end-of-life process, and 11% reported having at least 4 (14% in MA,10% in MN, 12% in AL, 11% in FL, 7% in TX,). States with "low" FTI were more likely to report that care received in the LWOL was excellent (48% in MA, 55% in MN) compared to those with "high" rates (33% in AL, 37% in FL, 43% in TX). Family members of decedents from AL and FL were significantly more likely to report poorer overall satisfaction with care received compared to MN (ORs = 1.94 and 2.00, respectively). There were no statistically significant differences in the number of problems across states. Conclusions: Perceived quality of care was lower in states with higher FTI.

## SESSION 1135 (SYMPOSIUM)

### ESPO/SRPP SYMPOSIUM: PROGRAMMATIC APPROACHES TO HEALTHY AGING AND COMMUNITY LIVING

Chair: *K.L. Phillips, Program on Aging and Care, Scott & White, Temple, Texas*
Discussant: *T. Prohaska, University of Illinois, Chicago, Illinois*

Community-based health and social services can provide unique and valuable services to the growing number of older adults who seek to maximize their well being and quality of life while maintaining community living. These unique community-based interventions and programs are especially important in light of the aging population, which will create a high demand for cost effective, programmatic approaches to health promotion for older adults. According to the Centers for Disease Control and Prevention (2003), health interventions and programs are important not only to prevent rising health care cost, but they also aid in allowing seniors to remain independent for longer, improve their quality of life, and delay nursing home use. The purpose of this symposium is to present innovative interventions and programs that further the healthy aging agenda by promoting community living and healthy aging. Four areas critical to the health and well being of community dwelling older adults will be discussed: 1) nursing home diversion 2) caregiver support 3) health promotion and 4) a health aging coalition. Each presenter will highlight how their program been successful in promoting community living and preventing adverse health events among older populations. The symposium will conclude with the distinguished discussant providing a general overview of the benefit of these programs and offer some final suggestions for continuing to promote healthy aging and how a programmatic approach to community-based programs can impact the health of older adults and impact public policy.

### RETURNING HOME THROUGH ENHANCED NURSING HOME DISCHARGE PLANNING

K. Pillemer, R. Meador, E. Kahoe, *Cornell University, Ithaca, New York*

A substantial proportion of older people will spend time in a nursing home before they die. After admission, some residents stabilize, adjust limitations, and wish to return to their own homes. This presentation describes the evaluation of an enhanced discharge planning intervention, Project Home, which targeted current nursing home residents who wished to return to community living. Project Home staff worked intensively to transition clients to more independent settings while ensuring that their care needs were met through home health care, nutrition programs, adult day care, and other services. Findings highlighted deficits in social and community resources that prevented some clients from being discharged as well as successful strategies that were applied across cases. Cost data indicate the Project Home provided significant savings over nursing home care. Overall, the effectiveness of the intervention was due to in its unusually personalized and time-intensive approach to discharge planning and long-term follow-up.

### SCOTT AND WHITE'S FAMILY CAREGIVER PROGRAM: POSITIONING AN EVIDENCED-BASED INTERVENTION WITHIN AN INTEGRATED HEALTHCARE SYSTEM

A.B. Stevens, E. Smith, *Scott & White Healthcare, Temple, Texas*

The Scott & White Family Caregiver Program (SWFCP) addresses the need for an evidence-based intervention available to dementia caregivers within a healthcare system. The SWFCP program staff utilizes the unique benefits of an integrated healthcare system to electronically identify caregivers. Once a caregiver is identified, a brief risk assessment (REACH II RAM) is used to identify key areas in which components of the REACH II (Resources for Enhancing Alzheimer's Caregivers Health) intervention could be individually tailored and delivered via a "Caregiver Notebook" and telephone support. To date, 112 caregivers have been enrolled in the SWFCP. At the six-month follow-up point, significant decreases in caregiver burden, safety and care recipient problem behaviors were noted. Furthermore, a decrease in the overall RAM score was observed. Strategies used to translate and implement the intervention will be discussed.

### THE ATLANTA HEALTHY AGING COALITION: CRAFTING A REGIONAL APPROACH TO HEALTH & WELLNESS

J. Gill, *Atlanta Regional Commission, Atlanta, Georgia*

The Healthy Aging Coalition facilitated by ARC and established in 2009 and meets quarterly is comprised of thirty-five organizations dedicated to encouraging healthy lifestyles within the area of aging. Public health entities, hospitals, voluntary health and faith-based organizations, parks and recreation departments, universities, and aging services collaborate to create an exchange of information and mutual support. The coalition goal is to consolidate efforts and resources and to identify major initiatives of interest for strategy, design, implementation and evaluation. Cross-collaboration allows for the development of a regional health and wellness plan. The objectives of this presentation are to: 1)To foster regional advocacy and implementation of creative approaches to promoting preventative health services and access to healthcare; 2)To identify methods for establishing cross-collaboration to get to a regional approach; 3)To illustrate the role that non-traditional partners play within this partnership.

### OLDER ADULT VOLUNTEERING AS A PATH TOWARD HEALTHY AGING AND COMMUNITY LIVING: A REVIEW OF EXPERIENCE CORPSR BALTIMORE CITY

E.J. Tan[1], M. Carlson[1], T. Seeman[2], Q. Xue[1], L.P. Fried[4], E. Tanner[1], K.E. Whitfield[3], G. Rebok[1], *1. Johns Hopkins Center on Aging and Health, Baltimore, Maryland, 2. University of California, Los Angeles, California, 3. Duke University, Durham, North Carolina, 4. Mailman School of Public Health, Columbia University, New York, New York*

Objectives. We describe the potential of Experience CorpsR Baltimore City (EC) to promote physical activity in older adults through volunteer roles in the Baltimore City Public School System that were specifically designed to increase physical, cognitive and social activity. Methods. We review data showing that EC can increase physical activity among initially sedentary older African American volunteers at elevated risk for poor health outcomes. Results. The 1999-2000 pilot randomized, controlled trial provided initial evidence that EC can increase physical, as well as social and cognitive, activity. We additionally demonstrated that EC volunteers sustained increased physical activity levels relative to matched controls over a 3-year period. Conclusions. The ability to increase and sustain increased physical activity among older African Americans through generative service suggests a potential avenue for embedding physical activity interventions in volunteer programs.

# SESSION 1140 (PAPER)

## BIOLOGICAL SCIENCES PAPER SESSION I

### THE REPRODUCTIVE BIOLOGY OF PARENTS AFFECTS THEIR OFFSPRING'S MORTALITY

B.A. Carnes, *Geriatric Medicine, Univ of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma*

We use data from a breeding colony of laboratory mice to examine the effect of maternal age on the mortality risks of her offspring. Specifically, age at birth of litter affected all offspring while premature menopause only affected male offspring. When coupled with existing literature, these findings reveal a U-shaped mortality risk curve with elevated risks at either end of a Dam's age window of reproduction. These risks have grave implications for humans because our ingenuity has allowed us to effectively escape the environments that shaped our biology. As a result, culture progressively prolongs childhood and delays reproduction. Our findings, however, suggest that the mortality consequences of our reproductive biology may be far harder to escape.

### THE ASSOCIATION OF LENS TRANSPARENCY AND CATARACT WITH TELOMERE LENGTH IN OLDER ADULTS

J. Sanders[1], A. Iannaccone[2], R. Boudreau[1], Y. Conley[1], W. Hsueh[3], R.M. Cawthon[4], T. Harris[5], A.B. Newman[1], *1. University of Pittsburgh, Pittsburgh, Pennsylvania, 2. University of Tennessee Health Science Center, Memphis, Tennessee, 3. University of California San Francisco, San Francisco, California, 4. University of Utah, Salt Lake City, Utah, 5. National Institute on Aging, Bethesda, Maryland*

Purpose: Lens transparency is a potential in vivo marker of primary aging that can be distinguished from diseases of the lens like cataract. To validate lens transparency as a marker of aging, we determined its association with leukocyte telomere length (TL). Methods: Participants included 2,750 community-dwelling older adults from the Health, Aging, and Body Composition Study in whom leukocyte TL was measured at baseline using qPCR. We determined the association between TL and prevalent cataract or nine-year incidence of cataract surgery, markers of lens disease. To assess primary lens aging, we conducted a cross-sectional sub-analysis of 259 Health ABC participants who had their lens transparency directly measured according to Age-Related Eye Disease Study (AREDS) criteria. Using AREDS grading, we stringently categorized successful lens aging as ≤3.0 nuclear grade and 0% cortical grade. Results: TL was unassociated with prevalent cataract or incident cataract surgery. In the transparency sub-study, the 6 individuals (2.3%) with successfully aged lenses had a mean TL of 5,700 basepairs. Individuals with >3.0 nuclear grade or >0% cortical grade had a mean TL of ~4,790 basepairs. Participants with a 1,000 basepair greater mean TL at baseline had more than a 50% reduced odds of any lens opacity (OR=0.47, 95% CI 0.22-1.02), any nuclear opacity (0.48, 0.22-1.03), or any cortical opacity (0.49, 0.23-1.05) after adjustment for age and gender. Conclusions: Lens transparency, but not cataract, might be associated with longer leukocyte TL. There should be further validation of lens transparency as an in vivo marker of biologic aging.

### ARE HUMAN BEINGS BIOLOGICALLY YOUNGER THAN BEFORE? A TWO-PROCESS VITALITY MODEL EXPLORES THE AGING TREND OVER THE PAST 200 YEARS

T. Li, J.J. Anderson, *Quantitative Ecology and Resource Management, University of Washington, Seattle, Washington*

A Remarkable Gain of Life Expectancy for Human Beings has been Observed over the Past 200 Years, Which Leads to a Fundamental Question that Whether the Mortality Decline Indicates a Slowing in Aging, Such that People Today Are Biologically Younger than in the Past, or an Improvement in Environmental Condition, Such that Deaths Are Delayed from Diseases and Other Stresses. We Investigate the Question by a Model which Describes Mortality through Two Processes: an Intrinsic Process Based on the Stochastic Loss of Survival Capacity (Vitality) to a Killing Boundary and an Extrinsic Process that Kills Individuals when the Intensity of External Random Challenges Exceeds the Vitality Level. This Model Expresses Mortality by the Interaction of the Two Processes and Provides a Quantitative Way to Separate the Contributions of Improved Senescence and Improved Environmental Conditions on Increasing Lifespan. Applying the Model to Period Survival Data from Sweden, Switzerland, France, Japan and the U.S Suggests a Long and Uninterrupted Decline in the Senescence Rate over the Past 200 Years. However, It also Suggests that Mortality Reductions in the First Half of the 20th Century were Dominated by Improved Environmental Conditions, While Reductions in the Second Half of the Century were Dominated by Intrinsic Improvements in Aging, i.e., the Rate of Loss of Vitality. The Model Further Implies that Recent Deviation from the Pattern of Mortality Compression or Survival Rectangularization was the Result of Stabilizing Environment Conditions and Thus Improvements in Longevity can be Mainly Attributed to Improvements in Senescence.

### SYSTEMIC GENETIC DETERMINANTS OF HEALTHY AGING AND EVOLUTIONARY SELECTION IN HUMANS

A. Kulminski, I. Culminskaya, S.V. Ukraintseva, K.G. Arbeev, A.I. Yashin, *Center for Population Health and Aging, Duke University, Durham, North Carolina*

Majority of current studies designed to unravel genetic predisposition to aging-related processes in humans focuses on a single trait of interest. This is not conceptually compelling strategy given that the aging phenotypes are of essentially systemic origin because of their connections with global changes in an aging organism. Furthermore, typically, genetic association studies disregard the role of evolution at the time scale of couple human generations. We focus on conceptually different (systemic) approach to unravel genetic predisposition to healthy aging phenotypes using phenotypic and genotyping data on about 9,300 Framingham Heart Study (FHS) participants from three successive generations. The proposed approach recognizes that multiple complex human phenotypes and their genetic determinants can be associated at higher (systemic) level of organismal organization. We report on discovery of remarkably strong and robust genetic effect on survival/longevity in a large sample of humans. This effect was so strong that after about 60 years of follow up of the FHS participants, virtually all (98.9%) carriers of minor allele of certain single nucleotide polymorphisms had died compared with only 24% of major-allele homozygotes. Although the minor-allele carriers were strongly predisposed to unhealthy life, health traits did not alter associations with survival/longevity implying connection of the discovered genetic effect to accelerated aging. Our findings explicitly document exceptional role of the systemic level of organismal organization in the process of human aging. Furthermore, we discuss connections of the systemic level of organismal organization with evolutionary selection as documented in the three successive generations of humans.

# SESSION 1145 (PAPER)

## BIOLOGICAL SCIENCES PAPER SESSION II

### VITAMIN D SUPPLEMENTATION REDUCES BLOOD PRESSURE IN THE ELDERLY AND THIS IS MODIFIED BY FRAILTY

H. Florez[1,3,2], A. Apaza[2,1], A. Sosa-Melo[2,1], B.R. Troen[1,3,2], E. Cherniack[3,1,2], S. Levis[1,3,2], B.A. Roos[1,3,2], *1. University of Miami Miller School of Medicine, Miami, Florida, 2. Jackson Memorial Hospital, Miami, Florida, 3. Bruce W. Carter VA, Miami, Florida*

Low vitamin D is associated with cardiovascular disease(CVD) and frailty. To assess the effect of cholecalciferol (D3) treatment on blood pressure(BP), we evaluated 59 subjects (ages 59-92, 81% women) at study entry and after 6-months of daily treatment with D3 (400IU vs. 2000IU). At baseline, 33% had low 25-hydroxy-vitamin D(25OHD) levels (<30ng/ml) while 56% had frailty grip(Fried 2001). Baseline systolic BP was higher in those with low compared to those with normal 25OHD levels (141±3.4mmHg vs. 132.1±2.5mmHg, p<0.05), while diastolic BP was not significantly different (78.9±1.6mmHg vs. 75.9±1.2mmHg, p=0.15). Similar reductions were observed at 6 months in both D3 groups (400IUvs.2000IU): -11.7±3.3mmHg vs.-10.2± 2.8 mmHg, for systolic BP(p=0.75) and -4.3±2.4 mmHg vs. -3.1±1.5mmHg, for diastolic BP(p=0.68); therefore data was pooled to assess predictors of BP response to D3. BP medications were used in 34(58%) patients at entry and did not change in 30 of them, while 25(42%) patients did not receive any BP medication. The reduction of systolic BP was greater in older adults without baseline frailty grip compared to those with it (-16.4±3.2mmHg vs.-7.6±2.8mmHg, p=0.06). Diastolic BP reduction was greater in those without baseline frailty grip(-7.9±1.8mmHg vs.-1.8±1.6mmHg in those with frailty grip, p<0.05) and in those with low baseline 25OHD levels(-7.7±2.1mmHg vs.-2±1.5 mmHg in those with normal 25OHD levels, p<0.05). These results suggest that D3 supplementation reduces BP, but frailty may attenuate D3 benefits on cardiovascular health. Assessment of 25OHD levels and frailty may be important to predict the response to D3 treatment aimed at reducing CVD and frailty.

### AMPK FUEL REGULATOR: CONVERGENCE OF HIBERNATION, DIET RESTRICTION, EXERCISE, AND OBESITY

J. Smith-Sonneborn, *Zoology & Physiology Emeritus, University of Wyoming, Laramie, Wyoming*

Divergent biological phenomena have fundamental pathways that affect aging and age related diseases. This presentation highlights common characteristics in hormetic responses to diet, exercise, temperature, exercise, and obesity, i.e, response to cell energy status and suggests that opioids, inducers of hibernation, may have anti-aging potential. The ability to hibernate, appears to involve differential expression of genes common to all mammals, rather than the induction of novel gene products unique to the hibernating state. Mammalian hibernators undergo a remarkable phenotypic switch that involves profound changes in fuel usage. Levels of serum insulin increase before hibernation, then decline to their lowest measured levels in hibernation, though insulin mRNA in the pancreas is highest in animals hibernating from December through March, thought to provide rapid glucose usage reentry out of hibernation(Carey et al., 2003). A known key element, in this fuel switch during hibernation, is the differential expression of the gene encoding pyruvate dehydrogenase kinase isoenzyme 4, that inhibits pyruvate dehydrogenase and thus minimizes carbohydrate oxidation by preventing the flow of glycolytic products into the tricarboxylic acid cycle (Andrews 2004). AMP-activated protein kinase (AMPK) by hypoxia and AICAR treatment combined with fatty acid administration synergistically induce PDK4 expression in non-hibernators, a key element in this fuel switch that modulates ligand-dependent activation of peroxisome proliferator-activated receptor, a major regulator of endurance in exercise, and in insulin sensitivity. AMPK and fatty acids play a direct role in fuel selection in response to cellular energy status (Smith et al., 2005);Houten et al., 2009).

### CYTOKINE PROFILING FOR AGED LOW CAPACITY RUNNER (LCR) RATS: A RAT MODEL FOR HUMAN FRAILTY

P.M. Abadir[1], L.G. Koch[2], H. Li[1], J.D. Walston[1], S.L. Britton[2], S.X. Leng[1], *1. Johns Hopkins, Baltimore, Maryland, 2. University of Michigan Medical School, Ann Arbor, Michigan*

Our previous studies in humans suggest inflammation as an important contributing factor to the geriatric syndrome of frailty. Low capacity runner (LCR) rats, after 22 generations of selective breeding without genetic manipulation, display significantly decreased running speed and distance as well as increased mortality compared to high capacity runner (HCR) rats; as such, we chose LCR rats as a model for human frailty. To gain initial insight into whether aged LCR rats manifest an inflammatory phenotype, we hypothesized that aged LCR rats would have higher serum levels of pro-inflammatory cytokines than aged HCR rats. To test this hypothesis, we profiled 9 pro- and anti-inflammatory cytokines by bead-based multiplex assay in 9 LCR and 9 HCR rats (mean age=28 months, ranging 25-30 months). The results showed that LCR rats had higher levels of pro-inflammatory cytokines including TNF-alpha, IL-1alpha, IL-1beta, IL-2, IL-6, IFN-gamma, and GM-CSF than HCR rats with TNF-alpha being most impressive (mean+SEM: 224+35 vs 34+11 pg/ml, respectively, p<.001). Compared to the HCR control rats, LCR rats also had increased IL-4 (544+19 vs 411+39 pg/ml, p=.002) and IL-10 (1881+247 vs 1192+193 pg/ml, p=.02), likely representing compensatory anti-inflammatory mechanisms. These findings suggest an inflammatory phenotype in the LCR rats that mimics human frailty. They also provide a basis for further development and utilization of LCR rat model to investigate the role of inflammation in and anti-inflammatory interventional strategies for frailty.

### EFFECTS OF MORPHINE ON THERMAL SENSITIVITY IN AGED RATS

C.S. Carter[1], L. Koerper[1], J.D. Mitzelfelt[2], D. Morgan[2], *1. Aging and Geriatrics, University of Florida, Gainesville, Florida, 2. University of Florida, Department of Psychiatry, Gainesville, Florida*

Aim: As the population ages, the prevalence of non-malignant pain increases along with the clinical use of opioids as an intervention. However, little is known regarding older individuals sensitivity to opioids and the most effective treatment strategy. Here we describe the development of a preference procedure to assess changes to thermal sensitivity in adult vs aged rats in response to morphine administration as a preclinical screening tool. Methods: Adult (12-16 months) and aged (27-31 months) male, F344xBN rats were tested in a thermal preference procedure. Rats were placed in an apparatus containing two compartments equipped with floors that were individually temperature-controlled so that sensitivity to “hot” and “cold” thermal stimulation could be assessed during daily 10-minute sessions. Dose-effect curves for morphine (0.56 to 5.6 mg/kg, i.p.)were determined for 3 temperature comparisons [i.e.hot vs neutral), cold vs neutral and hot vs cold] during test sessions. Results: Aged rats were more sensitive to cold stimulation compared with adults at baseline. With morphine administration, the most consistently observed effect in adult rats was antinociception during the hot thermal stimulation compared to the neutral stimulus; an effect which was present but somewhat attenuated in aged rats. In addition, morphine appeared to increase sensitivity to cold stimulation in aged rats only. Conclusions: These data demonstrate age-related differences in baseline thermal sensitivity and responsiveness to opioids. Based on behavioral and physiological requirements of this procedure, it is suggested that thermal sensitivity assessment is a relevant animal model for the assessment of pain and antinociception.

## SESSION 1150 (SYMPOSIUM)

### THE CONSTRUCTION OF SELF AND THE MEANING OF CHILDLESSNESS IN OLDER WOMEN

Chair: *K. de Medeiros, The Copper Ridge Institute, Sykesville, Maryland, The Johns Hopkins University School of Medicine, Baltimore, Maryland*
Discussant: *T. Calasanti, Virginia Tech, Blacksburg, Virginia*

A great deal of research in gerontology has focused on the forms and content of parent-child relationships, which can be especially important in later life. Although there has been increasing research centered on the nearly 20% of older adults in the U.S. who do not have children, many of these studies have looked at economic issues such as intergenerational transfers of wealth. Our symposium draws from a large, qualitative study on generativity and lifestyles of childless older women (GLOW) to explore how childlessness and generativity (investing one's substance in forms of life and work that will outlive the self) are experienced and expressed in a sample of 70 women aged 65 and over who do not have biological children. Given gendered and ageist assumptions that equate "older" and "female" with "grandmother," thereby ascribing identities for older women based on fertility, we present cases which explore the cultural context of voluntary childlessness; generativity and fictive kin; the construction of self and maintenance of self through written life stories; and, in a unique subsample of recent Russian immigrants, how the constructs of gender, fertility and generativity are influenced by the State. Overall, this research sheds important new light on the flow of lives through time, the aging self, the meaning of childlessness, and the psychosocial correlates of generativity in late life.

### THE CULTURAL CONTEXT OF VOLUNTARY CHILDLESSNESS

L. Keimig[1], A. Mosby[2], S.M. Hannum[1], L. Morgan[1], J.K. Eckert[1], *1. University of Maryland Baltimore County, Baltimore, Maryland, 2. Copper Ridge Institute, Sykesville, Maryland*

Over the course of their lives, women today age 65+ have witnessed social change and medical advances offering unprecedented choice in whether or not to have children. While an increasing number of women have decided to remain childless in recent decades, little is known about the dimensions of generativity and self-conception among these women as they age. Through a narrative analysis of in-depth interviews, this paper explores the meaning of voluntary childlessness in the lives of three older women, including the advantages and disadvantages of childlessness at different points in life, and regrets, if any. Findings indicate that these informants, influenced by the advent of the women's movement, 1) continue to contend with stereotypes, 2) ascribe new meaning to the concept of family through various forms of social support, and 3) arrive at an increased sense of independence and power associated with professional accomplishment and creative expression over time.

### REDEFINING "PARENTHOOD": CONCEPTUALIZATIONS OF GENERATIVITY AMONG OLDER WOMEN

S.M. Hannum[1], R. Rubinstein[1], L. Morgan[1], L. Keimig[1], A. Mosby[2], *1. Sociology and Anthropology, University of Maryland, Baltimore County, Baltimore, Maryland, 2. The Copper Ridge Institute, Sykesville, Maryland*

While having biological children does not alone achieve generativity, it is an important aspect for many women, given the social importance of reproduction. Those who did not reproduce, however, may come to understand the parent/child relationship through the care of non-biological children, thereby achieving a similar sense of generativity as childed peers. To explore this, a subsample of three older women (aged 65+) from the GLOW research grant were studied. Each participant completed three in-depth, qualitative interviews pertaining to their life history and specific experiences related to children. The results of the analyses describe how the women functioned as parent for non-biological children and came to regard these persons as their own offspring. Such a redefined parent/child relationship has clear implications on overall health and well-being, but specifically on manifest psychosocial outcomes and ideas of generativity and should be the basis of future research.

### A LEGACY OF STRENGTH: GENERATIVE ACTIONS OF WOMEN FROM THE FORMER SOVIET UNION

A. Mosby[1], K. de Medeiros[1], L. Morgan[2], L. Keimig[2], *1. The Copper Ridge Institute, Sykesville, Maryland, 2. University of Maryland Baltimore County, Baltimore, Maryland*

Childless women make up a growing proportion of older adults, yet this cohort is understudied. Furthermore, very little is known about older women who emigrated to America and how different national, cultural, and religious events may influence how childlessness is experienced. This paper presents findings from a subsample of four recent Russian immigrants who participated in a larger qualitative study on childless older women. Interviews addressed questions on life history, generativity, meaning of childlessness, and caregiving issues. Four major themes emerged from the data: 1) religious persecution in shaping their identity, 2) familial traditions lost among younger Americanized generations and those who are childless, 3) caretaking concerns among childless women who grew up in multigenerational households, and 4) life lessons and stories as important venues for generativity. New insights into the role of an oppressive state government inform views of fertility and generativity among these childless older women.

### KNOW THIS ABOUT ME: HOW WRITTEN NARRATIVES FRAME THE ORAL LIFE STORIES OF THREE OLDER WOMEN

K. de Medeiros[1,2], A. Mosby[1], R. Rubinstein[3], *1. The Copper Ridge Institute, Sykesville, Maryland, 2. The Johns Hopkins University School of Medicine, Baltimore, Maryland, 3. University of Maryland Baltimore County, Baltimore, Maryland*

Life stories, oral and written, have been used to understand the self in old age. The underlying assumption is that events are selected and told because they reveal something integral about that person's sense of self and identity. In our paper, we closely examine the life stories of three women who participated in a large qualitative study on childless older women (GLOW). In addition to telling their story during face-to-face interviews, these women also brought unsolicited written stories with them. In contrast to the oral stories, which included information on many aspects of their lives, the written pieces detailed barriers they encountered and overcame because of race and sex. In essence, the written pieces formed larger cultural frames through which the individual events of their lives told in the oral interviews could be interpreted. This points to importance of multiple narrative perspectives in understanding complexities of self.

## SESSION 1155 (PAPER)

## CAREGIVER HEALTH: DEPRESSION

### LONGITUDINAL ANALYSIS OF LEARNED RESOURCEFULNESS AND DEPRESSIVE SYMPTOMS IN GRANDMOTHER CAREGIVERS

C. Musil, A. Jeanblanc, C. Warner, J.A. Zauszniewski, *Case Western Reserve Univ, Cleveland, Ohio*

Resourcefulness, a set of cognitive-behavioral strategies for dealing with adversity, has been inversely associated with depressive symptoms in samples of older adults, including caregivers, but has had little examination longitudinally. Therefore, this analysis examines the relationships between resourcefulness and depressive symptoms in 323 grandmothers (mean age 60) who participated in a study on caregiving to grandchildren. Participants completed the Center for Epidemiological

Studies-Depression (CES-D) Scale and Self-Control Schedule using mailed questionnaires. Grandmothers were classified into one of three categories: primary (custodial) caregivers to grandchildren, grandmothers living in multigenerational homes, and non-caregivers to grandchildren. Primary caregivers reported the most depressive symptoms but no differences on resourcefulness. The data were analyzed using a cross-lagged, longitudinal structural equation model in AMOS. Grandmother group was included using two dichotomous variables: primary v. else and multigenerational v. else for each of five time points over eight years. Our final model, with all paths significant at p<.05, and most paths significant at p<.001, yielded fit indices of $\chi2$=602.51 df=159, p.<.001, CFI =.92, TLI=.90, and RMSEA =.08, indicating good model fit. Resourcefulness had a direct effect on depressive symptoms, with higher resourcefulness associated with fewer depressive symptoms at each time wave. There were small but significant cross-lagged effects between depressive symptoms and resourcefulness at all but one time wave, with higher depressive symptoms being associated with lower subsequent wave resourcefulness. R2 values ranged from .54-.58 for depressive symptoms and .39-.49 for resourcefulness. The model suggests that interventions focused on strengthening resourcefulness could be important in reducing depressive symptoms over time.

### CAREGIVING ROLE: A CONTRIBUTOR TO DEPRESSION IN MIDDLE-AGED AND OLDER ADULT KOREAN FAMILIES

J.I. Wassel[1], H. Jun[2], *1. UNCG, Greensboro, North Carolina, 2. Yonsei University, Seoul, Republic of Korea*

Understanding the consequences of assuming the role of caregiver to a disabled family member is becoming an increasingly important private and public issue. Guided by a life course role-identity perspective, this study examines the role of caregiving as a contributor to depression in caregivers. Gender differences were evaluated, and the processes through which care-providing may lead to higher level of depression were explored. Family relationships such as marital relationships and relationships with children were hypothesized to independently mediate the effects of the role of caregiver on depression. This research used nationally representative data (the first wave of Korea Longitudinal Study of Aging data 2006). The analytic sample for this study consisted of KLSA primary respondents (N=10,254) who were 45-year old and older. Depression was measured by CES-D10. Multivariate regression analyses revealed that the depression impact of the role of caregiver was different for women and men. That is, the caregiving role was a strong contributing factor to depression in women but not for men. Results also suggested that, for women care-providers the caregiving role exerts a negative influence on marital relationships, thus further contributing to depression. But relationships with children were found not to be a significant factor in the effects of the role of caregiver on depression.

### DEPRESSION AMONG ADULT-CHILD CAREGIVERS: THE EFFECT OF CARE-RECEIVING PARENT'S FINANCIAL TRANSFER

C. Noel-Miller, *University of Wisconsin-Madison, Madison, Wisconsin*

Objective: Drawing upon equity theory and the stress and coping perspective, this study examines the effect of financial transfers from care-receiving parents on adult-child caregivers' depressive symptomology. Methods: Based on nationally representative panel data from the Health and Retirement Study (1996, 1998, 2000), we estimate a nonlinear mixed model predicting depression amongst 1,651 adult-child caregivers. Depression was measured by using an 8-item version of the Center for Epidemiological Studies–Depression (CES-D) scale. We examine additional models specifying the financial transfers' size and the recipients' caregiving intensity. Results: Overall, roughly one in ten adult-child caregivers received a parental money transfer. Accounting for measured covariates, financial support recipients were substantially less likely to report depression symptoms than were non-recipient adult-child caregivers. In addition, we find that large transfers (but not small transfers) and transfers to low-intensity care providers (but not to high-intensity caregivers) buffer adult-child caregivers' depression. Discussion: This study uncovers evidence of care-receiving parents' potential for containing the deleterious mental health effects often experienced by adult-child providers of personal care. Our findings highlight the importance of recognizing care recipients' contributions to the caregiving relationship, and of moving beyond the prevailing conception of care-recipients as being solely a source of caregiver stress.

### GENDER DIFFERENCE IN THE RELATIONSHIP BETWEEN PARENTAL CAREGIVING AND DEPRESSIVE SYMPTOMS AMONG WORKING MEN AND WOMEN

J. Kim, S. Feld, R. Dunkle, H. Kim, H. Shen, *University of Michigan-Ann Arbor, Ann Arbor, Michigan*

Two different perspectives explain how the dual responsibilities of work and elder care can influence psychological well-being. The role strain perspective argues that these dual roles are likely to decrease psychological well-being whereas the role enhancement perspective proposes these dual roles can increase psychological well-being. However, little attention has been directed to whether one of these perspectives is more likely to be useful in explaining the effects of dual roles for men and women. Based on the nationally representative 2004 Health and Retirement Study, the present sample consisted of workers (average age 55) who had at least one living parent (n= 3,152; female=1,895 and male=1,257). Multiple regression modeling examined gender differences in the relationship between the 10-item CES-D measure of depression symptoms and dual working-caregiving roles, taking into account various aspects of work and parental elder care responsibilities. Results showed that elder caregiving was associated with more depressive symptoms for working women than men. Additionally, only for women greater were caregiving hours linked to more depressive symptoms (p=.0025), but greater working hours were linked to fewer symptoms (p=.009). Findings suggest that both role stain and role enhancement perspectives are useful in explaining the effects of dual roles among female working caregivers, not male working caregivers. We discuss ways our results can help employers and practitioners understand the psychological consequences of the dual responsibilities of workers who care for their parents and develop gender sensitive strategies to reduce negative effects of these dual responsibilities.

## SESSION 1160 (SYMPOSIUM)

### CAREGIVING WITHIN HISPANIC AMERICAN FAMILIES: CULTURAL IMPLICATIONS FOR RESEARCH AND PRACTICE

Chair: *H. Fuller-Iglesias, Human Development and Family Science, North Dakota State University, Fargo, North Dakota*

Co-Chair: *C. Mendez-Luck, University of California, Los Angeles, California*

Discussant: *S. Wallace, University of California, Los Angeles, California*

Hispanic Americans represent the largest ethnic group in the U.S. and the fastest growing segment of the nation's older adult population. The implications for aging among Hispanic Americans are especially complex given diverse immigration histories, countries of origin and cultural backgrounds. Cultural views about family unity and extended kinship may serve as facilitators or barriers for families faced with navigating the system of community-based long-term care services. This symposium takes a multidisciplinary look at caregiving in Hispanic American families. Using qualitative and quantitative approaches, we examine caregiving from the perspectives of caregivers and care recipients, the experiences of caregiving in families from different Hispanic-origins, and the unique cultural views that may have direct implications for programs and policies. Mendez-Luck and colleagues examined cultural justifications for caregiving and found that caregivers with greater degrees of Mexican identity had more positive orientations to the caregiving role. Fortinsky and colleagues found that language was a common barrier for caregiving families, making translation an integral part of dementia caregivers' responsibilities. Hinton and Apesoa-Varano examined the importance of extended kin in Mexican-origin families, finding that multiple family caregivers were often present particularly in cases of dementia. Brown and colleagues found that greater time costs of caregiving predicted an increased likelihood of institutionalization; however, the risk decreased when more adult children were present. Discussants Steven Wallace and Jacqueline Angel will integrate and synthesize these findings and provide their expert insights into the implications, applications, and future directions for research on caregiving in Hispanic American families.

### HELP-SEEKING EXPERIENCES AMONG LATINO FAMILY CAREGIVERS OF PERSONS WITH DEMENTIA: VIEWS FROM NEW ENGLAND

R. Fortinsky[1], D. Gonzalez Sanders[2], J. Robison[1], I.J. Castro[1], L. Hinton[3], *1. Center on Aging, University of Connecticut Health Center, Farmington, Connecticut, 2. Central Connecticut State University, New Britain, Connecticut, 3. UC Davis Medical Center, Sacramento, California*

Little current information is available on dementia-related help-seeking experiences of Latino family caregivers in New England, where most Latinos are of Puerto Rican ancestry. As part of an ongoing study, we have completed interviews with 44 Latino caregivers (86% first or second generation Puerto Rican; 91% female; mean age/s.d.=51.5/12.0 years) to determine the amount of dementia-related advice and guidance they received from physicians, and their experiences regarding communication with physicians and other health and social service professionals. Results indicate that greater proportions receive advice and guidance about medications than about how to manage dementia-related symptoms and access community resources. Qualitative results suggest that language is often a communication barrier between health professionals and persons with dementia, and that caregivers often serve the role as translator during health care encounters. We will also explain whether and how help-seeking experiences vary by caregivers' socioeconomic status and familial relationship to care receivers.

### ADAPTING THE CULTURAL JUSTIFICATIONS FOR CAREGIVING SCALE FOR USE IN A MEXICAN-ORIGIN POPULATION

C.A. Mendez-Luck[1], R.D. Hays[2], W. Steers[2], C.M. Mangione[2,1], *1. UCLA School of Public Health, Los Angeles, California, 2. UCLA Department of Medicine/Division of General Internal Medicine & Health Services Research, Los Angeles, California*

Current literature reviews highlight the need for research on the cultural influences of elder caregiving in diverse populations. We adapted the Cultural Justifications for Caregiving Scale for a Latino population by adding original items developed from formative research. A 23-item modified instrument was administered to 51 English- and 51 Spanish-speaking female caregivers of Mexican descent recruited from flyers, word of mouth, health fairs, and targeted recruitment events. The screener response rate was 81%; 92% of screened and eligible women completed questionnaires. Exploratory factor analyses suggested two factors, one representing positive normative role beliefs (14 items, $\alpha$=.84) and the other negative normative role beliefs (9 items, $\alpha$=.75). We found a negative correlation between acculturation (ARMSA-II) and positive role beliefs (r = -.48, P=.000). Acculturation and negative role beliefs were not significantly correlated. These findings suggest that women with greater degrees of Mexican identity have more positive orientations to the caregiver role.

### BEYOND THE DYAD: PATTERNS AND QUALITIES OF FAMILY CAREGIVING TO OLDER MEXICAN AMERICANS

L. Hinton, C. Apesoa-Varano, *Psychiatry and Behavioral Sciences, University of California, Davis, Sacramento, California*

Research on caregiving to older adults with cognitive impairment has tended to focus on the level of the dyad, with relatively little attention to the broader family and social context in which caregiving occurs. This study draws on survey and qualitative data to describe patterns and qualities of family caregiving for 71 Mexican American older adults with diverse cognitive function. Subjects were recruited from on ongoing community-based epidemiological study. Family members were queried about assistance to older adult in several domains. More than one third of caregivers reported the participation of two or more family members in caregiving domains including nearly 50% of caregivers of elderly with dementia. Qualitative data shows that gender plays a significant role in the caregiving division of labor where women are more likely to take on total care and emotional labor while men are responsible for more instrumental tasks outside the domestic arena.

### TIME COSTS AND RISK OF LONG-TERM CARE IN THE OLDER MEXICAN-AMERICAN POPULATION

H.S. Brown[1], J.L. Angel[2], A.P. Herrera[3], *1. Management, Policy and Community Health, UT School of Public Health, Austin, Texas, 2. UT-Austin, Austin, Texas, 3. University of California San Diego, San Diego, California*

This study of long-term care in older Mexican Americans quantifies the time cost to the subject's adult children and how this influences the risk of nursing home admission. The data studied were taken from the Hispanic Established Populations Study of the Elderly and logistic regressions were performed to identify the effect of time cost variables (geographic proximity, presence and availability of adult children, extent of care needed) on the likelihood of nursing home use. The results of the study show that high time costs for caregiving increase the risk of institutionalization and that severity of need was the more important determinant compared to geographic distance. Having a greater number of children, who could conceivably share care loads, decreased the risk of institutionalization. In conclusion, older Mexican Americans' cultural preferences to 'age in place' may be jeopardized as their adult children, the likeliest caregivers, are faced with increasingly expensive time constraints.

## SESSION 1165 (SYMPOSIUM)

### CRITICAL GERONTOLOGY, AGING AND THE ECONOMIC CRISIS: RE-ASSESSING THEORETICAL PERSPECTIVES

Chair: *C. Phillipson, Keele University, Newcastle-under-Lyme, United Kingdom*
Co-Chair: *C.L. Estes, University of San Francisco, San Francisco, California*
Discussant: *V.W. Marshall, University of North Carolina, Chapel Hill, North Carolina*

Aging populations face major challenges given world-wide economic recession. Dimensions of the crisis have been documented in respect of increasing social inequality and reduced well-being within populations. The consequences for older people are, however, less well understood but include: deep-rooted poverty amongst most older people in the Global South and significant groups in the North; ideological disputes around the demands of the baby boom generation; pressures affecting health and social care; and the increasingly dominant role of global organisations in determining policies and programmes for old age. The implications of these changes have yet to be fully debated within gerontology. The purpose of this Symposium is to examine the implications of the crisis, using perspectives drawn from critical gerontology. Critical gerontology has offered a wide-ranging commentary highlighting many of the injustices affecting older people. However, the recession raises a challenge for critical perspectives, especially in respect of the adequacy of theories for understanding changes to the institutions supporting older people. These issues will be examined as follows: Jan Baars will make the case for critical gerontology through examining its historical origins and the basis for different types of critical research. Chris Phillipson will examine the implications of the crisis for transforming theorising about aging. Isabella Aboderin will focus on the crisis in sub-Saharan Africa and the implications for critical perspectives. Dale Dannefer and Katheryn Douthit will examine the challenge of understanding social and biological aspects of aging and the need to give greater emphasis to the power of social forces.

### WHY IS THERE A NEED FOR 'CRITICAL' GERONTOLOGY?

J. Baars, *University for Humanistics, Utrecht, Netherlands*

At first sight the adjective 'critical' seems to be superfluous as each scholar or scientist would regard himself or herself as 'critical'; and indeed, critical thinking and critical discourse are inherent in scientific. In this paper, four major modes of critique regarding scientific work will be distinguished, together with their relevance for a 'critical gerontology'. The first mode of critique targets the theoretical presuppositions and internal logic of scientific work. The second mode critically interrelates the theoretical presuppositions of scientific work and its practical contexts. A third mode of critique explicitly chooses the side of groups or categories of people who are systematically disadvantaged by a particular constellation of power and develops scientific work with the intention of changing the diagnosed constellation. And, finally, some critical approaches can be seen as clarifying articulations of a contemporary crisis.

### EXPLORING IMPACTS OF THE GLOBAL ECONOMIC CRISIS ON OLDER POPULATIONS IN SUB-SAHARAN AFRICA: CRITICAL PERSPECTIVES

I. Aboderin, *Oxford Institute of Ageing, University of Oxford, Oxford, United Kingdom*

The 2008 global food price and financial crises have significantly affected the outlook for human, social and economic development in sub-Saharan Africa (SSA) - raising pressing questions about the consequences for SSA's growing older populations. While these have not yet been formally investigated, they likely include a widening and deepening of poverty, stalling social welfare provision and reduced access to basic services such as health care. Based on a case study from Kenya, one of the most directly affected countries, this paper demarcates and describes such probable changes. It conceptualizes the impacts drawing on theoretical ideas from western critical gerontology, in particular those pertaining to the influence of global forces on conditions of old age in the poor Global South. In doing so, it reflects on limitations in the theoretical perspectives themselves and offers approaches for developing more nuanced 'critical' gerontological theory on globalization and ageing in the region.

### GENE-ENVIRONMENT INTERACTIONS, THE LIFE COURSE AND SOCIAL LEGITIMATION

D. Dannefer, K. Douthit, *Department of Sociology, Case Western Reserve University, Cleveland, Ohio*

Within the social sciences, there has been a longstanding but unwarranted reluctance to explore interconnections between social and biological processes, based on the misplaced assumption that such explorations entail an acceptance of the primacy of biololgical explanatiosn, and on a failure to recognize the extent to which biological processes are organized by social forces. Recently, however, a broad-based social science interest in gene-environment interactions has developed, and we are now beginning to explore that question in social gerontology. Studies of gene-environment interactions generally begin from the premise that the effect of genes on individuals cannot be understood apart from environmental characeristics. However, much of what has been written on GE interactions in the social gerontology formulates the interaction in a way that constricts and obscures the power of social forces, by misplaced attributions of unexplained variance to genes. We demonstrate how such assumptions in research allow too much credit to be given to genetic explanation, and at the same time result in a naturalization of existing social arrangemetns and reinforcing racist, classist and ageist aspects of existing institutions.

## SESSION 1170 (SYMPOSIUM)

### DAILY LIFE CAN WEAR YOU OUT: INDIVIDUAL AND RELATIONAL PERSPECTIVES ON DAILY STRESS, HEALTH, & WELL-BEING

Chair: *K.E. Cichy, Human Development & Family Studies, Kent State University, Kent, Ohio*
Co-Chair: *R.S. Stawski, The Pennsylvania State University, University Park, Pennsylvania*
Discussant: *M.K. Diehl, Colorado State University, Fort Collins, Colorado*

Daily stressors are the routine challenges of daily life, such as family arguments or household demands, which tax an individual's emotional, physical, and cognitive resources. Some individuals are more prone to the adverse effects of daily stressors than others. Demographic and contextual characteristics may represent vulnerabilities that increase the likelihood of experiencing stressors and exacerbate reactivity to stressful events. Daily diary approaches provide the opportunity to obtain repeated measurements of multiple aspects of individuals' daily lives, such as daily stressors, physical symptoms, and affect. Diary assessments improve ecological validity by making it possible to capture naturally occurring stressful events and to link those events to day-to-day fluctuations in individual and relational well-being. The current symposium features daily diary research exploring how certain individual characteristics and relational experiences may increase exposure to daily stressors and exacerbate stressor reactivity. Cichy, Stawski, and Almeida will examine racial differences in exposure and reactivity to naturally occurring stressful events involving family members. Stawski, Cichy, and Almeida will consider how individuals' tendencies to worry moderate exposure and emotional reactions to daily stressors. Iida, Stephens, Franks, Rook, & Salem will examine the daily relational implications of stressors associated with spouses' diabetes management. Finally, Barker, Greenberg, & Seltzer will examine daily stress exposure and physiological reactivity in the lives of midlife parents of adult children with serious mental illness. Manfred Diehl will reconcile the presentations and offer insights into how these studies further our understanding of the daily stress process.

### RACIAL SIMILARITIES AND DIFFERENCES IN EXPOSURE & REACTIVITY TO FAMILY STRESSORS

K.E. Cichy[1], R.S. Stawski[2], D. Almeida[2], *1. Human Development & Family Studies, Kent State University, Kent, Ohio, 2. The Pennsylvania State University, University Park, Pennsylvania*

African Americans remain at a health disadvantage, even after considering socioeconomic status (SES), suggesting disparities reflect more than racial differences in SES. Given the salience of family ties in African Americans' lives, they may be particularly reactive to stressors involving family. We examined differences in reactivity to family stressors among African Americans (n = 59) and European Americans (n = 1,696) aged 34 to 84 from the National Study of Daily Experiences (NSDE II). Respondents participated in 8 days of interviews where they reported daily on stressors, affect, and physical health symptoms. Results revealed racial similarities in emotional reactivity, where, regardless of race, on days when respondents argued and avoided an argument with family they reported higher negative affect and lower positive affect (p ∠ .001). Compared to European Americans, African Americans experienced more physical health symptoms on days they argued with and avoided arguments with family (p ∠ .001).

### DON'T WORRY, BE HAPPY (OR AT LEAST LESS STRESSED): FINDINGS FROM THE NATIONAL STUDY OF DAILY EXPERIENCES

R.S. Stawski[1], K.E. Cichy[2], D. Almeida[1], *1. Pennsylvania State University, University Park, Pennsylvania, 2. Kent State University, Kent, Ohio*

Worry is a form of perseverative cognition associated with thoughts and emotions about future negative events, and is thought to moderate reactions to stressful events. The current study examined self-perceptions of worry as a predictor of exposure and emotional reactivity to daily stressors. Participants included 1,815 adults (Mage = 56, SD = 12, Range = 33-84, 50% female) from the second wave of the Midlife in the United States (MIDUS) study and the National Study of Daily Experiences (NSDE). Participants identified themselves as worrying more, about the same, or less than other people, and completed measures of their experiences and positive and negative affect across 8 days. Higher levels of worrying were associated with significantly more frequent daily stressor exposure, higher levels of negative affect, lower levels of positive affect, and greater emotional reactivity to daily stressors, including stressor-related increases in negative affect and decreases in positive affect (all ps<.05).

### CHRONIC ILLNESS AND RELATIONSHIP FUNCTIONING: A DYADIC DIARY STUDY OF OLDER MARRIED COUPLES MANAGING TYPE II DIABETES

M. Iida[1], M.P. Stephens[2], M. Franks[3], K. Rook[4], J.K. Salem[5], *1. Arizona State University, Tempe, Arizona, 2. Kent State University, Kent, Ohio, 3. Purdue University, West Lafayette, Indiana, 4. University of California, Irvine, Irvine, California, 5. SUMMA Health System, Akron, Ohio*

Chronic illnesses most often occur in late life, and spouses are frequently affected by the ill partners' condition. However, little is known about how chronic illness impacts relationship functioning on a daily basis. In this electronic diary study (N = 129 couples), we examined how diabetic patients' chronic illness management was associated with relationship functioning over 24 days. We focused on patients' daily diabetes conditions (diabetes symptoms, diabetes anxiety, and dietary adherence) and daily evaluations of the relationship (relationship enjoyment and tension) reported by both patients and their spouses. For both patients and spouses, daily dietary adherence was associated with an increase, and daily diabetes symptoms were associated with a decrease in relationship enjoyment. In contrast, daily diabetes symptoms were associated with an increase in relationship tension for both patients and spouses. For spouses, but not for patients, daily diabetes anxiety was also associated with an increase in relationship tension.

### DAILY STRESS AND CORTISOL PATTERNS IN PARENTS OF INDIVIDUALS WITH A SERIOUS MENTAL ILLNESS

E. Barker, J. Greenberg, M. Mailick Seltzer, *Waisman Center, University of Wisconsin Madison, Madison, Wisconsin*

We collected daily stress and cortisol data from 75 parents of individuals with a serious mental illness (SMI; 44 mothers, 31 fathers, M age = 58.07 years, SD = 12.81; child M age = 34.80 years, SD = 9.81). Diagnoses included major depression (n= 29), schizophrenia (n = 17), and bipolar disorder (n = 29). Compared to parents of individuals without a mental illness (N = 489), parents of individuals with a SMI experienced more stressors and higher stress severity, on average. Following days when stress severity was elevated, comparison parents experienced a typical accentuated morning rise in cortisol, but SMI parents did not. This pattern of morning rise hypoactivation in SMI parents is consistent with our studies of parents of young adults with an autism spectrum disorder, and suggests that chronic stress in the context of parenting an adult child with a disability is associated with HPA axis dysfunction.

# SESSION 1175 (POSTER)

## ECONOMICS AND EPIDEMIOLOGY

### THE IMPACT OF WEALTH ON CHRONIC ILLNESS AMONG OLDER AMERICANS

Y.G. Lee, D. Bradford, *Family, Consumer, and Human Development, Utah State University, Logan, Utah*

Much of the available literature on health and wealth focuses on poor health and low income or poverty. Using the 2006 Rand Health and Retirement Study (HRS), this study looked at the connection between wealth and chronic illness among Americans aged 65 or older (N=9,206). For the purposes of this study, "chronic illness" was defined in the following way: Zero chronic illness, mild chronic illness (1-2 chronic illnesses), and severe chronic illness (3+ chronic illnesses). Wealth holdings of older individuals were compared to their number of chronic illnesses, and it was found that individuals in the severe chronic illness category have lower levels of net worth than those with zero illnesses and those in the mild chronic illness category. Individuals in the severe chronic illness category tended to be older, less educated, divorced and widowed, and it was also found that having high levels of wealth in old age was negatively related to number of chronic illnesses. Gender, age, family size, race, marital status, and education, in addition to wealth, were significant predictors of the likelihood of having severe health problems. Identifying factors associated with chronic illness could be advantageous to educators, counselors, and policy makers because these professionals would be more capable of targeting at-risk individuals and implementing necessary programs that could enhance the financial and physical well-being of individuals.

### AGE AND INTENSITY DIFFERENCES IN REACTION TO RACE-BASED TREATMENT AND PHYSICAL/MENTAL HEALTH

P.T. Ryder, J. Mulvaney, *Coll Pharmacy & Health Sciences, Butler University, Indianapolis, Indiana*

Reactions to race-based treatment have been associated with many health outcomes, but little attention has been paid to whether associations vary by reaction intensity and age. The 2004 Behavioral Risk Factor Surveillance System Reaction to Race Module was used to examine associations of reaction to race-based treatment with self-rated health (SRH) and reported mental health impairment (MH), comparing ages 70+ with ages 18-29, 30-44, 45-59, and 60-69. Separate logistic regression models were run for SRH and MH by race/ethnicity, comparing younger ages to those 70+. Models included a 3-level variable representing reaction to race-based treatment and controlled for gender, education, and frequency of thinking of one's race. Decreasing age was associated with better SRH for blacks (N=4310) and whites (N=22,024); age was not significant for Hispanics (N=1332). Reaction was associated with better SRH for whites (OR moderate-reaction=0.42, 95% CI 0.33-0.53; OR high-reaction=0.28, 95%CI=0.20-0.38) and blacks (N=4310; OR moderate-reaction = 0.66, 95%CI=0.49-0.89; OR high-reaction 0.31, 95%CI=0.23-0.42) but not for Hispanics. Those 70+ reported less MH impairment relative to other age groups among blacks and whites. For Hispanics, those 18-29 had significantly poorer MH than those 70+. Moderate and high reactions to treatment were associated with MH for each race/ethnicity group (OR moderate-reaction-whites=2.26, 95%CI=1.71-2.99, OR high-reaction-whites-4.54, 95%CI=3.31-6.22; OR moderate-reaction-black=1.35, 95%CI=0.92-1.97, OR high-reaction-blacks=3.54, 95%CI=2.58-4.85; OR moderate-reaction-Hispanics=2.20, 95%CI=1.04-4.66. OR high-reaction-Hispanics=4.61, 95%CI=2.32-9.18). A dose-response association was found with reaction to treatment and most physical and mental health outcomes for blacks and whites and for mental health for Hispanics; these results varied by age.

### THE UAB STUDY OF AGING: 8-YEAR PREDICTORS OF LIFE-SPACE MOBILITY

R.M. Allman[1,2], P. Sawyer[2], C.J. Brown[1,2], C. Ritchie[1,2], J.M. Roseman[2], *1. Birmingham/Atlanta VA GRECC, Birmingham, Alabama, 2. University of Alabama at Birmingham, Birmingham, Alabama*

This study examines independent predictors of life-space mobility eight years following enrollment in the UAB Study of Aging, a random sample of Medicare beneficiaries stratified by gender, race, and residence. Following a comprehensive baseline in-home assessment of socio-demographics, medical conditions, cognition, depression, health behaviors, and physical performance, telephone follow-up interviews were conducted every six months. Life-space mobility (LS) was measured by distance and frequency of movement and use of personal assistance or equipment in the four weeks before assessments (range 0-120, higher scores represent greater mobility). Vital status was confirmed by the Social Security Death Index. Because of the previously reported pre-death decline in LS, death was defined as a LS score of zero and one point was added to the 8-year LS score. Multivariable regression was used to define independent predictors of LS. Eligible participants (N=873) were mean age=75.2; 49% female; 49% African American. Mortality was 41.2% over 8 years. Independent predictors of LS decline controlling for baseline life-space included: older age (p<.001), white race (p=.049), male gender (p=.021), lower income (p<.001), transportation difficulty (p=.002), BMI<20 (p=.028), more pack years (p=.002), hypertension (p=.012), arrhythmia (p=.002), COPD (.011), and diabetes (0.033). Leisure time physical activity (p=.014) and better physical performance (p=.032) predicted higher life-space. Potentially modifiable risk factors for LS decline included transportation difficulty, smoking and low physical activity. LS decline may also be moderated by targeting interventions to high risk groups and with implementation of evidence-based care for specific diseases such as hypertension, COPD, and diabetes.

### DIABETES-RELATED CHANGE IN PHYSICAL DISABILITY TRAJECTORIES FROM MIDLIFE TO OLDER ADULTHOOD IN TAIWAN

C. Chiu[1], L.A. Wray[1], M. Ofstedal[2], *1. Biobehavioral Health, Penn State University, University Park, State College, Pennsylvania, 2. University of Michigan, Ann Arbor, Michigan*

One in five older adults in Taiwan has been diagnosed with diabetes. Few existing studies assess the extent to which diabetes changes physical functioning in older Taiwanese. This study drew on disability data for 5,121 adults (mean age 66.2) from the nationally-representative 1996-2003 Survey of Health and Living Status of the Elderly in Taiwan and employed a cohort sequential design to combine both cross-sectional and longitudinal data to characterize disability trajectories from midlife to older adulthood. Our results documented that diabetes explained 3.2% and 1.6% of the variance in levels of and linear changes in physical disability, respectively, and that adults with diabetes have higher levels of disability and faster rates of deterioration over time. This study provided evidence that diabetes changes physical functioning over and above natural aging processes in Taiwanese. Such data are essential in setting targets for reducing physical disability in Taiwan, especially for adults with diabetes.

### THE ROLE OF DRUG INSURANCE IN MODERATING SENIORS' COST-RELATED NON-ADHERENCE TO PRESCRIBED MEDICATIONS

G.A. Jensen[1], X. Xu[2], *1. Institute of Gerontology, Wayne State University, Detroit, Michigan, 2. University of Michigan, Ann Arbor, Michigan*

BACKGROUND: Cost related non-adherence (CRNA) to prescribed medications can have devastating health consequences, especially for seniors with serious chronic illnesses, such as cardiovascular disease, diabetes, or depression. Yet, little is known about the role of prescription drug insurance in influencing CRNA. METHODS: We estimate multivariate logit regressions to examine the effects of drug coverage on CRNA among a nationally representative sample of 7,546 Medicare seniors from the 2002 – 2005 Medical Expenditure Panel Survey (MEPS). While doing so, we pay particular attention to whether and how the relationship between drug coverage and CRNA differs for seniors with and without major chronic health conditions and possible "self-selection" effects in the incidence of drug insurance. RESULTS: Drug insurance has a very strong and significant protective effect against CRNA. Holding drug coverage reduces the probability of CRNA by almost half. The odds of CRNA among Medicare seniors with drug insurance are 0.586 (95% CI: 0.397 – 0.866) compared to those without such insurance, ceteris paribus. Among seniors with two or more chronic conditions, the odds of CRNA when drug insurance is present are even lower, at 0.554 (95% CI: 0.336 – 0.867). However, drug insurance has no effect on the likelihood of CRNA among seniors with one or no chronic conditions. DISCUSSION: Holding drug coverage dramatically reduces the risk of CRNA. As prescription drug coverage continues to expand under Medicare Part D, we can expect to see lower rates of CRNA. However, more research is needed to understand the effects of high cost-sharing plans on CRNA.

### PERSISTENT PATTERNS OF ALCOHOL USE AND HEALTH-RELATED QUALITY OF LIFE IN OLDER AGE

M.S. Kaplan[1], N. Huguet[1], B. McFarland[2], D. Feeny[3], *1. Portland State University, Portland, Oregon, 2. Oregon Health and Science University, Portland, Oregon, 3. Kaiser Center for Health Research, Portland, Oregon*

Research investigating longitudinal patterns of alcohol use among older adults is limited. This study, funded by the National Institute on Aging, used data from the longitudinal Canadian National Population Health Survey to examine the association between persistent drinking patterns and health-related quality of life (HRQL) in older age. Participants were classified as lifetime abstainers, former, infrequent (<1 drink/week), moderate (1-14 drinks/week and <4 for men or <3 for women/occasion), excessive (>3 and <5 for men or >2 and <5 women/occasion), or binge drinkers (5+/occasion). We assessed drinking patterns at baseline and again 10 years later among 1,375 participants aged 50 or older at baseline. HRQL was assessed using the Health Utilities Index Mark 3 (HUI3). HUI3 scores were categorized into none/mild versus moderate/severe disability. Among the respondents, 11% were abstainers, 16% were former drinkers, 28% were infrequent drinkers, 41% were moderate drinkers, 2% were excessive drinkers, and 2% were binge drinkers at baseline and at the 10-year follow-up. Former drinkers accounted for the largest percentage of deaths during follow-up. Among the participants who were alive during the 10 years, abstainers and former drinkers were proportionately more likely to report moderate or severe disability on HUI3 (57.2% and 51.2%, respectively) while infrequent drinkers (59.6%, p<.01), moderate drinkers (69.1%, p<.001) and excessive/binge drinkers (72.9%, p<.05) were more likely to report mild or no disability. A discussion of the strengths, weaknesses, and implications of study will also be presented.

## CHANGES IN SOBRIETY IN THE SWEDISH POPULATION OVER THREE DECADES: AGE, PERIOD, OR COHORT EFFECTS?

K. Ahacic, *Department of public health, Social medicine, Karolinska Institutet, Stockholm, Sweden*

Objectives: While alcohol consumption is an important health determinant, sobriety has received little attention. Even the age-relatedness in abstaining from alcohol remains unclear. Moreover, in cross-sectional approaches a false impression of age related behavioral change may arise through cohort effects. This study therefore corroborated cross-sectional data with corresponding longitudinal analyses. Patterns in abstaining from alcohol were studied from 1968 to 2002 in the Swedish population. Methods: A representative Swedish panel study allowed repeated cross-sectional comparisons of ages 18-75 (5 waves n=5000), and ages 77+ at later waves (2 waves n=500). Cross-sectional 10-year age group differences in 5 waves, time-lag differences between waves for age groups, and within-cohort differences between waves for 10-year birth cohorts were examined. Results: Regular over time analysis revealed large decreases of sobriety between waves. While cross-sectional differences indicated an increased rate of sobriety with increasing age, longitudinal differences revealed little increase, contradicting cross-sectional results. Following the cohorts showed little change within cohorts but large differences between cohorts. All cohorts had aged with little change concerning their rate of abstainers; while at the same time great between-cohort differences were demonstrated. The examination of between cohort differences showed that the rate of abstainers had declined with later born cohorts until the cohorts born during the 1940s. Even later born cohorts had about the same rates. Conclusions: Almost all variation in sobriety originated before 1968. This cohort effect is probably the consequence of public opinion changes dating back several decades and results demonstrate the early socialization of health behavior.

## FINANCIAL STATUS, PATTERNS OF AGING AND MORTALITY FROM AGE 70-85

J.M. Jacobs, Y. Maaravi, A. Cohen, J. Stessman, *Geriatrics and Rehabilitation, Hadassah Hebrew-University Medical Center, Jerusalem, Israel*

Purpose: To determine the patterns of aging and survival according to financial status from age 70 to 85. Methods: The Jerusalem Longitudinal Study (1990-2010) continues to follow a representative West Jerusalem cohort, born 1920-21, with comprehensive assessment at ages 70 (n=595), 78 (n=933) and 85 (n=1165). Mortality data from age 70-88 were collected. Results: Self reported poor financial status was reported among 22%, 18%, 18% at ages 70, 78 and 85 respectively. With increasing age, the association between poor financial status with negative measures across all domains became more numerous and increasingly more pronounced. Significant associations were found at all ages between financial status and years of education, loneliness, social support and engagement, functional status, self-rated health, depression, cognition, and health service utilization. The associations were less pronounced for medical illnesses. Death rates among those with good vs. poor financial status from age 70-88, 78-88, and 85-88 were 52% vs. 64% (p=0.002), 37% vs. 56% (p<0.001), and 14% vs. 21% (p=0.008) respectively. Poor financial status was associated with increased mortality from ages 70-88 (HR 1.36, 95%CI 1.01-1.83), and 78-88 (HR 1.4, 95%CI 1.06-1.86), yet not 85-88 (HR 1.03, 95%CI 0.72-1.47), after adjusting for gender, ADL dependence, diabetes mellitus, ischemic heart disease, hypertension, physical activity, and smoking. Conclusions: Poor financial status is associated over time with numerous negative parameters across multiple domains as well as decreased survival. The oldest old, among whom financial status did not predict mortality after adjusting for common risk factors, may be resistant to its negative influence.

## A CASCADE MODEL OF THE ROLE OF SELF-REPORTED HEALTH: ANALYSIS OF HRS AND AHEAD COHORTS

S.P. DeViney[1], K. Kercher[1], K. Kosloski[1], D. Stull[2], *1. Gerontology, University of Nebraska at Omaha, Omaha, Nevada, 2. Center for Health Outcomes Research, Horsham, United Kingdom*

The role of self-reported health as both a consequence of other dimensions of physical health and a precursor of mortality has been a focus of much research. We present a “cascade model” in which self-reported health plays a mediating role between the antecedents of physical health conditions, health behavior, and functional ability (ADLs), and the outcome of mortality. Using the core respondent from 6 waves of both HRS and AHEAD surveys (N=9402), we test out cascade model with a discrete-time fragility survival analysis of mortality, with social status, illness, and health behaviors as exogenous variables, and latent growth curve models of functional ability and self-reported health as intervening variables. We find that self-reported health has a direct relationship on mortality, independent of functional ability and our exogenous variables. Persons with higher positive self-reported health at the beginning of the study and who have less decline in self-reported health are less likely to die. We conclude that a cascade model in which self-reported health is a mediating factor between functional ability and illness improves our understanding of the role of self-reported health in medical outcomes and the complex consequences of health conditions among the elderly.

## THE PREVALENCE OF DIABETES AND HEALTH BEHAVIORS AMONG THE ELDERLY IN SOUTH KOREA

D. Lee, *Kangwon National University, Chunchon, Republic of Korea*

Wild et al (2004) reported that the prevalence of diabetes for all age-group worldwide was estimated to be 2.8% in 2000 and 4.4% in 2030. Especially, The number of the elderly with diabetes is increasing in South Korea. The reason is that South Korea has had a surprising amount of economic growth for the past three or four decades, therefore, the prevalence of diabetes was very low in the past similarly to other developing countries, however now it is increasing at a pretty acute rate. The aim of this study was to explore the prevalence of diabetes among the elderly in South Korea. In addition, health behaviors of the elderly with diabetes were explored. We used data of The Korean National Health and Nutrition Examination Survey (KNHANES), a cross-sectional and nationally representative survey examining the general health and nutritional status of the Korean people, has been performed by the Korean Ministry of Health and Welfare. The 3rd KNHANES which used the data in this study was conducted in 2005 and consisted of three components: a Health Interview Survey including health behaviors and beliefs, a Health Examination Survey, and a Nutrition Survey. The target population for this study was civilian non-institutionalized individuals aged >60 years, therefore, we used the data of 1,127 subjects aged >60. The prevalence of diabetes among the elderly was 27.3% which estimated as the proportions of known cases of diabetes and the proportions of cases of diabetes as defined by ADA (a fasting plasma glucose value≥126mg/dl).

## DIFFERENTIAL AGE PATTERNS OF ORAL HEALTH BY RACE/ETHNICITY AND SOCIOECONOMIC STATUS

J. Kim, L. Baker, H. Seirawan, E. Crimmins, *University of Southern California, Los Angeles, California*

Previous studies have shown disparities in oral health by race and ethnicity and by socioeconomic status. It is not clear how differential age patterns of deterioration of oral health contribute to these differentials. This paper examines age patterns on a range of oral health indicators differentiated by race/ethnicity and socioeconomic status. Using the National Health and Nutrition Examination Surveys (NHANES) 1999-2008, we examine several indicators of oral health: edentulism, presence of caries and caries experience, root caries, and periodontal disease. Our analysis includes respondents ages 20+ who participated in the oral health examination (N=23,090). The results show that those with lower education tend to have oral health problems earlier in life; that is, blacks acquire oral problems at earlier ages than whites and poorer people earlier than those who are better off. This provides another example of how members of minority groups and those with lower socioeconomic status "age" earlier than others. Earlier and rapid development of oral health problems among racial/ethnic minorities and persons of low socioeconomic may result from a lack of dental intervention, and implies that more attention should be paid to earlier dental intervention. This study expects to provide participants with a better understanding of differential age patterns of oral health by race and ethnicity as well as socioeconomic status and clarify the importance of earlier dental intervention among these groups.

# SESSION 1180 (PAPER)

## EMPLOYMENT AND HEALTH

### THE ROLE OF SOCIAL INTEGRATION AND SUPPORT ON THE RELATIONSHIP BETWEEN JOB LOSS AND HEALTH

M.E. Canavan[1], W. Gallo[2], S.A. Burgard[3], *1. Epidemiology and Public Health, Yale University, New Haven, Connecticut, 2. Hunter College, New York, New York, 3. University of Michigan, Ann Arbor, Michigan*

Numerous studies have demonstrated that job loss precipitates adverse mental health effects. Yet studies of whether social factors moderate the effect of job loss are far fewer. While social support and social integration have consistently been linked to better health, their interaction with job loss is not thoroughly understood. In this study, we used data (N=3,258 observations) from the American Changing Lives study (ACL), a longitudinal cohort study that oversamples adults over 60 at four time periods (1986, 1989, 1994, and 2001), to investigate the moderating effect of social support and social integration on changes in depressive symptoms resulting from job loss. We hypothesized that: (1) higher levels of social support and social integration would diminish the mental health effect of job loss; and (2) the effect modification of these social variables would not operate independently of age. Our findings confirm the hypotheses. The results indicate that job losers with higher levels of social integration had smaller increases in depressive symptoms than those with lower levels. Whereas we did not find an analogous relationship for social support among individuals over fifty, a significant interactive effect was present for individuals aged 49 and younger. That is, job losers with higher levels of social support had smaller increases in depressive symptoms than those with lower levels. These findings suggest that social variables play an important role in moderating the extent of negative health consequences of involuntary job loss.

### PATH MODEL OF REDUCED EMPLOYMENT, MATERIAL HARDSHIP, AND DEPRESSION OF FAMILY CAREGIVER OF AN ALZHEIMER'S PATIENT

I. Nam, E. Choi, *School of Social Work, Univeristy of Pittsburgh, Pittsburgh, Pennsylvania*

Many studies have reported the direct and indirect costs of dementia care, however, little attention is paid to concerns about reduced employment due to caregiving needs impacting the emotional health of family caregivers. The purpose of this study was to evaluate how reduced employment and material hardship directly and indirectly influence depressive symptoms in caregivers of a demented family member. Cross-sectional and longitudinal data were examined from the Resources of Enhanced Alzheimer's Caregiver Health project. Caregivers (N = 671) were questioned on whether they stopped or reduced work because of care recipient's need for care, material hardship, and depressive symptoms (CES-D) at an initial interview and 6 month follow-up. Four structural equation path models examined the direct and indirect relationship among reduced employment, material hardship, and emotional health. The model of the effect of reduced employment on emotional health fits well to the observed data .There were significant positive predictions of depression at both the initial interview and the 6 month follow-up by material hardship and there was significant prediction of material hardship by reduced employment. There were also cross-sectionally and longitudinally significant indirect predictions of depression by reduced employment through material hardship. Results suggest that material hardship may be an important predictor of depression cross-sectionally and longitudinally, and reduced employment due to caregiving needs may influence material hardship. The effect of reduced employment may influence material hardship in the context of caregiving that may have a negative effect on depressive symptoms.

### EMPLOYMENT BARRIERS AND PSYCHOLOGICAL WELL-BEING AMONG KOREAN OLDER IMMIGRANTS IN LOS ANGELES

M. Rhee, I. Chi, J. Yi, *University of Southern California, Los Angeles, California*

During the last decade, the United States has undergone two major demographic changes: the aging of the population and the increase of immigrants. With the nation's concern on workforce shortage and increasing costs of health care and Social Security caused by the aging of the population, substantial amount of research has been done on how to recruit and retain older workers. However, limited attention has been paid to identifying employment barriers of ethnic minority older immigrants who often face multiple risks such as age discrimination, racial discrimination and language barriers when entering the labor market. Employment is a very critical component of older immigrants that affect their quality of life. Moreover, for many sub-ethnic Asian Americans, their cultural uniqueness is lost by often being lumped into Asians. This study attempts to fill the research gap by conducting more in-depth exploration of Korean older immigrants' experiences of employment barriers and their psychological well-being. A mixed-method approach was used, which consisted of focus groups (n=31), individual interviews (n=5) and self-administered questionnaires of the same participants (n=36). Either employed or unemployed Korean older immigrants aged 50 and older who live mostly in Los Angeles County participated in the study. The findings of the study provide empirical evidence that Korean older immigrants face multiple barriers of age, language, dual cultural conflict, restricted job market and lack of social network. Also, the depression level of the unemployed Korean older immigrants (CES-D mdn=26.0) was found to be significantly higher than that of the employed (CES-D mdn=12.5).

### PRE-RETIREMENT PERCEIVED HEALTH AND YEARS SPENT IN RETIREMENT AS PREDICTORS OF BRIDGE EMPLOYMENT INTENTIONS – A 16-YEAR PROSPECTIVE STUDY

M.E. von Bonsdorff[1,2], T. Rantanen[1], M. von Bonsdorff[1], J. Seitsamo[2], J. Ilmarinen[2], *1. Health Sciences, University of Jyväskylä, Jyväskylä, Finland, 2. Finnish Institute of Occupational Health, Helsinki, Finland*

Background Bridge employment, referring to any paid work after an individual retires, is likely to increase in the 21st Century. We studied the effect of the number of years spent in retirement on individuals' intentions to participate in bridge employment. Methods Participants of the baseline study in 1981 were Finnish municipal employees born between 1923 and 1937 (N=6,257). The follow-up was undertaken in 1997 (n=3,817). Altogether 3,494 retired individuals reported on their intentions to participate in bridge employment in their career job or in another field. Baseline perceived health was measured with a scale ranging between 1=very poor to 5=very good. Register-based data on retirement benefits and years spent in retirement (mean=7.5, SD=3.8, range=0-17) were collected from Finnish Pension Centre. Data was analyzed with logistic regression analysis (SPSS 15.0). Results Of the respondents 37 percent had considered bridge employment. After adjusting for age, gender, occupational group, and pension benefit, each additional year spent in retirement decreased the intention to participate in bridge employment (odds ratio [OR] 0.84, 95% confidence interval [CI] 0.78-0.91). A one-class increase in pre-retirement perceived health (OR 1.15, 95% CI 1.05-1.27) predicted bridge employment intentions in 1997. Conclusions This 16-year prospective follow-up indicated that the number of years spent in retirement and pre-retirement perceived health predicted individuals' willingness to participate in bridge employment.

## SESSION 1185 (SYMPOSIUM)

### END-OF-LIFE CARE: PREFERENCES, NEEDS, AND SERVICES

Chair: *L. Winter, Thomas Jefferson University, Philadelphia, Pennsylvania*
Co-Chair: *N. Hodgson, Thomas Jefferson University, Philadelphia, Pennsylvania*
Discussant: *J. Reifsnyder, Thomas Jefferson University, Philadelphia, Pennsylvania*

Research has identified multiple shortcomings and unmet needs in end-of-life (EOL) care for elderly individuals in the U.S. Presentations in this symposisum will explore a range of EOL care issues, from advance care planning to innovative palliative care services. These are examined in a variety of care settings and populations, including nursing homes, hospitals, and the community.

### ELDERS WHO WOULD ACCEPT VS. REJECT LIFE-PROLONGING CARE: DIFFERENCES IN LIVING WILL COMPLETION, DISCUSSIONS WITH FAMILY PROXIES, AND ACCURACY OF PROXY SUBSTITUTED JUDGMENT

L. Winter, S.M. Parks, *Thomas Jefferson University, Philadelphia, Pennsylvania*

Because most patients are decisionally incapacitated at the end of life, patient autonomy often relies on advance-care documents or proxies' substituted judgment. In a study of 202 elders-proxy dyads, we asked elders a living will question, asked their proxies their substituted judgment, and assessed whether elders had completed a living will and had discussed wishes with their proxies. We compared elders who would accept life-prolonging (LP) treatments from those who would reject it in terms of whether they had (1) completed a living will, (2) discussed wishes with family, and (3) the percent of proxies who identified their elders' wishes accurately. Elders who would reject LP treatments were significantly more likely to have completed a living will, discussed their wishes with proxies, and have proxies who correctly understand their wishes. The autonomy of elders who would accept LP treatments may be at greater risk than that of the rejectors.

### PALLIATIVE CARE REFERRAL PATTERNS IN HOSPITALIZED OLDER ADULTS

B. Reville, S.M. Parks, *Thomas Jefferson University, Philadelphia, Pennsylvania*

Palliative care intervention by an interdisciplinary consultation team has been shown to relieve symptoms and have other benefits for older adults with life-limiting illness. An in-patient palliative care consultation service established at Thomas Jefferson University Hospital in March 2006, grew rapidly from its 1st year (180 consults, 18 per month) to its 3rd year (389 consults, 32.4 per month). More than involved older adults (>65+ years) with life-limiting illness. We describe palliative care consultation referral patterns, including patient diagnoses, co-morbidities, referring specialties, reasons for consult, timing of consult during hospitalization and disposition and compare them to patients 65+ not receiving palliative care services. Despite its success, this consultation service remains under-utilized in this patient group, especially for pain and symptom management. These findings identify ways to improve utilization of palliative care services and quality of care for older hospitalized adults.

### PERCEPTION OF PALLIATIVE CARE NEEDS OF NURSING HOME RESIDENTS WITH ADVANCED DEMENTIA

K.B. Hirschman[1,2,3], A.M. Corcoran[3,4,7], S. Panzer[1], J.M. Kapo[4,5,6], D.J. Casarett[4,5,6], *1. University of Pennsylvania School of Nursing, Philadelphia, Pennsylvania, 2. NewCourtland Center for Transitions and Health, Philadelphia, Pennsylvania, 3. Insitute on Aging, University of Pennsylvania, Philadelphia, Pennsylvania, 4. Department of Medicine, Division of Geriatrics, University of Pennsylvania, Philadelphia, Pennsylvania, 5. Center for Bioethics, University of Pennsylvania, Philadelphia, Pennsylvania, 6. Philadelphia Veterans Administration Medical Center, Philadelphia, Pennsylvania, 7. Wissahickon Hospice, University of Pennsylvania Health System, Philadelphia, Pennsylvania*

The goal of this study was to identify palliative care needs of nursing home (NH) residents with advanced dementia through in-depth qualitative interviews with their family members (N=58) and surveying NH providers (N=109). Difficulty in assessing pain was identified by 93% of NH providers and 57% of family members wanted to learn more about how to detect pain. NH providers (74%) indicated that family members of advanced dementia residents need more explanation about their relatives' illness than relatives of other NH residents. There were no racial differences in reported palliative care needs however, when asked what type of health care they think their relative would want now 56% of black family members reported a palliative approach to care versus 97% of white family members. All of the needs identified by family members and NH providers match with services provided by programs such as hospice or can be provided NH staff.

### EFFICACY OF PALLIATIVE COMPLEMENTARY THERAPIES IN NURSING HOME RESIDENTS WITH CANCER

N. Hodgson, *Center for Applied Research on Aging and Health, Thomas Jefferson University, Philadelphia, Pennsylvania*

The study investigated the efficacy of two complementary therapies for relief of distress in medically frail nursing home residents with cancer using neuroendocrinological and observational outcomes. Using repeated measures, cross-over design two types of commonly used complementary therapies (reflexology and relaxation massage) were compared in a sample of 18 nursing home residents with incident diagnoses of solid tumors. Four types of data were collected over the 8 week study period: 1) salivary cortisol; 2) Apparent Affect Rating Scale; 3) Checklist of Nonverbal Pain Indicators; and 4) other demographic measures. There was a significant reduction in cortisol (F=7.5, P=.008), and agitation (F=3.6, P=.031) following both reflexology and massage treatments compared to no treatment. No statistical differences existed between reflexology and massage conditions. No negative effects were reported. These findings can be used as a foundation for understanding the palliative effects of complementary therapies in nursing home residents with cancer. (ACS-IRG #114958)

## SESSION 1190 (SYMPOSIUM)

### EXPLORING THE CONTEXT OF NON-NORMATIVE INFORMAL CAREGIVING SITUATIONS

Chair: *T.M. Cooney, Human Dev. & Family Studies, University of Missouri, Columbia, Missouri*
Discussant: *K. Piercy, Utah State University, Logan, Utah*

This symposium considers the topic of informal caregiving in a variety of situations largely overlooked by researchers because they fall outside the parameters of "normative caregiving" generally performed by spouses or nearby adult offspring. Included in our consideration are: adults assisting chronically ill lesbian, gay or bisexual friends; women providing end-of-life care to ex-husbands; young people caregiving for grandparents; immigrants providing transnational care to older family members in Ghana; and Korean immigrants to Singapore who exchange care with aging parents across borders. Findings from these studies provide evidence as to whether the large body of findings generated from past research on more typical caregiving situations applies more generally to a broader range of care situations. Contextual factors are central to understanding the array of caregiving issues discussed in this symposium. Contextual influences include caregiver age and competing roles, relationship history, emotional investment, received support, geographic distance, cultural barriers, and social norms and attitudes. These influences appear to predict the establishment of these caregiving arrangements, the negotiations that occur within the caregiving relationship, the extent and type of care provided by caregivers, the primary and secondary stressors caregivers report, the coping strategies caregivers employ, and the outcomes they experience. Consideration is given to the adequacy of prior conceptualization and theorizing in the caregiving literature for understanding the experiences of these unique groups of caregivers. Suggestions for practice and policy are also offered.

### "THAT'S WHAT FRIENDS DO:" INFORMAL CAREGIVING FOR CHRONICALLY ILL LESBIAN, GAY, AND BISEXUAL ELDERS

A. Muraco[1], K. Fredriksen-Goldsen[2], *1. Loyola Marymount University, Los Angeles, CA, 2. University of Washington School of Social Work, Seattle, Washington*

This study examines the relationships between friends; a caregiver who provides care to a care recipient, who is a gay, lesbian, or bisexual (lgb) older adult in need of assistance due to chronic physical or mental health conditions. Using a sample of 17 care pairs (n=34), this work draws from qualitative interview data to examine the connection between caregiving and friendship for lgb elders. Findings from the study show: a) both the care recipient and the caregiver often receive benefits from the presence of caregiving in their relationship; b) these caregiving bonds often constitute kinship ties; c) caregiving alters and sometimes challenges the friendship; and d) while caregiving is implicit in some individuals' definitions of friendship, friends assume differential levels of commitment and responsibility in providing care. Studying this population of lgb adults expands our knowledge about the diversity of care arrangements and needs within a relational context.

### CAREGIVING FOR AN EX: WOMEN'S EXPERIENCES OF PROVIDING CARE TO FORMER HUSBANDS

T.M. Cooney, C.M. Proulx, J.J. Benson, L.A. Snyder, K. Haq, *Human Dev. & Family Studies, University of Missouri, Columbia, Missouri*

This study explores women's experiences of providing end-of-life care to ex-husbands. Twelve women, ages 45 – 77, completed background questionnaires and unstructured telephone interviews addressing motivations to provide care, the process leading to the care decision, their behavioral and emotional experiences of caregiving, and adequacy of support received while caregiving for an ex-husband. Preliminary analyses suggest that ex-wives often assumed the caregiver role because there were few other care options, or they wished to spare their offspring the task. These women reported varying relational experiences as caregivers: for some, caregiving provided an opportunity to resolve past differences with the ex-spouse; others reported needing to explicitly renegotiate the meaning of their relationship with former husbands. Caregivers noted varied responses from network members, as well as variation in the amount of assistance offered with caregiving. Most caregivers described a mix of positive (e.g., care) and negative (e.g., guilt) emotions in the caregiving role.

### GRANDCHILDREN CAREGIVERS: THE DECISION TO PROVIDE CARE TO GRANDPARENTS

C.A. Fruhauf[1], N. Orel[2], *1. Human Development & Family Studies, Colorado State University, Fort Collins, Colorado, 2. Bowling Green State University, Bowling Green, Ohio*

It is well documented in the caregiving literature that the majority of care is provided by family members. However, little is known about grandchildren who provide care to their frail and/or cognitively impaired grandparents. Guided by the life course perspective, qualitative research conducted over the past ten years has led us to better understand the risks and rewards of being a grandchild caregiver. Grandchildren often experience difficult peer relationships and challenges with educational/career tasks. Rewards of caregiving include building skills, closer relationship(s) with family members and grandparents, and career interests in gerontology. Further, grandchildren's decision to provide care is often influenced by how others perceive their caregiving role and the negative or positive support from other family members. Future research would benefit from two main areas: (a) a systematic quantitative exploration of the risks and rewards of being a grandchild caregiver and (b) understanding the grandparent-grandchild caregiver dyad.

### DETERMINANTS OF INTERNATIONAL LONG-DISTANCE ELDERCARE: EVIDENCE FROM GHANAIAN IMMIGRANTS IN THE UNITED STATES

S.R. Kodwo, *Social Work, University of North Carolina at Pembroke, Pembroke, North Carolina*

The objective of this study was to examine the influence filial obligation, elder vulnerability, immigrant vulnerability, and support received from elderly person have on the level of care Ghanaian immigrants give to their elderly relatives in Ghana. Using a convenient sampling method, 124 Ghanaian immigrants were surveyed for this study. Hierarchical multiple regression and logistic regression were conducted to test the research hypotheses. Study results revealed that the dominant type of eldercare provided was emotional care. However, serious financial problem experienced by elderly person, and immigrant's level of income significantly determined the level of financial support provided. Feelings of high obligation, and readiness to show love for elderly relatives also were found to influence eldercare. Overall, there was evidence to conclude that most immigrants provided care to their elderly relatives and that most were influenced by the social and cultural tenets that underlie elder caregiving in Ghanaian society.

### TRANSNATIONAL MOBILITY OF OLDER PEOPLE FOR CARE-GIVING AND CO-RESIDENCE IN A NON-CONVENTIONAL IMMIGRANT STATE: A CASE STUDY OF KOREANS IN SINGAPORE

J. Kim, *Institute for East Asian Studies, Sogang University, Seoul, Republic of Korea*

This study examines the transnational mobility and care-giving/receiving of older people who moved to provide care-giving for their grandchildren or to co-reside with their adult children who have migrated to work abroad in a non-conventional immigrant state (i.e. where there is no immigration scheme for family union). What are the challenges, dilemma and compromised practices for care-giving in a non-conventional immigrant state? Semi-structured in-depth interviews with multiple members of each family (both the migrant couples and at least one (up to all four) of their surviving elderly parents) were conducted for 26 three-generational families in Singapore and Korea in 2006 and 2007. Among them, this study focuses on cases where migrant adult children's families either co-resided with their elderly parents in Singapore or on those families with elderly parents who spent a significant part of a year with their grandchildren or who had played a significant role in care-giving for their grandchildren in the past. This study found that although family obligation for caregiving increased mobility between older people and their migrant adult children (Baldassar

2007; Finch 2007; Mason 2004), like their counterparts in conventional immigrant states (Treas and Mazumdar 2002; Treas and Mazumdar 2004; Treas 2008), immigration regulations and past family history of care and support further shaped their current arrangements of care-giving. This paper will further discuss the dilemmas, the coping strategies and the patterned arrangements of the negotiated practices of care and support across the border.

## SESSION 1195 (SYMPOSIUM)

### GETTING TO KNOW YOU: THE SOCIAL WORLD OF ASSISTED LIVING

Chair: *A. McQueen, Portland State University, Portland, Oregon*
Discussant: *D.J. Dobbs, University of South Florida, Tampa, Florida*

Assisted living has often been described as a social model of long-term care differentiated by a homelike environment and a philosophy that places primary importance on ensuring residents' dignity and autonomy, encouraging their independence, and facilitating the involvement of families and friends in their lives. Few studies, however, have examined the social world of assisted living residents in detail. This symposium will explore the social interactions and personal relationships of residents in assisted living settings through a variety of lenses, using both qualitative and quantitative data sources. Specific presentation topics include, the ways residents' form and manage relationships with each other, factors that influence social interactions among table mates during mealtimes, issues related to sexuality and intimacy among residents, how various factors influence residents' subjective health and well-being, and how social interactions involving humor impact residents' mental health. Social relationships can foster older adults' sense of belonging, as well as impact daily mood and contribute to, or detract from, their emotional well-being. Learning more about factors that influence the social environment within assisted living settings may assist practitioners in developing policies and practices that encourage positive interactions and limit negative interactions, thereby exerting a positive influence on psychological health.

### STRANGERS AND FRIENDS:RESIDENTS' SOCIAL RELATIONSHIPS IN ASSISTED LIVING

C.L. Kemp, M. Ball, M.M. Perkins, C. Hollingsworth, M. Sweatman, S. Luo, V. Stanley, *The Gerontology Institute, Georgia State University, Atlanta, Georgia*

Social relationships can have profound effects on physical and mental well-being, especially in later life when individuals are at heightened risk of social isolation. Consequently, the desire for increased social interaction is one reason many older adults relocate to assisted living facilities (ALFs). Yet few studies have examined social relationships in ALFs, and none has focused on residents' relationships with each other. This paper presents an analysis of ethnographic data from three AFLs in our NIA-funded study. We consider how residents experience relationships with others and identify influential factors. Findings suggest residents' relationships can be meaningful, but vary widely by individual and relationship partner, ranging in contact, familiarity, and attachment levels. Individual factors, including gender, age, and health, and facility factors, such as size, frailty levels, physical layout, and policies, join to influence interactions and relationships. We conclude by discussing successful strategies that help residents negotiate and manage their relationships.

### ITS MORE THAN 'FOOD ON THE PLATE'- MEALTIMES AS AN ESSENTIAL SOCIAL ACTIVITY IN FORMAL CARE

H. Keller, *Family Relations and Applied Nutrition, University of Guelph, Guelph, Ontario, Canada*

After attending this session, participants will be able to 1) describe in general terms the Life Nourishment theory and 2) how social interaction may be promoted for older adults living in formal care. Mealtimes are readily acknowledged to be an important social activity among family members, however the social nature of meals in formal care is often neglected. A longitudinal grounded theory study bridging community and long-term care for persons with dementia has resulted in the development of the Life Nourishment Theory. Developed from interviews with family care partners and persons with dementia, this theory explains how 'mealtimes mirror the way we are' through 'being connected', 'honouring identity', and 'adapting to an evolving life'. This theory will be introduced and supplemented with data from mealtime participant observations (n=63 tables) and retirement home resident interviews (n=18) to discuss how mealtimes can be a more positive social experience for residents in formal care.

### HILARIOUS OR DELETERIOUS: HUMOR, SOCIAL INTERACTIONS, AND MENTAL HEALTH OF OLDER ADULTS IN ASSISTED LIVING

A. McQueen, *Institute on Aging, Portland State University, Portland, Oregon*

Research indicates that social interactions are related to older adults' mental and physical health. Moreover, the absence of social ties has been shown to put older adults at greater risk for depression, cognitive decline, and other health risks. Social interactions involving humor may be particularly salient in the lives of older adults, who often face multiple age-related losses, especially those living in living in institutional or long-term care settings. Although having a "sense of humor" is widely regarded as a positive attribute, attempts at humor are not always received favorably. In fact, interactions involving humor may be perceived as supportive or destructive, thereby affecting the interpersonal relationships and emotional well-being of those involved. Drawing upon literature from social support and social exchanges, the psychology of humor, and long-term care policy, this study examines social interactions involving humor and how they impact the psychological well-being of assisted living residents.

### NOT SO HAPPILY EVER AFTER: EXPLORING LONELINESS, SEXUAL COMPETITION AND CONFLICT IN ASSISTED LIVING

E.O. Burgess, A.A. Bender, C.L. Kemp, C.E. Barmon, *Gerontology Institute, Georgia State University, Atlanta, Georgia*

Contrary to ageist stereotypes, many older adults are interested in intimate and sexual behavior. Yet, their intimate and sexual experiences are influenced by access to partners, health and cognitive status, and their environment, particularly for those residing in assisted living facilities (ALFs). This grounded theory study involves in-depth interviews, focus groups, and participant observations with administrators, staff, family members and residents in six ALFs in a metropolitan area. Lack of opportunity-often related to the gender imbalance among ALF residents- means some residents have unmet sexual and intimate desires which can result in loneliness. In some cases, the scarcity of intimate companionship also leads to competition, conflict, and jealousy. Furthermore, variability in the desire for intimacy or sexuality can lead to misunderstandings about relationships, including unrequited feelings and conflict about the appropriateness of intimate relationships in AL. We conclude by addressing the suitability of interventions by administrators, staff, or family members.

### AL RESIDENTS' SUBJECTIVE HEALTH AND WELLBEING: RESIDENTIAL CONTEXT AND RELATIONSHIP INFLUENCES

D. Street[1], S. Burge[2], *1. Department of Sociology, University at Buffalo, SUNY, Buffalo, New York, 2. University of Oklahoma, Norman, Oklahoma*

Using data from 411 cognitively intact AL residents 60 and older from the Florida Study of Assisted Living, we explore how residential circumstances and social relationships influence elderly assisted living

(AL) residents' subjective health and well-being. For residential context, the type of facility influenced outcomes on several wellbeing measures, but made little difference in terms of subjective health. Facility type influenced only one of the health measures, but several of the well-being measures. Having control over the move and place of prior residence were important predictors of several wellbeing measures, but none of the health measures. Relationships with family were seldom significant; contact with friends outside AL and with co-residents influence several dimensions of subjective health and wellbeing. Relationships with family, friends, AL staff and co-residents are seldom significant predictors of subjective health, but those social relationships are consistent predictors of residents' wellbeing.

## SESSION 1200 (SYMPOSIUM)

### GSA TASK FORCE ON MENTORING: LADDER MENTORING - EVERYONE CAN LEND A HELPING HAND

Chair: *E.L. Idler, Sociology, Emory University, Atlanta, Georgia*
Discussant: *E.L. Idler, Sociology, Emory University, Atlanta, Georgia*

Providing opportunity and encouragement for mentoring is a function of most professional organizations and this has historically been done well by GSA. As an organization with special insight into the growth and development of individuals throughout the life course, and and understanding of the critically important societal underpinning of intergenerational relations, GSA brings a lot of intellectual horsepower to the practice of mentoring. One of the most central insights is that mentoring should be a continuous activity across the life course of a career – from the undergraduate student attending GSA for the first time, to the retired professor, everyone needs advice, and everyone has some wisdom they can impart to others. Everyone at GSA is on the ladder; everyone can look up to those ahead for a helping hand, and everyone can extend a helping hand to those on a lower rung. It may not be easy to see yourself on the very top of the ladder, but one rung up isn't so hard to imagine. And the people who are there are the most valuable advisers of all. Transitions from one career stage to another are some of the key moments when we need advice. In this symposium we will hear from GSA members at all career stages, about their experiences of being mentored and mentoring others. Then members of the Task Force will discuss the panel's comments and new GSA mentoring initiatives.

### EMERGING STUDENTS AND PROFESSIONALS ORGANIZATION

S. Bodnar Deren, *Sociology, Instititute for Health, Health Care Policy, and Aging Research, Rutgers University, New Brunswick, New Jersey*

From refining a dissertation topic, to submitting a first paper to a research journal, to applying for postdoctoral, tenure-track faculty, or clinical or professional positions ESPO members can use advice! But they can be mentors too - by welcoming a new member to GSA, serving in leadership positions within ESPO, or serving as campus ambassadors. An ESPO member will reflect on her most important experiences of being mentored, and discuss ways in which ESPO can promote mentoring before, during, and after the annual GSA meeting.

### EARLY CAREER MENTORING

S. Sanders, *University of Iowa, Iowa City, Iowa*

Junior faculty are facing the challenges of settling into a new institution, starting research projects, learning how to teach, forming professional relationships, and generally laying the groundwork for a career in aging research and practice. At the same time many are starting families and making transitions in their personal lives. This is a critical time for mentoring, when the graduate and professional school mentors are no longer a daily presence, and new mentors may not have emerged. GSA can play a critical role in building bridges between the old and the new environments and easing those transitions. At the same time, early career professionals, from the vantage point of their new position, have a wealth of advice to offer those entering the job market or looking for postdoctoral program opportunities.

### HALF WAY UP THE LADDER: MID-CAREER MENTORING

K.E. Whitfield, *Psychology and Neuroscience, Duke University, Durham, North Carolina*

Mid-career GSA members sit halfway up the career ladder; they are close enough to get a good view of what it means to be at the top and remember what it was like in the beginning. The transitions at mid-career bring new opportunities and challenges. These challenges include more requests to mentor others by sharing experiences, more need for 'next level' mentoring, more offers for leadership at home institutions and in professional organizations, and more decisions about the focus and direction of one's scholarship. The objective of this presentation will be to demonstrate how mentorship up and down the career ladder for the mid career scholar is important by addressing three issues to discuss with mentors and mentees: 1) What is expected at the next level, 2) Setting goals and evaluating success, and 3) Identifying the right balance between scholarship and leadership.

### MATURE CAREER

R. McCarter, *Penn State University, State College, Pennsylvania*

Those who are at the zenith of their careers have a special responsibility to pass on their experiences,their trials and their successes.They are easy to think of as mentors since they have achieved senior status in a highly competitive environment.They have developed insights into successful strategies and means of avoiding pitfalls along the way.As they look ahead to future challenges and retirement they, and GSA, provide an exceptional resource to developing scientists for access people in leadership positions who have maintained intellectual curiosity and professional interest.

### RETIREMENT

M. Mezey, *New York University College of Nursing, New York, New York*

As an organization devoted to research and practice in the field of aging, GSA is extraordinarily friendly to senior scholars, who represent role models for absolutely everyone. But even those in retirement from academic or professional positions frequently are asked to serve active roles on boards and in advisory positions, for which mentors are needed. And the transition to retirement can in itself be a significant moment to get mentoring from those who have already retired.

## SESSION 1205 (POSTER)

### HEALTH PROMOTION

### COLORECTAL CANCER SCREENING AMONG CHINESE ADULTS: DECISION MAKING AND ASSOCIATE FACTORS

V. Lou[1,2], M.C. Wong[3], K. Tsoi[3], S.S. Ng[3], S. Choi[3], S. Griffiths[3], J. Sung[3], *1. Social Work & Social Administration, The University of Hong Kong, Hong Kong, Hong Kong, 2. Sau Po Centre on Ageing, The Unviersity of Hong Kong, Hong Kong, Hong Kong, 3. The Chinese Unviersity of Hong Kong, Hong Kong, Hong Kong*

Background: A colorectal cancer (CRC) screening programme targeting adults aged 50-70 by offering free CRC education and Faecal Immunochemical Tests (FITs) was launched in Hong Kong. Community elderly centres recruited participants via CRC health education talks. Objective: This study examined the decision making process for participants in the FIT screening, specifically focusing on whom participants would consider during the decision-making process, decision-making process satisfaction, and decision regret. Method: A 0.5 hour standardized videotaped education session followed by a presentation by trained instructors focusing on risks, symptoms, and screening methods was held before screening. A questionnaire was administered to 275 participants after the FIT screening to investigate whom they considered in the decision making process (i.e., self, family members, and professionals), decision-making process satisfaction, and the Decision Regret Scale (DRS). Results: Half (n=143) of the participants considered all three parties to some extent before making the decision to join the FIT screening. Almost all participants were satisfied with their decision-making process (98.2%). Decision regret was significantly associated with satisfaction with the decision-making process (r=-.41,p<.01). More consideration of self was associated with a lessened decision regret (r=-.25, p<.01). Conclusions: Half of the respondents considered self, family members, and professionals before making the decision to participate in the FIT screening. Most participants were satisfied with their decisions. Satisfaction with the decision-making process and consideration of self were associated with less decision regret. This programme successfully helped participants make CRC screening decisions with low regret and high satisfaction and thus deserves promotion.

## A SENIOR HEALTH AND WELLNESS COURSE AND THE SELF-RATED HEALTH OF STUDENTS

R.L. Lee[1], K. Kopera-Frye[2], *1. University of Nevada, Reno, Reno, Nevada, 2. University of Louisianna at Monroe, Monroe, Louisiana*

A health and wellness course was taught to older adults (60+) residing in rural counties of northern Nevada. Researchers suggest self-rated health of older adult students (n=14) would improve over the duration of the course. The class met twice a week for ten weeks; topics covered include physical activity, nutrition, social and emotional health. Self-rated health was reported by students on a five-point likert scale bi-weekly. Overall, it was found that self-rated health decreased by .50 point. Upon further investigation it was found that students attending 2/3 or more class sessions improved their self-rated health (.25). It may be possible that students participating in more of the course received health information in a more complete context and experienced the full effect of course intent. Increasing students' self-rated health, even slightly, is important due to the measures' link to predicting overall health, functionality, and survival in older adults.

## WHO LIVED HAPPILY THEREAFTER? DIFFERENTIAL EFFECTS OF SUBJECTIVE WELL-BEING ON MORTALITY

M. Wiest, B. Schüz, S. Wurm, C. Tesch-Roemer, *German Centre of Gerontology, Berlin, Germany*

Although the potential of subjective well-being (SWB) to predict mortality has been subject of some studies, findings are inconsistent with regard to several aspects. First, it is unclear whether positive indicators of SWB (life satisfaction, positive affect) and negative indicators of SWB (depression, negative affect) are independent predictors of mortality. Furthermore, the literature reports different effects of SWB in older and younger as well as in healthy and unhealthy populations. This poses the question whether the effects of SWB are stronger or weaker in different subpopulations. This study therefore examines the effects of different SWB indicators on mortality in different populations. We analyzed data of the national representative German Ageing Survey. In a sample of 5,294 participants (40-91 years old), socio-demographic, health and SWB indicators were measured up to two times (1996, 2002). Mortality data was obtained in 2009. Preliminary analyses suggest that only positive indicators of SWB are significant predictors of mortality: Higher positive affect (HR = .86, 95%CI = .75-.99, p < .05) and higher life satisfaction (HR = .81, 95%CI = .73-.91, p < .01) predicted lower mortality controlled for age, gender, and negative affect. In further analyses, different age groups and participants differing in health status will be analyzed. Results will be discussed with regard to possible underlying pathways and to previous findings in order to elucidate whether positive and negative affect are independent predictors of mortality and if effects of SWB are stronger among older and unhealthier subpopulations.

## UNDERSTANDING OLDER ADULTS' COGNITIVE TRAINING BEHAVIORS: SCALES DEVELOPMENT

C. Haley, E.M. Hudak, M. O'Connor, J. Edwards, *Aging Studies, University of South Florida, Tampa, Florida*

Due to the somewhat recent advent of evidence-based cognitive interventions, efforts to understand older adult cognitive training behavior have yet to be undertaken. A next step in improving older adults' health through cognitive training is to learn more about the determinants of participation and adherence. The aim of the current study was to develop scales for studying cognitive training behavior adoption and adherence. Using constructs from Social Cognitive Theory and the Health Belief Model, scales were adapted from existing health behavior scales to measure Self Efficacy for Cognitive Training (SECT), Outcome Expectations for Cognitive Training (OECT), Perceived Susceptibility to Cognitive Decline, Dementia or Alzheimer's Disease (PSUS), and Perceived Severity of Cognitive Decline, Dementia or Alzheimer's Disease (PSEV). Factor and reliability analyses were performed on pilot data from 50 participants recruited for cognitive intervention studies. Results indicated the existence of one factor for SECT. Three factors relating to interpersonal relationships, brain function and activity satisfaction were suggested for OECT. All retained items loaded on one factor for the PSUS and PSEV scales, respectively. Cronbach's alphas were 0.97 (SECT), 0.87 (OECT, interpersonal relationships), 0.79 (OECT, brain function), 0.83 (OECT, activity satisfaction), 0.81 (PSUS) and 0.82 (PSEV). Next steps are to 1) Complete scales validation using data from a larger sample, and 2) Identify factors that serve to motivate or discourage older adults' enrollment in, and adherence to cognitive training. Results may have implications in promoting compliance among participants in research intervention protocols, and in the design and/or promotion of cognitive training programs.

## INFLUENCES ON OLDER ADULTS' DECISION TO OBTAIN INFLUENZA AND PNEUMOCOCCAL VACCINE

C.E. Gould, *Psychology, West Virginia University, Morgantown, West Virginia*

Despite the benefits of influenza vaccination, a surprising number of older adults do not get vaccinated. Secondary analyses were conducted on the 2008 Behavioral Risk Factors Surveillance System (BRFSS) data set to examine influences on older adults' decision to obtain the influenza vaccine or nasal spray. A subset of the sample (N = 11973) was selected to examine a predictors of influenza inoculation using logistic regression analyses. The dependent variable of vaccination behavior consisted of participants who obtained the influenza vaccine and/or nasal spray. Older adult participants were 66.1% female, 81.7% white/non-Hispanic, and 48% were married. Three sets of variables were entered as predictors of influenza inoculation decision: (1) depression and anxiety, perceived health, and disability, (2) demographics, and (3) access to health care and past pneumonia vaccination behavior. The total model fit was significant, $\chi 2 = 21.9$, p = .005, and 76.1% of cases were correctly classified. Despite a significant model fit, the model classified only 53.3% of older adults who were not inoculated. Older adults who obtained previous pneumonia vaccination (OR = 6.4), had a healthcare plan (OR = 1.6), had one primary care doctor (OR = 1.2), or visited a doctor within the last year (OR = 1.9) were more likely to obtain influenza inoculation. Black/non-Hispanic individuals were at greater risk (OR = .50) of not being inoculated in the past year. However, disability, perceived healthy, anxiety and depressive symptoms did not predict influenza inoculation. Future research should why older adults may not have annual influenza vaccinations.

## TRANSLATION ISSUES IN HEALTH PROMOTION RESEARCH: ENGLISH TO SPANISH

G. Acton[1], M.A. Aguilar[2], B. Flores[1], B. Jensen[1], *1. University of Texas at Austin, Austin, Texas, 2. Texas A&M International, Laredo, Texas*

Translating materials from English to Spanish for use in research can be particularly challenging. For example, researchers have noted that although burden has been measured in several studies of Hispanic/Latino family cargivers, the Spanish language does not have a word that translates to the exact meaning of the English word burden. Thus, research measuring the concept of burden may be flawed if conceptual meaning is misunderstood by Spanish-speaking respondents. Further complicating the issue, Spanish-speaking individuals in the southern U.S. often speak a combination of Spanish and English, sometimes referred to as Spanglish. This led to a difficulty encountered in the present research when an instrument that had been previously translated to Spanish and tested for validity and reliability, was not compatible with the dialect of Spanish spoken by the study population and as such, had to be retranslated and reverified before use. This poster presents issues, problems, and solutions encountered while translating to Spanish, a health-promotion intervention and instruments developed in English for English-speaking populations. Brislin's model for translation and back-translation was used to translate the materials for use in a study of health promotion in Hispanic family caregivers of persons with dementia. Brislin's procedure included: 1) translation of English materials to Spanish; 2) review of Spanish materials by Spanish-speaking master's prepared clinicians; 3) back translation from Spanish to English; 4) comparison of original and back-translated English versions by the principal investigator and master's prepared clinicians, 5) resolution of discrepancies. The poster will present translation/back-translation issues, difficulties, solutions, and recommendations for researchers.

### FUTURE TIME PERSPECTIVE, HEALTH LOCUS OF CONTROL, AND HEALTH BEHAVIORS: THE MEDIATING ROLE OF AFFECT

B.J. Ayotte[1], J.H. Patrick[2], E. Goedereis[3], S. Stahl[2], *1. VA Boston Healthcare System, Boston, Massachusetts, 2. West Virginia University, Morgantown, West Virginia, 3. Webster University, St. Louis, Missouri*

Future time perspective (FTP), beliefs about the limited nature of time, and health locus of control (HLoC), beliefs regarding control of health outcomes, are related to health-related behaviors throughout the lifespan. The current analysis examines how FTP and HLoC relate to physical activity and nutrition, and whether these associations are mediated by affect. Data were collected from 574 adults ($M = 26.03$ years, $SD = 13.87$; range 17-88 years). Path analysis examined a model where FTP, external HLoC, and internal HLoC were related to positive and negative affect, which were related to nutrition and physical activity. The final model controlled for age, sex, and education, number of chronic illnesses, and BMI. The final model fit the data well, $\chi 2(7)= 28.77$, $p < .05$, RMSEA = 0.05, CFI = 0.98. FTP was positively related to positive affect and negatively related to negative affect, internal HLoC was positively related to positive affect, positive affect was positively related to physical activity and nutrition, and negative affect was negatively related to physical activity and nutrition. Direct paths from internal HLoC and external HLoC were added based on modification indices. FTP was indirectly related to nutrition and physical activity through positive and negative affect, while internal HLoC was indirectly related to nutrition and physical activity through positive affect. These findings suggest that positive and negative affect at least partially mediate the associations between HLoC, FTP, and health-related behaviors.

### CONTENT LINKING PHYSICAL ACTIVITY AND COGNITIVE HEALTH IN TOP-CIRCULATING MAGAZINES, 2006-2008

A. Mathews[1], S. Corwin[2], D.B. Friedman[2], S.B. Laditka[3], N. Colabianchi[2], K. Montgomery[2], *1. Health and Exercise Science, Furman University, Greenville, South Carolina, 2. University of South Carolina, Columbia, South Carolina, 3. University of North Carolina at Charlotte, Charlotte, North Carolina*

Physical activity may promote cognitive health in older adults. Popular print media plays an important role in preventive health communication. This study examined articles discussing associations between physical activity and cognitive health in top-circulating magazines targeting older adults. Focused on 2006-2008 publications, 42,753 pages from 537 issues were reviewed. Twenty-six articles were identified. Scientific studies examining the relationship between physical activity and cognitive health were described in 46.2% of the articles. An explanation for the association between physical activity and cognitive health was provided in 57.7% of articles. The explanations provided in the articles were compared to explanations in the scientific literature; the explanations presented in the articles were consistent with empirical evidence. Recommendations for physical activity were presented in 80.8% of articles; these recommendations varied greatly (90-300 minutes of physical activity per week). The prevalence of cognitive decline was discussed in 19% of articles; 27% mentioned that some degree of cognitive decline is normal with age. Memory was mentioned in 38.5% of articles; only 15.4% of articles described characteristics of cognitive decline other than memory loss. The majority of illustrations were of White persons (81.0%); ethnicity was not mentioned in the text. Results suggest an opportunity for greater coverage about the role of physical activity in promoting cognitive health in the popular media targeted toward older adults. Content would benefit from including text and illustrations that are culturally sensitive to multiple racial/ethnic groups, and recommendations consistent with the U.S. guidelines for physical activity.

### EXPLORING THE GREEN THUMBS, HEALTHY JOINTS PROGRAM: PROGRAM CHARACTERISTICS AND ENGAGEMENT

L. Schlosnagle[1], T. Karns[1], J. Strough[1], J. Hayhurst-Marshall[2], *1. West Virginia University, Morgantown, West Virginia, 2. Center for Excellence in Disabilities at West Virginia University, Morgantown, West Virginia*

Health promotion programs aimed at increasing physical activity in older adults can help to lower the prevalence of risk factors such as cardiovascular disease, hypertension, obesity, and depression (Nelson et al., 2007; U.S. Department of Health and Human Services, 1996). Physical activity modified for older adults who are suffering from a disability can be therapeutic and beneficial (Kesaniemi et al, 2001). Thus, it is prudent to maximize the effectiveness of such programs by studying their characteristics (Loeb, O'Neill, & Gueldner, 2001). The Green Thumbs, Healthy Joints program modifies gardening activities using ergonomic tools and raised flower beds with the goal of increasing the involvement of older adults with joint pain. The current study assessed the characteristics of program implementation at 23 different project sites. Project sites were independently coded as either "community" or "assisted living" sites ($\kappa = .81$). Volunteers built raised flower beds at each project site and older adults with joint pain used the flower beds to participate in gardening activities. Project sites that received a greater number of volunteer hours served a greater number of older adults ($r = .77$, $p < .01$). Neither the number of volunteer hours committed, nor the number of older adults served were related to project sites' budget requests or project site type ("community" vs. "assisted living"). This suggests that the number of older adults participating in the Green Thumbs, Healthy Joints program is primarily dependent on the number of volunteer hours each project site receives.

### INTRINSIC MOTIVATION AND WELL-BEING: HOW ARE THEY RELATED TO ACTIVITY LEVEL AMONG OLDER ADULTS?

H.A. Myers[2], K. Kopera-Frye[1], *1. Dept. of Gerontology, Sociology, & Political Science, University of Louisiana at Monroe, Monroe, Louisiana, 2. University of Nevada-Reno, Human Dev. & Fam. Studies/ Gerontology, Reno, Nevada*

Various predictors have been examined in relation to frequency of leisure activity participation among older adults, e.g. educational levels. While health status and pain levels experienced by elders have been examined, no study to date has examined the relationship between types of motivation (e.g., intrinsic motivation and extrinsic, Deci & Ryan) and leisure activity participation. One hundred seventeen older adults (M age = 81.6 yrs.) were surveyed on their frequency of leisure activity participation, well-being according to Ryff, and types of motivation (e.g., internal, for personal growth reasons or external involving reward motives). Results indicated that less frequent leisure activity participation was significantly associated with higher reported pain levels. Also, higher intrinsic motivation was associated with higher activity levels. Surprisingly, activity levels were not related to well-being, nor extrinsic motivation. Results suggest a new direction to explore in understanding older adult's motivation for leisure activity levels.

### POST-DISASTER RESILIENCE IN YOUNGER AND OLDER ADULTS

K.E. Cherry, M. Garrison, S. Wilks, E. Jackson, S. Brigman, M. Sullivan, K. Broome, *Psychology, Louisiana State University, Baton Rouge, Louisiana*

Natural disasters bring catastrophic destruction with loss of homes and property. After a disaster, some people experience physical and psychological distress, while others do not. Resilience, defined as the ability to "bounce back" or respond positively to adversity, implies successful adaptation when challenged by stressful life events (Werner & Smith, 1992). In the present research, we focus on psychological and social factors that are assumed to lessen vulnerability and promote resilience in younger and older adults who experienced Hurricanes Katrina and Rita in 2005. In particular, we hypothesize that dispositional optimism, perceived social support, use of humor and religiosity are individual difference characteristics which are positively associated with psychological well-being and resilience in a post-disaster context. As part of a larger project on post-disaster resilience and recovery, this study focuses on resilience characteristics in residents of St. Bernard Parish in South Louisiana, a geographic region that was nearly destroyed during Hurricane Katrina. Our assessment of post-disaster resilience includes the Connor-Davidson Resilience Scale (Connor & Davidson, 2003) and the Medical Outcomes Study Short Form-36 (SF-36; Ware & Sherbourne, 1992) as a measure of health-related quality of life. Our initial findings are suggestive of the positive role of dispositional optimism and perceived social support in post-disaster health and well-being. Preliminary analyses revealed that use of humor as a coping strategy was also associated with individual resilience. Implications for post-disaster resilience, health promotion, and long-term disaster recovery for researchers, educators and practitioners will be discussed.

### HEALTH-RELATED QUALITY OF LIFE AFTER HURRICANES KATRINA AND RITA

J. Silva Brown[1], K.E. Cherry[2], L. Marks[2], E. Jackson[2], J. Volaufova[3], C. Lefante[3], S. Jazwinski[4], *1. Drury University, Springfield, Missouri, 2. Louisiana State University, Baton Rouge, Louisiana, 3. Louisiana State University Health Sciences Center, New Orleans, Louisiana, 4. Tulane University Health Sciences Center, New Orleans, Louisiana*

Hurricanes Katrina and Rita (HK/R) in 2005 caused unprecedented destruction and disruption in the lives of thousands of people in the Gulf Coast region. We examined the effects of these storms on health-related quality of life and psychological well-being in 59 adults aged 47 to 95 years old from the Louisiana Healthy Aging Study (LHAS). These persons had been tested eight months before the storms and were retested using some of the original LHAS measures and other psychosocial indicators of well-being during the immediate impact period (within the first 6 months of the storms) and in the post-disaster recovery period (6 to 14 months after the storms). Analyses of pre-and post-disaster SF-36 scores yielded declines in physical function and bodily pain across waves of testing. Mental health scores were lower for women than men. Gender differences were observed in religious beliefs and religious coping, favoring women. Religious beliefs and religious coping were negatively correlated with physical function, implying that stronger reliance on religiosity as a coping mechanism may be more likely among those who are less physically capable. Implications of these data for post-disaster recovery and health promotion are discussed.

### SELF-APPRAISALS OF HEALTH GOALS IN OLDER ADULTS

C. Bolkan[1], K. Hooker[2], D. Coehlo[3], *1. Washington State University, Vancouver, Vancouver, Washington, 2. Oregon State University, Corvallis, Oregon, 3. Oregon State University Cascades, Bend, Oregon*

Older adults may maintain healthy functioning through their goal pursuits, which are tied to motivational resources. Individuals' perceptions guide action planning followed by appraisals of these efforts. This process can produce behavioral change and is an avenue for health promotion. We investigated the self-appraisals of health goals; particularly the relationship between both future and current health-related goals. Current goals perceived to be related to future goals, termed teleonomic relevance (TR), may reflect increased motivation to achieve goals. We hypothesized the pursuit of goals perceived to be meaningful and manageable was associated with skill at organizing current goals to map onto future goals (or high TR). We conducted interviews with 85 community-based older adults (mean age=74) recruited from two primary care clinics. We administered the Possible Selves Interview, Personal Projects Analysis, Health Perceptions Questionnaire, and Geriatric Depression Scale. Most participants (63%) identified future health goals and 54% reported current health goals. TR was related to current heath goals ($r=0.25$, $p=0.02$) and future health goals ($r=0.19$, $p =0.04$). Self-appraisal of current goals as meaningful was associated with increased TR ($p <0 .01$). Goal manageability was not significantly associated with TR, but was linked to depressive symptoms ($r=-0.52$, $p <0 .01$) and physical health ($r=0.45$, $p <0 .01$). Engaging in meaningful goals that are not overly challenging, may promote self-efficacy, leading to goal attainment and psychological well-being. A better understanding of goal engagement and self-regulation of health goals fits within a healthy aging framework and has implications for behavioral interventions.

## SESSION 1210 (PAPER)

## MODERATING COGNITIVE DECLINE

### COMBINED INFLUENCE OF ELEVATED PULSE PRESSURE AND APOE ε4 ALLELE EXACERBATES AGE-RELATED DIFFERENCES IN EPISODIC MEMORY

A. Bender, N. Raz, *Institute of Gerontology & Dept. of Psychology, Wayne State University, Detroit, Michigan*

Advanced age is associated with reduced cognitive performance. Vascular risk factors such as hypertension, increased arterial stiffness, and atherosclerosis exacerbate negative effects of age on cognition. Furthermore, carriers of the ε4 allele of the Apolipoprotein E gene, a genetic risk factor for late life Alzheimer's disease, show both greater age-associated vascular damage and decreased cognitive functioning in comparison to non-carriers. Pulse pressure is a common surrogate marker of arterial stiffness, and a cardiovascular risk factor associated with cognitive decline. We hypothesized that physiological (increased pulse pressure) and genetic (ApoE ε4) risk factors will exert a synergistic negative influence on episodic memory performance. We measured blood pressure, free recall, and recognition memory in a lifespan sample of healthy, normotensive adults 18-85 years of age. Among carriers of the ApoE ε4 allele, there was a pronounced, negative relationship between pulse pressure and memory performance; greater pulse pressure was associated with poorer memory. In persons without the ε4 allele, memory was unrelated to pulse pressure. Thus, in the presence of genetic risk, high-normal values of vascular indicators are associated with declines in episodic memory.

### PULMONARY FUNCTION AS A LEADING CAUSE OF COGNITIVE AGING

D. Finkel[1], C.F. Emery[2], *1. School of Social Sciences, Indiana University Southeast, New Albany, Indiana, 2. Ohio State University, Columbus, Ohio*

Reduced pulmonary function is associated with poorer cognitive performance in healthy older adults. Studies show that forced expiratory volume in one second (FEV1) predicts long-term (up to 6 years) performance on measures of fluid intelligence, but not crystallized intelligence. Furthermore, the relationship between FEV1 and fluid abilities is largely driven by genetic factors (Emery et al., 1998). Latent growth curve models demonstrate that the strong linear declines with age found for FEV1 are primarily genetically mediated (Finkel et al., 2003). Dual change score models (DCSM) allow for the identification of leading indicators of cognitive change: the extent to which changes in one variable impact subsequent changes in a related variable, and vice versa. In the current analysis we applied DCSM to data from 861 individuals aged 50-98 years who participated in up to 5 waves (16 years) of testing as part of the Swedish Adoption/Twin Study of Aging to elucidate the nature of the relationship between pulmonary function and cognitive aging. FEV1 was collected at all waves, as well as measures of cognitive function in four domains: verbal abilities, spatial abilities, memory, and processing speed. Results suggest changes in FEV1 lead to subsequent changes in verbal ability.

### DOES AGE OR HEALTH MITIGATE THE STRENGTH OF THE RELATIONSHIP BETWEEN ACTIVITY AND COGNITION?

A.A. Bielak[1], K. Anstey[1], M. Luszcz[2], *1. Ageing Research Unit, Australian National University, Canberra, Australian Capital Territory, Australia, 2. Flinders University, Adelaide, South Australia, Australia*

Research investigating the presence of a longitudinal link between activity participation and cognitive performance in older adulthood has been inconsistent. One moderating factor might be that a strong relationship between activities and cognition is only present at certain points in the lifespan, or for individuals with certain characteristics. We investigated whether baseline age, health, and self-rated health modified the activity-cognition change relationship over 15 years. Over 2000 participants (M = 78.70 years) from the Australian Longitudinal Study of Ageing completed an activity questionnaire and various cognitive measures at baseline, two, eight, and fifteen years. Multiple group bivariate latent growth curve models were evaluated between total activity participation and each cognitive measure. Significant differences in the inter-correlations between the intercepts and slopes were sparse: Individuals between 65-79 years at baseline (YO) significantly differed from those 80 years and older (OO) in the relationship between their activity intercept and change in perceptual speed ($\chi^2$change = 5.68 (1), p<.05), and change in short-term memory ($\chi^2$change = 11.8 (1), p<.001), where the older group showed stronger negative relationships (Std.$\beta$ YO = -.30, OO = -.41; YO = -.06, OO = -.50, respectively). OO also showed a stronger initial link between activity and short-term memory than the YO (Std.$\beta$ YO = .36, OO = .50). There were no significant differences as a result of the number of initial medical conditions or self-rated health. Results suggest the covariation between activity participation and cognitive performance may be weak regardless of age and health, particularly across long time frames.

### AN INVESTIGATION OF THE DEDIFFERENTIATION THEORY AMONG THE OLDEST OLD

P.E. May[1], J.L. Woodard[1], L. Miller[2], P. Martin[3], A. Davey[4], L. Poon[2], *1. Wayne State University, Detroit, Michigan, 2. University of Georgia, Athens, Georgia, 3. Iowa State University, Ames, Iowa, 4. Temple University, Philadelphia, Pennsylvania*

Objective: Considerable controversy has surrounded the notion of dedifferentiation for explaining cognitive changes associated with aging. According to dedifferentiation theory, specific cognitive abilities merge into a common factor during late life. Dedifferentiation theory was tested in centenarians and octogenarians by examining performance patterns across neuropsychological test scores. Methods: Participants were drawn from the Georgia Centenarian Study, which consists of a population-based sample of 244 centenarians and 80 octogenarians. Participants completed the Mini-Mental State Examination, Fuld Object Memory Evaluation, Behavioral Dyscontrol Scale, Controlled Oral Word Association Test, motor speed assessment, and WAIS-III Similarities. Pairwise correlations between test scores were computed for each age-group as a whole and for age-groups stratified by level of cognitive functioning. Correlations were converted to z-scores, and differences among these transformed correlations were evaluated for statistical significance. Results: There were no significant differences between centenarians and octogenarians in terms of the magnitude of correlations between cognitive measures. When age-groups were stratified by level of cognitive functioning, there were significant differences within the low functioning groups, but the direction of differences was unexpected. There were no significant differences between the two high-functioning age-groups. Conclusion: The findings do not support the dedifferentiation of cognitive functions among the oldest old. There were no significant differences between the two age-groups as a whole. Associations between scores among low-functioning centenarians were smaller in magnitude than those among low-functioning octogenarians, which is inconsistent with dedifferentiation theory. While dedifferentiation was not observed, it is possible that such changes occur before the age of 80.

## SESSION 1215 (PAPER)

## RELIGION AND SPIRITUALITY

### SPIRITUALITY, PERCEIVED AGE, AND WELL-BEING IN MIDDLE AND LATER LIFE

J. Park[1], R. Ward[2], *1. University at Albany, School of Social Welfare, Albany, New York, 2. University at Albany, Department of Sociology, Albany, New York*

Previous studies have suggested that older adults who feel older and desire to be younger than their biological age tend to be less satisfied with their life and experience a lower sense of well-being. Based on Lazarus and Folkman's stress and coping theory, the objectives of this study are to empirically investigate whether spirituality positively impacts people's age perception, and whether spirituality factors moderate the association between age perception and well-being in middle and later life. In this study, the construct spirituality was measured by ten subscales of spiritual and religious beliefs, spiritual coping, and religious attachment. We hypothesized that spirituality would moderate positive self-evaluations and contribute to younger felt age and older desired age, and that spirituality would lessen the negative implications of older perceived age and enhance people's subjective well-being. Subjects aged 40 to 74 were selected from the Midlife in the United States Survey of 1995 (N=3,897, mean age=54). Results showed a significant association among spirituality, age perception, and subjective well-being. Individuals with greater spirituality tend to feel younger, and desire to be older relative to their actual age. Also, these individuals reported higher subjective well-being in general. Notably, the interaction between felt age and religious attachment was found to counteract the negative impact of older felt age and thus increase subjective well-being. These findings reflect the positive impact of spirituality (especially religious attachment) on well-being in middle and later life, and support the integration of spirituality and religiosity into various social services for people in need.

### WORSHIP ATTENDANCE AND DISABILITY IN A BIRACIAL, COMMUNITY-BASED POPULATION OF OLDER ADULTS

G. Fitchett[1], M.R. Benjamins[2], C.F. Mendes de Leon[1], *1. Rush University Medical Center, Chicago, Illinois, 2. Sinai Urban Health Institute, Chicago, Illinois*

Results from prior studies of worship attendance and disability in older adults are inconsistent and limited by the use of composite, self-reported measures of disability. We examined the role of frequency of attendance on disability and progression of disability in older adults and whether the effects varied by race. Data come from 6,500 participants in the Chicago Health and Aging Project, an ongoing population-based, biracial study of older adults. Self-reported measures of disability included the Nagi assessment of lower and upper-body extremity function and a 6-item assessment of independence in activities of daily living. Both were reported for up to 9 years of follow-up. We also examined observed performance on 3 measures of lower extremity strength, balance, and gait, assessed every 3 years for up to 3 assessments. The analyses used GEE and mixed effect regression models. Compared to those who reported no or infrequent worship attendance, for all 3 measures of disability, we found progressively lower levels of disability at baseline for frequent and very frequent attenders (all $p<0.001$). We found no association between frequency of attendance and change in disability over time, nor did these associations vary for Whites compared to Blacks. The baseline relationship between more frequent worship attendance and lower levels of disability appears to be consistent across diverse measures of disability and for both Whites and Blacks. In contrast to some prior studies, we found no evidence that worship attendance was associated with change in disability over time.

### COGNITIVE AND AFFECTIVE DIMENSIONS OF SPIRITUAL RESILIENCY IN OLDER ADULTS: A GENDERED PERSPECTIVE

J.L. Ramsey[1], R. Blieszner[2], *1. Pastoral Care, Luther Seminary, St Paul, Minnesota, 2. Virginia Polytechnic Institute and State University, Blacksburg, Virginia*

For many older adults, active involvement in religious and spiritual practices contributes to health and well being. Our international research project demonstrates the importance of spirituality experienced in a community-based context for sustaining resilience as elders strive to interpret the meaning of past events and cope with current aging-related challenges. The cross-cultural design employed guided discussions in women's and men's focus groups at churches in the U.S. and Germany, followed by in-depth interviews with individuals identified as exemplars of deep spirituality (N = 16; 8 women and 8 men ). Grounded in narrative theory, our analysis of coding categories and themes and patterns in the data revealed two prominent narrative strategies. One is the capacity of older adults to critique beliefs and practices using rather abstract cognitive tactics; men tended to evaluate beliefs and actions using these approaches. The other is the capacity of older adults to situate their spirituality in emotional and relational attachments with significant others; women were more likely to interpret their spirituality and personal resiliency in terms of their contributions to and benefits from relationships. We provide case studies to illustrate these gender-based approaches to spirituality, life review, and meaning making in old age, noting influences of gender-based socialization on the propensity of older adults to engage in these processes. We offer suggestions for professionals working with this cohort of elders, pointing out the importance of taking men's more analytic approach seriously while providing women with opportunities to express their affective attachments.

### THE ASSOCIATION OF RELIGIOSITY AND FOUR-YEAR OUTCOMES AMONG OLDER CANCER SURVIVORS

L. Caplan[1], P. Sawyer[2], C.L. Holt[3], R.M. Allman[4], *1. Morehouse School of Medicine, Atlanta, Georgia, 2. UAB Center for Aging, Birmingham, Alabama, 3. University of Maryland School of Public Health, College Park, Maryland, 4. Birmingham/Atlanta VA GRECC, Birmingham, Alabama*

The association between religiosity, physical and mental health, and survival among cancer survivors in the UAB Study of Aging was examined. Baseline and four-year assessments included socio-demographics and medical history. The Duke University Religiosity Index measured organizational, non-organizational, and intrinsic religiosity. Activities of daily living (ADL), cognition, and depression (GDS) were assessed. Vital status was confirmed by the Social Security Death Index. Changes were computed between baseline and 4-year measures. Chi square, ANOVA, and logistic regression analyses were used. At baseline, 177 persons had a cancer diagnosis, (mean age = 75.9; 58% male; 48% African American). Baseline church attendance (organizational) 1+ times per week was reported by 65%; private study 1+ times per week (non-organizational) was reported by 81%; and 76% endorsed the integration of religion in day-to-day living (intrinsic). At four years 58 (32.8%) had died and 45 additional persons had a cancer diagnosis. A second religiosity assessment was available for 139 (mean age = 73.7; 50% African American; 56% male). Organizational religiosity predicted survival, but was not significant after adjustment for other factors. Over 4 years, 25% had declines in organizational, 8.6% in non-organizational, and 13.7% in intrinsic measures; 12.9% reported greater ADL difficulty and 34.5% had increased GDS. Controlling for baseline values and declines in religiosity, baseline organizational religiosity was protective against increased ADL difficulty ($p=.015$) as well as increased depression ($p=.020$). Religiosity levels were high in this cohort of cancer survivors. Declines in religiosity were noted but did not predict increased ADL difficulty or depression.

## SESSION 1220 (POSTER)

## SUCCESSFUL AGING

### SUCCESSFUL AGING: IN THE SEARCH OF PREDICTORS

N.M. Mendoza-Ruvalcaba, E. Arias Merino, R. Meda Lara, J. Cueva Contreras, I. Díaz-García, *University of Guadalajara, Guadalajara, Jalisco, Mexico*

Introduction: Is not clear which factors are predictors of successful aging. Our aim was to identify predictors of successful aging according with definitions and indicators reported in different worldwide studies. Methods: Data analysis from the cross-sectional study "Mujeres Grandes" conducted in Guadalajara, Mexico 2007. Data were obtained from 638 women participants aged 60+(mean=70.9,SD=7.1), based on 19 different authors definitions, were classified as successful or not successful and logistic regression analyses were performed to identify predictors of successful aging. Results: The most powerful predictors were depression (lower score), age, to perform daily activities, and education. Among socio demographics, significant predictors were: age [range:$\beta$=-.039 to -.068,Exp($\beta$)=.93-.96] resulted in nine definitions, education [range:$\beta$=-.08 to -.168,Exp($\beta$)=.88–1.18] five definitions, while income [$\beta$=-.07,Exp($\beta$)=.93] and number of children [$\beta$=.087, Exp($\beta$)=1.09] in only one definition. Among health-functionality, significant predictors were: nutritional risk (lower score) [range:$\beta$=-.08 to -.271,Exp($\beta$)=.76–.92] in four definitions, subjective health [range:$\beta$=.40 to .87,Exp($\beta$)=1.09–2.4] three definitions, and number of diseases [$\beta$=-.46, Exp($\beta$)=.63]. Among psychological: depression (lower score) [range:$\beta$=-.087 to -.372,Exp($\beta$)=.69-.91] in fourteen definitions, life satisfaction [$\beta$=.43,Exp($\beta$)= 1.54] and satisfaction with sexual life [$\beta$=-.07,Exp($\beta$)= .93] in only one. Life style predictors were: doing daily activities [range:β=.586 to .717,Exp(β)=1.79–2.04] in six definitions, doing activities in general [range:β=.22 to 2.27,Exp(β)=1.25–9.73], leisure [range:β=.65 to .80,Exp(β)=1.92–2.23], and artistic [range:β=.76 to .85,Exp(β)=2.15–2.35] in two definitions each one; doing participative activities [β=1.14,Exp(β)=3.14] and drinking alcohol [β=1.07,Exp(β)=5.49] in one definition. Conclusion: It is necessary to establish a standard for defining, quantifying and determine the predictors of successful aging.

## HOW CHANGES IN ACTIVITIES IMPACT LIFE SATISFACTION IN LEISURE ORIENTED RETIREMENT COMMUNITIES

E.K. Smith, C. Wilken, L. Forthun, S. Bluck, *University of Florida, Gainesville, Florida*

Leisure Oriented Retirement Communities (LORCs) are an increasingly popular trend among retirees with an impact on numerous aspects of gerontology. The images of LORCs are that of neighborhoods that facilitate various activities that add to an older adult's life satisfaction. Due to the growing popularity of these communities, these images and advertisements elicit the question of how changes in social, physical, and leisure activities influence life satisfaction in an LORC. A descriptive research study was undertaken in a LORC in north-central Florida with over 50,000 residents. Twelve female residents were asked a series of questions on activities and life satisfaction before and since moving to the LORC. Content analysis was utilized to analyze the data. The findings suggest that the female respondents became more involved with their activities upon moving to the LORC. Most of the women indicated that, although they were satisfied with their activities before moving to the LORC, the community-facilitated activities had a positive impact on their life satisfaction. The respondents gave various reasons for their increased involvement in activities and life satisfaction citing the convenience of the facilities and clubs and the variety of social connections made within the community. The convenience of the community-facilitated activities and social connections of this LORC add to the ability of these women to age successfully. The findings suggest the amenities of LORCs and their impact on these respondents may warrant further research on how residents of these communities age.

## A STUDY OF CENTENARIANS WHO MAINTAIN HEALTH AND VITALITY

L. Campbell, G. Sanders, *NDSU, Fargo, North Dakota*

The purpose of this study was to explore the life-long experiences of centenarians in order to (1) identify the factors that they perceive to have contributed to maintaining their health and independence and (2) comprehend the value these experiences hold in regard to their quality of life. The study was phenomenological and used in-depth interviews to explore how individuals verbalize and interpret their lived experiences. To ascertain the essential themes of maintaining health and vitality into extreme old age, 8 participants residing in rural and urban areas of North Dakota and Minnesota were asked to respond to exploratory items relating to their life story. Upon completion of the interviewing process, the data were transcribed verbatim by a contracted transcriber who was IRB approved and a part of the research team. The primary researcher under the guidance of the Major Professor coded and organized the data. Participants attributed 5 common themes to maintaining their health and vitality into extreme old age: acceptance of life and being content, control, engagement in the world and others, moderation across life, and a lifetime of nurturing relationships. The results indicated that most individuals have the ability to increase their quality of life to some degree given the knowledge and the initiative to act on that knowledge.

## WHAT MAKES YOU HAPPY? – FINDINGS FROM YOUNG, MIDDLE-AGED, AND OLDER INDIVIDUALS

M.M. De Feo[1], D.S. Jopp[1], K. Boerner[2], *1. Psychology, Fordham University, Bronx, New York, 2. Jewish Home Lifecare, New York, New York*

Do people know what makes them happy and is there a relation to well-being scales? The present study asked for individuals' assessment of factors contributing to their happiness. Specifically, young, middle-aged and older individuals (N = 128; mean age: 45.77, range: 20-91 years) indicated what they would need or do to be happy. Content analysis extracted 22 categories. Inter-rater reliability was high. Social factors were mentioned most often (68%; including spent time with friends/family, talking to others, good relations), followed by experiential activities (40%; physical, cultural activities), and developmental activities (32%; productivity, expand horizon). Participants also mentioned resources including health (24%; optimize health, good health), time (13%; time, rest), and positive environment (13%). Furthermore, they mentioned attitudes (21%; being positive, reevaluate), problem-solving strategies (9%) and avoidance/distraction (5%). Age differences were only found for spending time, which was more often mentioned by young individuals. Women mentioned social factors and experiential activities significantly more often than men. Partial correlations controlling for age showed positive links of developmental activities and attitudes to well-being (CESD subscale). Developmental activities were also negatively linked to CESD Dysphoria and negative affect (PANAS). Regression analyses showed that well-being was predicted by age, developmental activities, and attitude. For negative affect, age and time were the only predictors. Marginal effects existed for talking with others and developmental activities. Findings may suggest that individuals have only limited insight regarding what is good for them; however, the mixed-method design may be one reason for poor correspondence between happiness factors and well-being scales.

## RELATIONSHIPS BETWEEN LEISURE ACTIVITIES, HEALTH AND WELL-BEING INDICATORS IN YOUNG, MIDDLE-AGED, AND OLDER INDIVIDUALS

M.E. Paggi[1], D.S. Jopp[1], C. Hertzog[2], *1. Psychology, Fordham University, Bronx, New York, 2. Georgia Institute of Technology, Atlanta, Georgia*

Research has demonstrated the positive effects of leisure activities on well-being and depression across the lifespan (Lampinen, Heikkinen, Kauppinen, & Heikkinen, 2006; Pressman, et al., 2009). Because physical health also relates to participation in leisure activities, it seems reasonable that physical health affects one's participation in leisure activities, which can in turn affect well-being and depression. Thus, the present study investigated the link between leisure activities and well-being indicators in more detail, and further explored the how health affected this link. The sample consisted of 267 participants 18-82 years old (mean age = 49.13). Leisure activities were assessed with the extended VLS Activity questionnaire (Jopp & Hertzog, 2010). Well-being was measured with the Satisfaction with Life Scale (Pavot & Diener, 1993), depression with the CESD (Radloff, 1977). Young, middle-aged and older individuals did not differ in their overall activity participation. With advancing age, however, individuals engaged less in sports, technology-related and developmental activities. Engagement in religious and experiential activities increased with age. Regression analysis for the total sample (controlling for age, gender, health) indicated that technology-related activities and travel were positive predictors of well-being, TV watching was a negative predictor. Social-private activities had negative and TV positive beta-weights predicting depression. Analyses further indicated that leisure activities partially mediated the relationships between health and well-being indicators, but a Sobel test underscored the mediating role of activities only for depression. Results highlight the important role leisure activities for well-being indicators and the impact of health in the context of depression.

### RELATIONSHIPS BETWEEN STRENGTH OF IDENTITY, FUNCTIONS OF IDENTITY AND WELL-BEING IN HEALTHY OLDER PEOPLE

L.S. Caddell, L. Clare, *Psychology, Bangor University, Bangor, United Kingdom*

Background: Aging is often accompanied by transitions and changes in circumstances which may influence a person's sense of identity. This in turn, could have an impact upon a person's feelings of well-being in terms of anxiety and depression. Currently, further work that directly investigates the association between aspects of identity and well-being is required, given the possible implications for care and support. Objectives: This study aimed to investigate the relationships between strength and possible functions of identity (structure, harmony, goals, future, personal control), distress relating to aspects of identity, and anxiety and depression in older adults living in the community. Method: Participants were 60 people aged 60 or over. Participants completed a number of questionnaire measures focusing on strength of identity, functions of identity, distress related to aspects of identity, and anxiety and depression. Results: Strength of identity and fulfilment of the functions of identity were related to well-being, such that a stronger sense of identity was significantly associated with lower levels of anxiety and depression, and the fulfilment each of the functions of identity was significantly associated with a lower level of depression. Anxiety was significantly positively associated with identity-related distress. Conclusion: Results suggest that aspects of identity are related to well-being in older people. This points to the need to consider how best to support self and identity in older people in order to maximise well-being amongst this population.

### EFFECT OF SOCIAL SUPPORT ON THE NEGATIVE INFLUENCE OF PHYSICAL DECLINE ON PSYCHOLOGICAL WELL BEING IN OLD PEOPLE

M. Ogawa[1], Y. Gondo[2], Y. Masui[3], H. Iwasa[4], H. Inagaki[3], H. Sugisawa[1], *1. J.F. Oberlin University Graduate School, Tokyo, Japan, 2. Osaka University, Osaka, Japan, 3. Tokyo Metropolitan Institute of Gerontology, Tokyo, Japan, 4. University of Tokyo, Tokyo, Japan*

The purpose of this study is to examine the effect of social support on the relationship between physical decline and psychological well-being in old people. In order to examine the different influences of support resources on the subjective well-being changes caused by the decline in physical function, latent growth curve model was used. The analysis was done utilizing four waves' panel data (collected in 1995, 1997, 1999 and 2000) conducted by the Tokyo Metropolitan Institute of Gerontology. The subjects were those who responded as first wave (n=1607). Because the effect of the support from family and support from friends was considered to be different, we tested two models which relationship between physical function and psychological well-being was mediated by support from family or by support from friends. Although subjective well-being deteriorated with physical function in both models, a different mediation effect was observed. In the friends support model, decline in subjective well-being was influenced by direct influence of deteriorated of physical function and indirect effect through the decline in support from friends caused by the deteriorated of physical function. Meanwhile, in the family support model, decline in physical function and decreased support from family was not related, and the subjective well-being was not decrease through the support from family. These results suggest that according to the physical functions decline, support from friends tend to shrink while support from family to be constant. Consequently, support from family is more important than support from friend to psychological well-being in Japanese elderly.

### ENGAGEMENT WITH LIFE: ACTIVITY PARTICIPATION AS A PREDICTOR OF SUCCESSFUL AGING AND QUALITY OF LIFE

R. Stevens-Ratchford, *Occupational Therapy and Occupational Science, Towson University, Towson, Maryland*

Introduction. This study examined the relation of long-standing occupation to successful aging and quality of life (QOL). Long-standing occupation was participation in a particular activity for a period of five years or more. QOL was a positive state of well being that was an inherent factor of successful aging. Successful aging was defined as continued good health and well being in concert with high function and active engagement with life (Row & Kahn, 1999). Engagement with life is involvement in leisure, social, and productive activities. QOL was defined as overall positive well being that included health status and life contentment. Engagement in long-standing occupation provides seniors with a vehicle for staying active and socially connected. Method. Correlational procedures were used to collect data on long-standing occupation, successful aging, and quality of life in a sample of 276 community-dwelling older adults. The Long-Standing Occupation Measure (r=.81) was used to measure activity participation. The Successful Aging Profile (r=.84) was used to measure successful aging. The Quality of Life Scale (r=.92) was used to measure QOL. Regression analyses were used to determine predictors of successful aging and QOL ($p < 0.05$). Results. Findings indicated that long-standing occupation is a significant predictor of successful aging and quality of life. Productive occupation was a significant predictor of both QOL and successful aging. Conclusion. This sample of older adults had participated in a variety of leisure, social, and productive occupations across their lifetimes. These activities related to their overall successful aging and QOL.

### EXAMINING THE EFFECTS OF EPIPHANIES ON POSSIBLE SELVES

M. Barreto, L.D. Frazier, *Florida International University, Miami, Florida*

This study examined the manifestation, underlying processes, and psychological effects of epiphanies on sense of self and goal-directed behaviors. Specifically, we examined the origins of possible selves (e.g., future self representation) with particular focus on origins that came from the psychological experience of an "aha" moment or an epiphany. The sample, based on data from two previous studies of possible selves, consisted of 411 men and women. Ages ranged from 17 – 95 with a mean of 35.9 (SD = 20). Findings indicate that hoped-for possible selves were more likely to be derived from epiphanies than feared possible selves. The specific types of experiences that generate epiphanies and epiphany-derived possible selves include a particular goal or calling (e.g., career), a positive or negative influence of others (e.g., mentorship/manipulation), health, and a particular fear (e.g., unemployment). Possible selves derived from epiphany experiences had higher levels of importance and stronger motivational power through balance (among hoped and feared selves) and the self regulatory variables (i.e., self-efficacy and outcome expectancy) than possible selves derived from other origins. This understanding of the mechanisms for how the self is shaped by epiphanies sheds light on the motivational aspects of the self-system and provides insight into ways individuals can affect greater change in their development and lead to more adaptive developmental outcomes, especially in later life. The role of an epiphany on the formation and implementation of possible selves helps pave the way for important prevention programs aimed at promoting healthy development and adaptation to age-related change.

### THE EFFECT OF PLAYING THE WII ON LONELINESS AND MOOD IN THE ELDERLY

P.E. Kahlbaugh, A.J. Sperandio, A. Carlson, *Psychology, Southern Connecticut State University, New Haven, Connecticut*

This study investigates the effectiveness of the Wii technology in promoting successful aging. The Wii represents computerized simulations of previously enjoyed activities for individuals whose participation is no longer feasible or actively pursued. Investigations of compensatory strategies (e.g., Baltes, 1997), such as those offered by the Wii, have practical and theoretical value. Technology has the potential to benefit the elderly in terms of social connectedness and enjoyment (Ijsselsteijn, Nap, de Kort, & Poels, 2007). Previous research has investigated relationships between loneliness, emotional well-being, and technology with mixed results. Elderly using the internet reported overall low loneliness, but social and family loneliness were related to more internet use (Sum, Mathews, Hughs & Campbell, 2008). Goldstein et al. (1997) found declines in emotional well-being were mitigated by videogame play, but videogame technology such as the Wii has not been studied. In the present study, 36 individuals (mean age 82.6 years) were randomly assigned to Wii, TV or control conditions. Assessments of life satisfaction, loneliness, positive mood, physical activity and general health were obtained across a ten-week interval. Elderly playing Wii had lower loneliness and greater positive mood at the end of the study compared to TV and control groups. For Wii participants, loneliness and mood predicted life satisfaction, while for TV and control groups neither were predictors. We are an aging society. The importance of promoting successful aging cannot be underestimated. This investigation provides evidence of the effectiveness of using computer simulation technology to enhance aspects of successful aging.

### THE RELATIONSHIP BETWEEN SUCCESSFUL AGING AND ACTIVITY LEVEL PARTICIPATION AMONG OLDER ADULTS

K. Kopera-Frye[1], H.A. Myers[2], *1. Dept. of Gerontology, Sociology, & Political Science, University of Louisiana at Monroe, Monroe, Louisiana, 2. University of Nevada-Reno, Human Development & Family Studies/Gerontology, Reno, Nevada*

Successful Aging (SA) has been characterized as involving three factors: Freedom from cognitive impairment, freedom from physical disability, and social engagement (Rowe & Kahn). Therefore, leisure activity participation, possibly a form of social engagement, should be significantly related to SA conceptualizations among older adults. One hundred seventeen older adults drawn from an independent/assisted senior housing community were surveyed on their conceptualizations of SA both by using a Likert SA scale and an open-ended question, in addition to frequency of leisure activity. It was expected that higher scores on the SA attribute scale would be significantly related to greater activity participation. Interestingly, higher SA scores on the Phelan scale were not related to activity level. Open-ended responses revealed that staying physically and mentally fit, having relationships with friends and family best represented SA. This suggests different dimensions to SA among healthy, educated seniors, which may be unrelated to activity levels.

### JOINT TRAJECTORIES OF MULTIPLE SUCCESSFUL AGING INDICATORS OF THE ELDERLY IN TAIWAN

H. Hsu[1], B.L. Jones[2], *1. Asia University, Taichung, Taiwan, 2. Carnegie Mellon University, Pittsburgh, Pennsylvania*

Purpose: Successful aging has been defined as multi-dimensional concept. However, most studies only showed the longitudinal pattern of one indicator at a time. The purpose of this study is to explore the multiple trajectories of successful aging among the Taiwanese elderly. Methods: Data were from the four waves of a longitudinal elderly data, 1993-2003. The survived and completely self-responded samples were included in the analysis, totally 1474 persons. Six indicators of successful aging (chronic disease numbers, instrumental activities of daily living, depressive symptoms, perceived social support, participation in productive activities, and economic satisfaction) were used as the indicators. Group-based multiple trajectories and multinomial logistic regression were applied for analysis. Results: Four joint trajectory groups were identified. The Care-Demanding group (2.0%) had medium chronic diseases, severe disability, highest depressive symptoms, increase-and decrease social support, little productive activity, and lower economic satisfaction. The Successful Aging group (57.8%) had lower risk in chronic diseases, highest IADL, lowest depressive symptoms, decrease-and-increase social support, high productive activity, and high economic satisfaction. The Physically Decline group (13.3%) had higher chronic diseases, declining IADL, lower depressive symptoms, stably increasing social support, declining productive activity, and medium economic satisfaction. And the Mentally-and-Economically in Risk group (26.8%) had higher chronic disease, higher IADL, higher depressive symptoms, increasing social support, high productive activity, and low economic satisfaction. Those who were male, higher educated, higher economic status in the childhood were more likely to be successful aging. Discussion: The high risk groups of multiple-dimension successful aging can be identified. Different health promotion strategies for the heterogeneous elderly should be accordingly developed.

### ASSIMILATION AND TRAJECTORIES OF POSITIVE AND NEGATIVE AFFECT AMONG OLDER MEXICAN-AMERICANS

J. Liang[1], N. Fultz[1], J.M. Bennett[1], B. Shaw[2], N. Krause[1], *1. School of Public Health, University of Michigan, Ann Arbor, Michigan, 2. University at Albany, Rensselaer, New York*

As two key components of subjective well-being, positive affect entails feelings of joy or active pleasure, while negative affect represents feelings of anxiety, distress, agitation, worry, and pessimism. Current research regarding subjective well-being is largely based on cross-sectional data, which confound intrapersonal changes with interpersonal variations. In addition, knowledge of SWB in ethnic minorities, particularly older Mexican-Americans, is very limited. This research analyzed the linkages between assimilation (structural and language) and trajectories of positive and negative affect among older Mexican-Americans. Data came from the Hispanic Established Populations for Epidemiologic Studies of the Elderly (HEPESE) collected in 1993, 1995, 1998, 2000, and 2004, which yielded 10,317 observations from 3,050 respondents. Multilevel models were employed to evaluate intrapersonal and interpersonal differences in positive and negative affect. Whereas positive affect increased slightly over time ($b=.134$, $p<.001$), negative affect remained stable. Whereas structural assimilation was positively associated with both positive affect ($b=.109$, $p<.05$) and negative affect ($b=.397$, $p<.001$), it was not correlated with the rates of changes in these two components. In contrast, language assimilation was associated with a higher level of positive ($b=.144$, $p<.001$) but a lower level of negative affect ($b=-.156$, $p<.001$). In addition, it was correlated with a lower rate of change in positive affect ($b=-.03$, $p<.001$) but a higher rate of change in negative affect ($b=.016$, $p<.05$). These linkages were partially confounded by socioeconomic status, social support, and attrition over time. Cultural assimilation is a key variable in understanding how subjective well-being evolves among older Mexican Americans.

### THE INTEGRATION OF NORMATIVE AND NON-NORMATIVE LIFE EVENTS INTO THE POSSIBLE SELVES REPERTOIRE

M. Barreto[1], L.D. Frazier[1], A. Osgood[2], *1. Florida International University, Miami, Florida, 2. Mount Ida College, Newton, Massachusetts*

This study examined the integration of normative (i.e., anticipated, developmentally predictable) and non-normative (i.e., unanticipated, unpredictable) stressful life events into the possible selves repertoire across adulthood. Possible selves (e.g., future self-representations) motivate individuals to adapt to new roles and circumstances throughout the lifespan. The purpose of this study was to determine what types of life events (normative and non-normative) become integrated into one’s possible selves, how they shape possible selves, and whether the integration of life events/experiences is positive for developmental and psychosocial outcomes such as coping and well-being. The sample was comprised of 198 men and women. Ages ranged from 18 to 85, with an average age of 42.5 (SD = 19). Over two-thirds of participants indicated the presence of stressful life events within their possible selves, indicating integration of stress into future self-representations. The degree to which individuals conceptualize themselves in terms of these experiences relates to their ability to cope with these challenges. The integration of life events, both normative and non-normative, into one's possible selves were related to stronger coping scores. Finally, the degree of integration was examined in relation to the extent of self-regulation of the possible selves and results showed that a greater integration was related to greater self-regulatory activities associated with the event–related self. This study indicates possible avenues for prevention/intervention programs that can teach people how to incorporate stressful life events and change into their sense of self in positive ways to promote well being.

### DEVELOPMENT OF SELF-EFFICACY SCALE ON GOING OUT AMONG COMMUNITY-DWELLING ELDERLY IN JAPAN

S. Yamazaki[1], H. Imuta[2], M. Hashimoto[2], S. Nomura[3], S. Yasumura[1], *1. Public Health, Fukukshima Medical University School of Medicine, Fukushima, Japan, 2. Tokyo Metropolitan University, Tokyo, Japan, 3. Waseda University, Saitama, Japan*

BACKGROUND: The frequency of leaving the house among the elderly is associated with the need for nursing care. Behavior change theory suggests that self-efficacy influences leaving the house, leading to a reduction in homebound states. However, few scales exist to evaluate these aspects. OBJECTIVE: To develop a self-efficacy scale on going out among community-dwelling elderly (SEGE), and to establish its reliability and validity. METHODS: In the first preliminary survey, we collected 63 items associated with self-efficacy regarding leaving the house from 18 community-dwelling elderly in Tokyo. A prototype scale was developed by selecting 13 of the original 63 items based on results from 258 elderly in the second preliminary survey. We determined the scale's reliability and validity by mailing a questionnaire that included health-related variables and the prototype scale to a total of 8,000 randomly selected elderly individuals in Tokyo. RESULTS: Responses from 2,627 elderly individuals (men, 1145; women, 1482; mean age, 73.8±6.6 years) were analyzed. We developed a six-item scale using stepwise variable selection in explanatory factor analysis. The $\alpha$ coefficient of internal consistency was 0.96. SEGE scores correlated significantly with self-efficacy for activities of daily living (ADL), self-rated health, and health-related quality of life (QOL). Confirmatory factor analysis revealed that, although SEGE scores and self-efficacy of ADL were highly correlated with each other, they measured different concepts. CONCLUSION: We developed SEGE, a six-item scale with a one-factor structure, and demonstrated its reliability and validity. SEGE may help evaluate the need for nursing care in elderly individuals.

### RISK FACTORS FOR LONELINESS IN OLD AGE: EUROPE, USA AND VIET NAM

B. Malmberg[1], A. Davey[2], G. Sundström[3], S.H. Zarit[4], *1. Institute of Gerontology, Jönköping University, Jönköping, Sweden, 2. Temple University, Philadelphia, Pennsylvania, 3. Jönköping University, Jönköping, Sweden, 4. Pennsylvania State University, State College, Pennsylvania*

Loneliness in old age varies between cultures. For example, feelings of loneliness are more frequently reported in southern Europe than in Scandinavia. Yet, factors behind loneliness are largely the same: Living alone, higher age, female gender, and poor health. We use SHARE 2008 (N=8,787), HRS 2006 (N=15,072) and a local study in Da Nang, Vietnam (N=588) to analyze risk factors for loneliness in different cultures. Levels of loneliness vary, but are consistently associated with co-residence and poor health in all these countries. We made logistic regressions of perceived loneliness with a combined independent variable of living arrangement and subjective health in Europe, USA and Vietnam. ( Adjusted for age, years of education, gender and in Europe Country and in USA ethnicity). With living alone and poor health as reference the risk for loneliness for persons living alone and in good health was in Europe .51(.42-.63) in US .43(.39-.49) and in Vietnam .42(.22-.81). Compared to persons not living alone in poor health corresponding figures are .25(.21-.30), .33(.29-.38) and .30(.17-.51) and to persons not living alone and in good health .10(.08-.12), .09(.08-.11) and .11(.06-.11) respectively. There is a strong association between loneliness and the combination of living arrangements and subjective health in all three cultures. Persons who live alone and feel unhealthy have a ten times elevated risk for loneliness compared to co-residing persons who feel healthy.

## SESSION 1223 (SYMPOSIUM)

### PRESIDENTIAL SYMPOSIUM: TRANSITIONS OF CARE ACROSS THE AGING CONTINUUM: INTERSECTION OF DRIVING CESSATION AND CAREGIVING

Chair: *C.M. Connell, Health Behavior & Health Education, U Michigan School of Public Health, Ann Arbor, Michigan*
Co-Chair: *M. Berg-Weger, St. Louis University, St. Louis, Missouri*
Discussant: *G. Hunt, National Alliance for Caregiving, Bethesda, Maryland*

With the aging of our population, increasing numbers of older adults will confront the need to limit and stop driving, despite a strong preference to continue. For many families, this transition places a burden on family members who are called on to assume an informal caregiving role by assisting with transportation needs. The purpose of this symposium is to present empirical work by members of the Transportation and Aging Special Interest Group that addresses the intersection of the driving cessation and caregiving transitions. Results of three studies will be presented. The first is based on in-depth qualitative interviews of father/daughter dyads who recount their challenges in communicating about and planning for age-related transitions, particularly the impact of driving reduction and cessation on family roles and responsibilities. In contrast to communication and planning, the second study reports reasons why family members elected the drastic measure of reporting older family members as unfit drivers to state authorities, resulting in the loss of their license. In the final study, data from a survey of older former drivers is used to assess the impact of relying on family members to provide transportation on quality of life and depression. Taken together, these three studies provide insight into how research on driving reduction and cessation fits in the broader literature on transitions to caregiving and family dynamics and roles in the face of age-related changes.

### DRIVING CESSATION AND CAREGIVING CONTINUUM: PERSPECTIVES OF FATHER/DAUGHTER DYADS

C.M. Connell[1], D.K. Vibbert[1], L. Kostyniuk[2], M. Janevic[1], *1. University of Michigan School of Public Health, Ann Arbor, Michigan, 2. University of Michigan Transportation Research Institute, Ann Arbor, Michigan*

Age-related declines in health and functioning force many older adults to reduce or stop driving, limiting their opportunities for productive activities and valued social ties. In addition to the profound impact on older drivers, this transition has ripple effects for family members who may step in to provide transportation and assist with mobility needs. The purpose of this presentation is to share results from in-depth interviews conducted with 15 adult daughter/father dyads to examine family decision making and planning about this important age-related transition. Selection criteria for fathers included being age 70 or over and living alone; all daughters had to have noticed problems with their fathers' driving. Themes were categorized as: parent/child communication and conflict; gender roles; reluctance to discuss and plan for age-related decline; sibling roles; and transition to caregiving. Implications of these qualitative findings for programs designed to facilitate planning for age-related family transitions will be discussed.

### REPORTING OLDER DRIVERS TO THE STATE LICENSING AUTHORITY: CONCERNS EXPRESSED BY FAMILY MEMBERS

T.M. Meuser[2], D.K. Vibbert[1], M. Berg-Weger[3], C.M. Connell[1], *1. Health Behavior & Health Education, U Michigan School of Public Health, Ann Arbor, Michigan, 2. University of Missouri - St. Louis, St. Louis, Missouri, 3. St. Louis University, St. Louis, Missouri*

Family members are often the first to notice safety concerns among older drivers. While many retire from driving when prompted, some reject this advice and continue to drive. Although considered a drastic measure, some family members feel as if filing a report with the state is the only option to end a driving career. This presentation will summarize the primary reasons why family members reported 460 older adults (mean age 83, 54% male) as unfit drivers in Missouri, 2001-2005. Physical/cognitive health concerns included impaired cognition (57%), impaired mobility (36%), confusion/disorientation (35%), vision problems (32%) and forgetfulness (30%) On-road concerns included dangerous lack of control (52%), getting lost (25%), and having caused a crash (20%). Concerns were used to predict three outcomes: submitted physician evaluation, referred for on-road testing, and completed on-road testing. Discussion will focus on policy and practice implications for intervention with families, older drivers, and state authorities.

### FORMER DRIVERS' RELIANCE ON FAMILY MEMBERS FOR MEETING THEIR TRANSPORTATION NEEDS

M. Bedard[1,2], G. Kafka[2], *1. Lakehead University, Thunder Bay, Ontario, Canada, 2. Northern Ontario School of Medicine, Thunder Bay, Ontario, Canada*

Further work to understand the impact of driving cessation on older adults and the role of network members who then assume an informal caregiving role by providing transportation is warranted. Data collected from 30 former drivers who had stopped driving in the past three years (as part of a larger study of 223 adults ranging in age from 55 to 91 years) is used to assess the psychosocial impact of relying on family members to provide transportation. The availability of drivers was significantly related to the ``ability to go places" (including senior centers), as well as fewer symptoms of depression and better life engagement. Caregivers who provide transportation are central to the successful aging of former drivers. Supporting these caregivers via policy and practice initiatives will indirectly enhance the quality of life of their loved ones.

## SESSION 1225 (SYMPOSIUM)

### TRANSITIONS IN CARE: INDIVIDUAL, CONTEXTUAL, AND CULTURAL PERSPECTIVES ON LONG-TERM CARE PLANNING

Chair: *S. Sorensen, University of Rochester School of Medicine and Dentistry, Rochester, New York*
Discussant: *R.S. Allen, The University of Alabama, Tuscaloosa, Alabama*

The concept of Preparation for Future Care (PFC) has been advanced as a type of health-promotion activity that combines both thoughts about future care needs and actions to determine preferences and obtain needed services. PFC may help people cope with age-related stressors, residential transitions, and gradual functional decline experienced by many older adults over a period of years or decades. In the last five years we have seen an increase in the number of researchers considering both the predictors and outcomes of long-term care planning. This symposium will provide an overview of long-term care planning in different demographic groups. Priscilla Quinn presents data from a large stratified random sample of older adults 60 in the greater Omaha metropolitan area; Kathy Black reports on one specific aspect of long-term care planning, the consideration of end-of-life decisions in a stratified random sample in South Florida. Jameson Hirsch presents combined data from two studies in New York state and addresses ethnic and personality differences in the propensity to plan for future care. Wingyun Mak presents data on the relationship of chronic diseases to PFC from a study of first degree relatives of people with Alzheimer's disease. As evidence for the importance of PFC, Silvia Sörensen presents one of the first assessments of the effect of PFC on subsequent mental health. Rebecca Allen will discuss the implications of these findings for individual decision-making, elder care planning, and policy decisions regarding transitions in care.

### FACTORS ASSOCIATED WITH LONG-TERM CARE PLANNING AMONG OLDER ADULTS

P.M. Quinn, *Gerontology, University of Nebraska Omaha, Omaha, Nebraska*

The purpose of the present study was to identify factors associated with long-term care planning in an effort to assist individuals in preparing for their long term care needs. The present study was designed to answer two research questions: (1) what distinguishes those who plan for long-term care versus those who do not; and (2) what distinguishes those who intend to pay for it themselves versus those who will rely on public support. Survey data were collected from a stratified random sample of adults 60 and over (n=651). Data were analyzed using nested logistic regression models. Findings indicated that those most likely to have a plan for long-term care were female, unmarried, with higher income, and aware of the availability of long-term care insurance. Only income was associated with taking responsibility for one's own long-term care.

### DEMOGRAPHIC AND ATTITUDINAL FACTORS ASSOCIATED WITH ADVANCE CARE PLANNING

K. Black, *College of Arts and Sciences, University of South Florida Sarasota - Manatee, Sarasota, Florida*

Our study utilized a stratified random sampling design to survey older adults (n = 203) in the state of Florida regarding their attitudes towards future care and planning behavior in social- environmental, health, and financial domains. Regression analyses were conducted to determine factors most predictive of older adults' attitudes towards future care and planning behavior by domain. Results suggests that gender, age, and functional status predict greater planning behavior and more accepting attitudes towards long-term care, while living alone and poor health status are associated with less advance care planning behavior and greater non-accepting attitudes. Factors associated with a greater likelihood to have advance care planning documents and concrete plans for future care include increased age, higher educational attainment, and female gender. Specifically, we used the Preparation of Future Care Needs Content of Plans Subscale of Sörensen et al's Preparation for Future Care Needs measure.

### OPTIMISM AND PLANNING FOR FUTURE CARE NEEDS: MODERATING EFFECTS OF RACE

J.K. Hirsch[1], S. Sorensen[2], J. Lyness[2], *1. Department of Psychology, East Tennessee State University, Johnson City, Tennessee, 2. University of Rochester School of Medicine and Dentistry, Rochester, New York*

With aging, illness and impairment may necessitate planning for future health care, a process influenced by individual and socio-cultural characteristics. We examined race, optimism and future care planning in 194 White and Black older adults aged 59-89 (60% women). Participants completed self-report measures of optimism, preparation for future care, beliefs about usefulness of planning, and perceived need for future care. In bivariate analyses, optimism was related to less future care planning, and Blacks reported greater future care planning than Whites. In multivariate analyses, Blacks had higher Awareness, Gathering Information, Decision Making, and Concrete Planning; optimism was negatively associated with Gathering Information and Concrete Planning. The association between optimism and Gathering Information and Concrete Planning was stronger for Blacks than Whites; for Blacks, very low and very high optimism were associated with more concrete planning. Future oriented, yet realistic, health information delivered in a culturally-relevant manner may facilitate future care planning.

### THE EFFECTS OF HEALTH CONDITIONS ON PATTERNS OF PLANNING FOR FUTURE CARE ACROSS SIX YEARS

W. Mak, S. Sorensen, *University of Rochester, Rochester, New York*

In the context of aging, anticipation for one's future care may alleviate stress and anxiety associated with the increased chances for disease and disability. Despite this association with better outcomes, older adults may not recognize the importance of planning until they encounter a potentially life-threatening health condition. This study examined the effects of various health conditions on the longitudinal patterns of planning for future care. Older adults who experienced a life-threatening health condition such as cancer were more likely to have greater awareness for future care planning on average and increased rates across time. A cancer diagnosis was associated with higher levels of gathering information, decision-making, and establishing concrete plans, though rates of change across time were unaffected. Non-life-threatening health conditions like arthritis, incontinence and bowel problems, and osteoporosis did not predict greater average or growth tendencies for future care planning. Implications for targeting at-risk groups will be discussed.

### MENTAL HEALTH CORRELATES OF PREPARATION FOR FUTURE CARE: LONGITUDINAL FOLLOW-UP OF PRIMARY CARE PATIENTS

S. Sorensen, W. Mak, J. Lyness, *Psychiatry, University of Rochester School of Medicine and Dentistry, Rochester, New York*

The current study examines whether Preparation for Future Care (PFC) is related to indicators of mental health among 392 primary care patients aged 65+ participating in a study of mood. Participants completed a PFC survey and several validation measures, as well as questionnaires about depression, anxiety, and affect. A subset of this sample was followed up at 24 months (N=198). We conducted analyses of the effect of the 5 PFC Subscales (Awareness of Care Needs, Avoidance, Gathering Information, Decision Making, and Concrete Planning) on depression symptom severity, anxiety scores, and positive affect. After adjusting for covariates, including depression at baseline, Avoidance at baseline was significantly related to greater depression severity at 24 months; Decision-making was related to greater positive affect at 24 months. Practical applications and implications are discussed.

## SESSION 1230 (PAPER)

## UNDERSTANDING PHYSICAL ACTIVITY

### FUNCTIONAL MOBILITY AND COGNITION IN ELDERLY PEOPLE: DO THESE FUNCTIONS DECLINE TOGETHER?

N. Galdona, U. Diaz, I. Laskibar, M. Gonzalez, P. Llavero, B. Morales, D. Facal, J. Yanguas, *Fundacion Instituto Gerontologico Matia INGEMA, Donostia-San Sebastian, Spain*

Background: Some studies show functional mobility measures as factors that may help identify people with higher risk of progressive cognitive decline (Deshpande et al., 2009; Holztzer et al., 2006; Verghese et al., 2002). Objective: The goal of the current study was to search possible correlations between functional mobility and cognitive measures in a sample of community-dwelling elderly people with normal cognitive aging. Sample and methods: 85 elders (age: x=71.23, sd=6.73) were evaluated for cognitive functions with RAVLT (Rey, 1964), specific subtests of WMS-III (Face recall, Block Design, Direct and Inverse Digit Span) and FAS-Verbal Fluency Test. Functional mobility was measured with the Tinetti Gait (TG) and Tinetti Balance (TB) scales (Tinetti, 1986), as well as with the Time Up & Go test (Podsialdlo & Richardson, 1991). Results: Statistical analyses showed significant correlations between TB and RAVLT series 1 (immediate memory) (r=0.249, p=0.025), series 5 (short-term memory) (r=0.293, p=0.007) and series 6 (r=0.260, p=0.018), and with Block Design (r=0.271, p=0.014); TG only showed significant correlations with Block Design (r=0.302, p=0.006). On the other hand, Time Up & Go correlated inversely with RAVLT series 1 (r=-0.366, p=0.001) and series 5 (r=-0.263, p=0.018). No further correlations were found between the rest of cognitive and functional mobility scales. Conclusions: Our results indicate that functional mobility and some cognitive functions, such as memory or visuospatial skills, change together in normal cognitive aging elderly. Further studies should explore whether functional mobility measures such as balance and gait speed can be reliable predictors of cognitive decline.

### PREDICTING FALLS IN A COMMUNITY SETTING USING BALANCE AND BODY COMPOSITION

J. Gaines, K. Marx, K.L. Burke, J.M. Parrish, *The Erickson Foundation, Baltimore, Maryland*

The number of falls occurring among older adults remains high despite efforts to reduce the risk through fall prevention classes. In the context of a longitudinal study entitled VIVA!, we monitor balance and body composition among older-old and oldest-old adults residing in a large-scale CCRC. For this study, we investigated the value of balance testing and bioimpedance analysis in the prediction of falls using data from Year 2 to predict falls occurring during the subsequent Year 3. Of the 250 participants (mean age 83.0 (sd=5.7), 77% female) in this study, 64 self-reported falling at Year 2 with 52 participants reporting falls at Year 3. Balance was assessed using a NeuroCom BalanceMaster. Four balance variables were included: (1) the ability to stand on a firm surface with eyes closed (sec); (2) the sit-to-stand rising index (%); (3) the limits of stability reaction time (sec); and (4) the walk across speed (cm/sec). Body Composition was assessed using a Tanita 418 Bioimpedance Analyzer. Lower extremity composition variables used were: (1) right leg fat mass; (2) right leg predicted muscle mass; (3) left leg fat mass; and (4) left leg predicted muscle mass. Using linear regression analysis, two of the chosen variables from Year 2, right leg predicted muscle mass ($\beta$=.224) and the ability to stand on a firm surface with eyes closed ($\beta$=.298) explained 15% of the variance in fall status at Year 3. Translating this data into action for older adults continues to be the upcoming challenge.

### THE APPLICATION OF SOCIAL COGNITIVE THEORY FOR UNDERSTANDING PHYSICAL ACTIVITY BEHAVIOR IN OLDER ADULTS

S.M. White, T.R. Wojcicki, E. McAuley, *Kinesiology and Community Health, University of Illinois Urbana Champaign, Urbana, Illinois*

Social Cognitive Theory (SCT) is one of the most frequently used theoretical frameworks for understanding physical activity (PA) behavior. Most applications, however, focus on self-efficacy as the sole determinant of SCT often ignoring the contributions of remaining model constructs. In this study, we prospectively tested the utility of a more comprehensive SCT model to explain PA behavior over an 18-month period in a sample of older adults (N=321; *M* age= 63.8 years). Participants completed measures of self-efficacy, goals, outcome expectations, and PA at each time point. The hypothesized relationships were examined using panel analysis within a covariance modeling framework. Self-efficacy was hypothesized to have a direct relationship with goals and physical, social, and self-evaluative outcome expectations. Goals and outcome expectations were hypothesized to directly influence PA, and self-efficacy was hypothesized to influence PA directly and indirectly through goals and outcome expectations. Overall, this model provided an excellent fit to the data ($\chi^2$ = 36.16, df= 30, p= .20; CFI= 1.00; RMSEA= .03; SRMR=.07). Self-efficacy was directly related to outcome expectations and goals and indirectly related to PA through social and physical outcome expectations. Changes in self-efficacy were significantly related to residual changes in outcome expectations, goals, and PA. Changes in self-efficacy were also indirectly related to residual changes in PA through changes in physical outcome expectations. These results provide support for the use of SCT to understand and explain PA behavior in older adults. Future studies should replicate this model in other samples and incorporate measures to test the full model.

### SOCIOECONOMIC STATUS AND THE DEVELOPMENT OF FRAILTY IN DUTCH OLDER PEOPLE; A TEN-YEAR FOLLOW-UP STUDY

M. Huisman[1,2], M. Heymans[1], D.J. Deeg[1], *1. VU medical center, EMGO+ Institute for Health and Care Research, Amsterdam, Netherlands, 2. VU University, department of Sociology, Amsterdam, Netherlands*

Background: Frailty is a geriatric concept that signals a lack of reserve functional capacity in older people. It has practical clinical implications because it constitutes a state of health that is still modifiable but is on the threshold to chronic irreversible health problems. In this study we analysed the development of frailty over a ten-year follow-up period in older Dutch men and women from different socioeconomic groups. Methods: Data came from a nationally representative cohort of 1,509 men and women aged 55-85 years. Frailty was measured with the following markers: physical activity, and grip strength, BMI, cognitive functioning, vision and hearing problems. A maximum of 4 observations of the degree of frailty were acquired over a ten-year follow-up period. Indicators of socioeconomic position were education level and household income. We conducted several types of linear mixed model analyses to assess socioeconomic inequalities in the development of frailty, including complete case analyses, and analyses with frailty imputed for those who died during follow-up. Results: Adjusted for age, sex, and a partner being present inside the house or not, primary educated had a .76 higher odds of developing frailty than tertiary educated men and women (95%CI OR: 1.05-2.97), and the lowest income groups had a .90 higher odds than the highest income groups (95%CI OR: 1.20-3.02). Interactions of education and income with time of frailty measurement suggested that the association of education and income increased during follow-up. The association of education with frailty was reduced after adjusting for income. Analyses with imputations for missing observations due to deaths yielded similar results. Conclusion: Having a high socioeconomic position is still protective against one of the core geriatric health problems; frailty. This suggests that differences in vulnerability account for socioeconomic inequalities in health in old age, but also that reversing these inequalities partly is feasible.

## SESSION 1235 (SYMPOSIUM)

### CANADA'S ROADMAP FOR RESEARCH ON AGING: A DECADE REVIEW AND FORWARD AGENDA FOR THE INSTITUTE OF AGING OF THE CANADIAN INSTITUTES OF HEALTH RESEARCH

Chair: *A. Martin-Matthews, Institute of Aging, Canadian Institutes of Health Research, Ottawa, Ontario, Canada*

The Institute of Aging is one of 13 national Institutes of the Canadian Institutes of Health Research, funding biomedical, clinical, health services and population health research. Established in 2000, the Institute of Aging's fundamental goal is the advancement of knowledge in the field of aging to improve the quality of life and the health of older Canadians. As CIHR and the Institute of Aging now embark on a decade review, and a strategic alignment of the Institute's priorities with CIHR's Roadmap, this symposium will present the research outcomes of several Institute strategic initiatives over the past ten years, by examining: (a) the findings and research gaps in its priority funding areas of cognitive impairment in aging, mobility in aging, and the Canadian Longitudinal Study of Aging; (b) the research and stakeholder issues central to a developing strategic research focus on health services and systems for an aging population; and (c) the ways in which CIHR's requirements for knowledge translation and citizen engagement, and Canada's need for research capacity development, have influenced and been shaped by these initiatives. While these issues are discussed primarily in the context of Canada's research achievements and forward agenda for research on aging, they are also framed in the context of the Institute's international collaborations with the UK, France, Japan, and China, and with the EU's ERA-AGE initiative.

### SHAPING RESEARCH ON AGING IN CANADA: THE STRATEGIC INITIATIVES OF THE CIHR INSTITUTE OF AGING

A. Martin-Matthews, *Institute of Aging, Canadian Institutes of Health Research, Ottowa, Ontario, Canada*

Since its establishment in 2000 as one of 13 national Institutes of the Canadian Institutes of Health Research, the Institute of Aging has identified strategic priorities in cognitive impairment, mobility in aging, health services and systems for an aging population, and developed and launched the Canadian Longitudinal Study on Aging. This presentation examines the changing landscape of research on aging (including biomedical, clinical, health services and population health research) in Canada over this 10 year period, the Institute's approach to CIHR's dual mission of knowledge creation and knowledge translation, and the IA's approach to stakeholder and citizen engagement over time. Canada's need for development of research capacity in aging is a cross-cutting theme in this presentation. Issues of aging in a global research context are also addressed, with a particular focus on the Institute's international collaborations with the UK, France, Japan, and China, and the EU's ERA-AGE initiative. (n=148)

### COGNITIVE IMPAIRMENT IN AGING: NATIONAL PARTNERSHIPS TO INTERNATIONAL COLLABORATIONS

M. Peel, *Institute of Aging, Canadian Institutes of Health Research, Ottowa, Ontario, Canada*

Cognitive Impairment in Aging has been a strategic priority of the Institute of Aging since 2001. A primary mechanism for strategic planning and funding of research in this area has been the Cognitive Impairment in Aging (CIA) Partnership, a consortium of private, non-governmental, voluntary and government organizations who collaborate to further research in all aspects of cognitive impairment. This presentation discusses the IA-led strategic funding initiatives on biological mechanisms and treatment of Alzheimer's disease, Vascular Health and Dementia, Caregiving and Care Practice in Dementia, and the creation of the Canadian Dementia Knowledge Translation Network. In looking to the future of research in this area, CIHR is leading the development of an International Collaborative Research Strategy for Alzheimer's Disease (ICRSAD). This presentation will discuss ICRSAD's focus on issues of risk factor identification, early diagnosis (in order to facilitate early intervention), prevention, and early and optimal response of the health system. (n= 149)

### MOBILITY IN AGING: BUILDING CAPACITY AND KNOWLEDGE TRANSLATION

S. Crawford, *Institute of Aging, Canadian Institutes of Health Research, Ottowa, Ontario, Canada*

The Institute of Aging launched its strategic initiative on Mobility in Aging (MIA) in 2005 with the goals of enhancing relevant research and knowledge translation, spanning physiological mechanisms to the built environment. Consultations with national stakeholders identified research foci that included understanding and defining mobility; maintaining and restoring mobility; measures, tools and technologies in mobility research and the assessment of mobility aids; and supportive design covering housing, communities and transportation. This presentation discusses how the mobility in aging research landscape in Canada has been shaped by this strategy, through its support of feasibility studies, demonstration projects, and emerging interdisciplinary teams; and through partnered initiatives in Canada and collaborations with research funding agencies in the U.K. Challenges in realizing policy-relevant outcomes impacting mobility in aging and age-supportive environments, are also discussed. (n=130)

### CANADIAN LONGITUDINAL STUDY ON AGING: A RESEARCH PLATFORM FOR CANADA

L. Mealing, *Canadian Institutes of Health Research, Ottawa, Ontario, Canada*

The Canadian Longitudinal Study on Aging (CLSA), launched in 2008, is a 20-year study of 50,000 Canadians between the ages of 45 and 85. Of these, 30,000 people will undergo in-depth clinical assessment at 11 sites across Canada. With over 140 research collaborators, the CLSA will examine relationships among intrinsic and extrinsic factors from mid life to old age, and capture profiles of healthy and successful aging, adaptation, disease and disability. The CLSA will provide a national research infrastructure and build research capacity for sustained high quality research on aging from biology to population health. This presentation discusses the research, innovation and opportunities of the early phases of the CLSA, through its partnership with Statistics Canada and the Canadian Community Health Survey. CLSA's collaborations, and harmonization of data and access with other international cohort initiatives, such as the US HRS, are discussed. (n=146)

## SESSION 1240 (POSTER)

## EPIDEMIOLOGY AND RESEARCH METHODS

### METABOLIC SYNDROME AND CONSUMPTION CUPANA PAULLINIA (GUARANA) IN AMAZONAS RAIFOREST ELDERLY

I.B. Cruz[1], E.E. Ribeiro[2], E.A. Ribeiro[2], E. Brito[2], K. Viegas[2], A.F. Silveira[1], M.U. Rocha[1], *1. Centro de Ciencias da Saúde, Universidade Federal de Santa Maria, Santa Maria, RS, Brazil, 2. Universidade do Estado do Amazonas, Manaus, Brazil*

Amazon for its caffeine-rich fruits. In the last two decades the guaraná was investigated and the antioxidant, anti-obesogenic proprieties were observed. Considering the guaraná biological proprieties we investigated is whether the prevalence of metabolic syndrome (MS) could be influenced by consumption in Maués's elderly population. A study was done by cluster sampling in two stages: (1) identification and analysis of health indicators of elderly enrolled in the Brazilian Public Health Services in Maués-AM. This city is compound by 174 communities scattered along rivers and streams. This step was carried out by health workers previously trained (n = 1317), (2) selection and evaluation of elderly as the sampling unit chosen. A sample of 500 subjects were analyzed (72 years, 46% men, 54% women) .The prevalence of MS was 25% (126). The intake of guarana was 65% (327). Older adults who consume guarana had a lower prevalence of MS (21%) of the remaining (32%) (p = 0.007) regardless of sex and age. Considering the bioactive principles of guarana (caffeine, theobromine, theophylline and catechin) and previous investigations the results suggest that this food could have anti-SM proprieties.

### PREVALENCE AND RISK FACTORS OF PAIN CLUSTERS: KOREAN LONGITUDINAL STUDY OF AGEING (KLOSA)

S. Cho[1], S. Jang[2], H. Phang[3], *1. Seoul National University Graduate School of Public Health, Seoul, Republic of Korea, 2. Department of Society, Human Development, and Health, Harvard School of Public Health, Boston, Massachusetts, 3. Korea Labor Institute, Seoul, Republic of Korea*

Pain may result in activity limitation and reduced quality of life, and incur treatment cost. Understanding patterns and determinants of pain can help develop preventive measures. We investigated pain symptoms in older adult Koreans. Data were obtained from a sample of adults aged 45 to 85 years (4016 men, 5003 women) who participated in the 2006 cross-sectional baseline survey of the Korean Longitudinal Study of Ageing. Questionnaire interview obtained information on pain in 13 different body sites. Grouping of pain sites was investigated by clustering algorithm. Impact of pain was assessed on the need for assistance in daily living, hospitalization, and outpatient visit during the past year. Statistical analyses were performed with SAS software. Most frequent pain sites were back, legs, and knees. Women experienced more frequent pain than men in all sites($p<0.05$). Pain sites were clustered into three groups; those associated with movement, force, and the others. First two groups significantly increased with age. History of multiple chronic diseases and traffic injury were significantly associated with all three pain groups. History of falls was associated with the first two groups. Having pain in 3 or more sites was significantly associated with greater need for assistance (OR 1.8), hospitalization (OR 1.7), and outpatient visit (OR 2.6) in men, and with hospitalization (OR 1.5) and outpatient visit (OR 2.7) in women ($p<0.01$ for all). In conclusion, pain is associated with age, gender, past exposures and health problems, and leads to increased care burden.

### HEMOGLOBIN A1C LEVEL, SELF-RATED HEALTH, AND PHYSICAL PERFORMANCE AMONG OLD JAPANESE

L. Nyquist[1], J. Liang[1], J.M. Bennett[1], S. Shinkai[2], Y. Fujiwara[2], H. Yoshida[2], *1. University of Michigan, Ann Arbor, Michigan, 2. Tokyo Metropolitan Institute of Gerontology, Tokyo, Japan*

There is increasing interest in using biomarkers to predict changes in physical function across time. Few studies consider the association of psychological variables in these relationships. This research examines the trajectories of physical performance among older Japanese with a focus on their linkages with hemoglobin A1c (HbA1c) and self-rated health (SRH). Data came from the annual health examinations from 2002 to 2006 in Kusatsu in eastern Japan. Participants included 1,048 Japanese aged 70 or over with 2,405 observations. The dependent variables were performance-based measures of strength (hand grip), balance (one-leg stance time), and walking (usual and maximum gait speed). HbA1c was determined from nonfasting blood samples. SRH was indexed by a rating of health as excellent, good, fair, and poor. Hierarchical linear models with time-varying covariates were applied to examine changes in physical performance over a period of up to 5 years. Linear as well as nonlinear trajectories were evaluated. All performance measures showed slight but significant linear decline over time. Higher levels of HbA1c and poorer SRH were associated with accelerated decline in physical performance. With age, gender, education, height, weight, use of diabetes medications, and attrition adjusted, higher HbA1c was negatively associated with only the balance measure. In contrast, controlling for population heterogeneity, the linkages between self-rated poor health and faster decline in all measures of physical performance persisted. In summary, trajectories of physical performance are significantly correlated with not only HbA1c but also SRH.

### RELATIONSHIP BETWEEN GAIT SPEED AND THE RISK OF FALLS IN COMMUNITY-DWELLING OLDER ADULTS: THE MOBILIZE BOSTON STUDY

L. Quach, R. Jones, M. Hannan, E. Newton, B. Manor, L. Lipsitz, *Instittute for Aging Research, Hebrew Senior Life, Boston, Massachusetts*

Since both high and low gait speeds have been linked to falls, the relation between gait speed and falls may be non-linear. Little is known about changes in gait speed and their relation to falls in community-dwelling older adults. We examined the relationship between baseline gait speed, decline in gait speed, and falls measured prospectively from baseline, September 2005 to April 2009 in a large community based cohort (n=765) using negative binomial regression and adjusting for age, race, gender, education, body mass index, vision, co-morbidity, number of medications, and physical activities. Baseline characteristics: mean age 78, 64% female, 77% white. The rate of falls was 1.0 fall/person-year (95% CI: 0.9-1.1). Mean (± standard deviation) baseline gait speed was 0.95 (±0.26) meters per second (m/s). 28% had gait speed decline at least 0.12 m/s at 18 month follow-up. We grouped persons into three groups of baseline gait speed: low (<=0.6 m/s), median (>0.6 m/s-1.2 m/s), and high (>1.2 m/s). Relative to median gait speed, persons with low and high gait speed were at higher risk of falls (RR low = 1.5, 95% CI: 1.0-2.1, RR high = 1.4, 95% CI: 1.1-1.9). Persons with decline at least 0.12 m/s were at higher risk of falls compared with person without decline in gait speed (RR = 1.5, 95% CI: 1.1-2.1). Decline in gait speed at 0.12 m/s is a predictor of falls. Interventions could target risk in slow as well as fast walkers and also aim to intercede in those with declining speed.

### IDENTIFYING OLDER ADULTS AT RISK FOR HOSPITAL READMISSION

L. Graham[1], B. Leff[1,2], A.I. Arbaje[1], *1. Department of Medicine Division of Geriatric Medicine and Gerontology, Johns Hopkins School of Medicine, Baltimore, Maryland, 2. Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland*

Background: Adequate care across transitions, particularly at hospital discharge, is critical to reducing readmission rates. Previous studies have identified individual risk factors but have not identified types of patients at risk for readmission to allow for targeted discharge interventions. Objective: To identify subsets of patients and discharge factors associated with hospital readmission Methods: Retrospective cohort study of patients aged ≥ 65 years admitted to an academic teaching hospital from January to December 2007 (n=5736). Primary outcome measure was time to hospital readmission within 30 days post-discharge. We created a Cox proportional hazards model comparing medical and surgical patients and elective and non-elective patients, adjusting for demographics, healthcare utilization, multi-morbidity, and day of discharge. Results: 11.4% of patients were readmitted within 30 days and 18.9% within 90 days. Readmission rates at 30 days were higher for patients who were admitted non-electively (11.9%) and for patients admitted to a medical service (13.2%). The most discharges occurred on Friday (20.0%) and was not different for surgical or elective patients. In multivariate analysis, Friday discharge was not significantly associated with an increased hazard of readmission (HR=1.02, 95% CI 0.84-1.24). Conclusions: Medical and non-elective admissions have higher rates of readmission, suggesting that interventions focused on these patients may have the greatest impact on readmission. A disproportionate amount of discharges occur on Friday across all types of patients. Study findings do not suggest that older adults experience increased risk of hospital readmission associated with Friday discharge. Findings have implications for organizations interested in reducing readmission rates.

### ARE THE ELDERLY PEOPLE FEELING HEALTHIER THAN 10 YEARS AGO?

C. dos Reis, M. Souza-Fischer, A. Nolte, D. Bastiani, A.J. Bos, *Institute of Geriatrics and Gerontology of PUCRS, Porto Alegre, RS, Brazil*

METHODS: We used data from two methodological comparable population based studies of elderly (60 years or older) community dwelling subjects randomly identified at their homes in Porto Alegre, Brazil, in 1995 (860 participants) and 2006 (1078 participants). The multidimensional questionnaire included HSA and socio-demographic characteristics. Health Self-Assessment was dichotomized in good or bad. Tables of HSA and study year were constructed for each characteristic and tested using chi-square test with the program Epi Info 3.5.1. RESULTS: More elderly referred their health as good in 2006 (47.3%) than in 1995 (43.1%), borderline significant (p=0.063). All age groups (decade) showed higher proportion of good HSA in 2006 comparing to 1995, but not significant. Women significantly increased good HSA from 40% to 45.5% (p=0.0470). Men also improve, from 50.4 to 52.5%, the proportion good HSA, but not significantly. Race was borderline significant for white (44% to 48.4%, p=0.077) and mulatto (26.6% to 46.6%, p=0.0861). Separated or divorced elderly improved significantly their HSA (33.3% to 49.5% p=0.0418). Participants with higher levels of education reported better levels of HSA in both years, but did not change significantly between the years. CONCLUSION: In a decade interval, elderly seems to feel healthier, particularly women and those with marital status of separated or divorced.

### PROCEDURES FOR ENSURING TRANSLATION EQUIVALENCE IN QUALITATIVE RESEARCH WITH SPANISH SPEAKING WOMEN WITH DISABILITIES

T. Harrison, S. Hendrickson, N.A. Lopez, A.G. Zegarra-Coronado, T. Scott, *The University of Texas at Austin, Austin, Texas*

Language differences may exist that prevent the inclusion of Spanish speaking older adults in qualitative research. When they are included issues related to translation often go unreported. The purpose of this study was to examine the procedures for translating large sets of Spanish text into English results. Sample: A subset of 10 Spanish speaking, Mexican American women age 55 to 75 years of age were included. The women were part of an ongoing cross cultural comparative ethnographic study currently including 45 Mexican American and 28 Non-Hispanic, White women. Procedures: Women were interviewed in the language of their choice by a bilingual investigator. Four in-depth, topical biographical, conversational interviews were done with each. A total of 40 interviews were transcribed verbatim from Spanish dialogue to Spanish text. Each interview averaged 35 pages of double-spaced text. Next, Spanish text was subjected to two different translation processes and the processes were compared for effectiveness: A professional, certified translator vs. local, bilingual team translators Analysis: Time spent in translation, error rates, meaning or coherence of text data and costs are evaluated and compared. Results: Preliminary results suggest that the use of local bilingual translators employed as part of the project translate at less initial cost, but they are slower. Error rates for local translators are higher and require multiple translation verifications. Meaning or coherence of the final text is theorized to be similar but slightly superior in the local team due to knowledge of regional words/phrases. Procedural issues to be aware of are also shared. This study was supported by a grant from NIH/NINR 1 R01 NR010360

### EVALUATING THE ATTRIBUTED DIGNITY SCALE

C.S. Jacelon, *School of Nursing, U. Massachusetts Amherst, Amherst, Massachusetts*

Dignity is important for the health and independence of older adults, and particularly important in relation to interaction with the healthcare system. One aspect of dignity, attributed dignity, defined as a cognitive component of the self, connoting self-value, and as behavior that demonstrates respect for self and others, is amenable to measurement. The purpose of this study was to test a short positively scored instrument to measure the attributed dignity of older adults. The specific aims of the study were to: 1) Determine the psychometric properties of the Attributed Dignity Scale (ADS) through a field test to ascertain the internal consistency, underlying factor structure, temporal stability, and sensitivity to change over time of the ADS. 2) Use the ADS to examine the basic structure of attributed dignity in older adults including: a) The construct validity of attributed dignity by exploring relationships between scores obtained on the ADS with scores obtained on instruments measuring self esteem and social desirability. b) Comparisons between the ADS and measures of health status, psychological and physical vulnerability, and demographic variables to determine the relationships among these variables. The sample was composed of a diverse group of 230 rural and urban dwelling older adults living in New England. The ADS can be used to measure a concept that is a core value of healthcare delivery and important to the well being of older adults that is just now being operationalized.

### ASSESSING COMORBIDITY IN OLDER ADULTS USING PRESCRIPTION CLAIMS DATA

M. Dubois[1,2], N. Dubuc[1,2], E. Kroger[3,4], R. Girard[5], R. Hebert[1,2], *1. Université de Sherbrooke, Sherbrooke, Quebec, Canada, 2. Research Centre on Aging, Sherbrooke, Quebec, Canada, 3. Centre d'excellence sur le vieillissement de Québec, Quebec, Quebec, Canada, 4. Utrecht University, Utrecht, Netherlands, 5. Clinique Médicale des Cantons, Sherbrooke, Quebec, Canada*

OBJECTIVE: Comorbidity is an important variable in many studies since it may influence the results. While self-reports, medical records abstraction and medical claims databases present problems of practicability, comorbidity scores could be derived more conveniently from prescription claims databases. Existing scores were developed for people aged 18 years or older and used costs, hospitalizations, or death as outcomes of interest. Therefore, they tend to be of limited value when studying disability in older adults. Our objective was to develop the Chronic Disease Score for Disability in Older Adults (CDS-DOA) based on outpatient prescription claims data from community pharmacies. METHODS: Clark et al.'s 1995 extended Chronic Disease Score was revised and expanded to account for diseases and treatments relevant for older adults. Empirical weights for frail older adults were then derived on a development sample using a multiple regression model with disability as the outcome. Beta coefficients were used to weight the CDS-DOA, which was then assessed in a validation sample. The predictive power of the CDS-DOA was also compared to that of a simple count of distinct prescribed medications. RESULTS: The CDS-DOA explained 12 to 16% of the variance in disability, in both the development and validation samples. It performed far better than the number of distinct medications with only 2 to 4% explained variance. CONCLUSIONS: The CDS-DOA is a valid and stable comorbidity score in community-dwelling frail older adults and may be used for adjustment in epidemiological studies of disability using prescription claims data.

### DO UNBLINDED ASSESSORS BIAS OUTCOMES IN MUSCLE STRENGTH TRAINING TRIALS IN OLDER ADULTS?

C. Liu, *Indiana University at Indianapolis, Indinapolis, Indiana*

Results from randomized controlled trials (RCTs) are regarded as the highest level of evidence in evidence-based medicine and practice. However, RCTs are not without flaws if trials investigators do not preserve the internal validity. Knowledge of the intervention by participants and assessors can cause systematic detection bias. Blinding participants in the muscle strength training trials is problematic because participants have to take part in the intervention. On the other hand, blinding outcome assessors is possible. This study was undertaken to determine the difference in muscle strength outcomes measured by blinded versus by unblinded outcome assessors in progressive resistance strength training trials in older adults. Meta-regression analysis was conducted in 73 RCTs obtained from a systematic review recently published in the Bone, Joint and Muscle Trauma Group of the Cochrane Collaboration. Lack of blinded assessors is common in these trials (75%). The analysis show that trials that used blinded assessors (n=18) tend to report smaller effects of lower limb muscle strength than those that used unblinded assessors, coefficient = -.80, 95% CI = -1.35 to -.25. The result is still hold even after the variance in intention-to-treat has been controlled, coefficient = -.65, 95% CI = -1.26 to -.04. This study suggests that assessor blinding is important and is a safeguard to internal validity of exercise trials in older adults. Effects of lower limb muscle strength are exaggerated in trials that used unblinded assessors.

### TRAJECTORY CLASSES OF DEPRESSION IN AN OLDER COMMUNITY SAMPLE

M. Kuchibhatla, G. Fillenbaum, *Biostatistics and Bioinformatics, Duke University Medical Center, Durham, North Carolina*

Level of depression may vary over time in older community residents. To identify the kinds of variation present over a 10-year period, depressive symptomatology was measured using the Center for Epidemiologic Studies Depression Scale (CESD), and trajectory classes of depression were determined through latent class models, namely, growth mixture models (GMM). A sample of 4162 subjects was drawn from the Duke site of the Established Populations for Epidemiologic Studies of the Elderly (EPESE). At this site, a four-stage sampling design was used in five counties to select a stratified representative sample of households containing one or more persons 65 years of age or older with only one older person selected per household. At baseline, three, six and ten years later, all sample members were evaluated at home by trained interviewers using a structured questionnaire. GMM was used to model CESD data from four waves over 10 years, using the statistical software M-plus. A sample of 4009 subjects with one or more waves of CESD data was used for the current analysis. The analysis resulted in 5 classes of trajectories: stable non-depressed trajectory class with 74.2% of the sample, chronic depressed trajectory class with 5.7% of the sample, baseline non-depressed worsening class (4.0%), baseline depressed improving class (9.4%), and baseline non-depressed transient class (6.7%). Effects of covariates on these trajectories will be examined. CTSA grant UL1 RR024128-04 from NCRR/NIH, P30AG028716 & 2P50-MH60451

### PREDICTING 10-YEAR MORTALITY: A CLASSIFICATION TREE ANALYSIS OF EPESE DATA

S. Perera[1], S. Studenski[1], J. Brach[1], R.B. Wallace[3], K. Patel[2], J. Guralnik[2], *1. Division of Geriatric Medicine, University of Pittsburgh, Pittsburgh, Pennsylvania, 2. National Institute on Aging, Bethesda, Maryland, 3. University of Iowa, Iowa City, Iowa*

Background/Objective: Predicting mortality of older adults is important in making decisions about getting affairs in order and aggressive treatment options. We sought to evaluate the data mining technique of classification tree analysis (CTA) in predicting 10-year mortality using measures that would (and ought) to be collected in a routine clinic visit. Methods: We used the 2547 participants from the Iowa Established Populations Epidemiologic Study of the Elderly (EPESE) study with 10-year mortality data from the year 6 assessment. We randomly selected 1547 participants (training sample) for model building, and 1000 as the validation sample. We used age, gender, self-reported global health (excellent/very good/good/fair/poor) and diseases (arthritis, heart disease, cancer, diabetes), 8-foot gait speed, body mass index, weight, systolic and diastolic blood pressure, and prior hospitalization as predictors. Criteria for optimal tree were minimal misclassification-complexity cost and greatest area under receiver operator characteristic curve (AUROC) obtained under internal cross-validation. Once optimal tree was obtained, the validation sample was used to assess predictive accuracy. Results: Participants had mean age 79.7 and were 34% male. All measures were similar between training and validation samples. CTA identified 13 participant groups based on simple thresholds: age 78.5, 80.5 and 83.5; excellent/very good, good and fair/poor health; gender; gait speed 0.34, 0.54 and 0.87 m/s; systolic blood pressure 169 mmHg; weight 59.32, 71.36 and 74.77 kg. The AUROC for training and validation samples were 0.753 and 0.704. Conclusion: Classification tree methodology, with acceptable accuracy, produces an easy-to-use grouping of subjects with respect to 10-year mortality risk.

### GERONTOLOGIC RESEARCH ALGORITHMS & STATISTICAL PROGRAMS (GRASP) - A WEB-BASED BIOSTATISTICAL REPOSITORY FOR GERONTOLOGICAL RESEARCHERS

H. Allore, *Internal Medicine, Yale University, New Haven, Connecticut*

Gerontologic biostatistics is a subdiscipline characterized by the methodological issues that arise when working with populations whose health conditions feature multifactorial etiologies and multiple morbidities. Gerontologic researchers face challenges in appropriate study design and analytic approaches to address multifactorial etiologies of geriatric health outcomes and their relationship with multiple morbidities of older patients and other risk factors. The objective of GRASP (http://grasp.med.yale.edu) is to provide a free, widely-accessible, web-based resource and platform for gerontological researchers and quantitative methodologists from different backgrounds to exchange problem-solving ideas and skills and share analytic methodology and instruments. Created by the joint efforts of Yale, Duke and Wake Forest Universities Older Americans Independence Centers with funding from the NIA, GRASP provides sample computer programs, data structures, analytic results, with links to external resources, such as reference articles, research instruments. User contributions are welcomed. Examples include controlling the overall error rate in multiple outcomes studies, missing data methods including imputation strategies for intermittent missing over repeated measures, temporal-spatial models, state transition models and floor and ceiling effects. Furthermore, to analyze geriatric syndromes examples of group-based trajectory model, structural equation modeling, and latent-growth models are included. Furthermore, extensive genetic resources for exploring conditions that have later life onset with potential genetic contributions are available for both teaching and research needs. GRASP includes Geriatric Research Instrument Library (GRIL), an online repository of data collection instruments in geriatrics research. Each instrument in GRIL includes a description, references, and links to online resources, and many entries provide downloadable PDF documents.

## SESSION 1245 (SYMPOSIUM)

### GENOMIC APPROACHES TO DISCOVERY IN AGING RESEARCH

Chair: *S.B. Kritchevsky, Wake Forest University School of Medicine, Sticht Center on Aging, Winston-Salem, North Carolina*
Co-Chair: *M. Garcia, National Institute on Aging, Bethesda, Maryland*
Discussant: *T. Harris, National Institute on Aging, Bethesda, Maryland*

At a time when resources available for health care are declining, the absolute number of disabled older adults is projected to increase. There is a wide variation in the trajectories of functional decline indicating the potential for the prevention of disability. While research has identified several potentially modifiable risk factors there are currently no proven interventions to prevent the onset of disability. Thus, there is an urgent need to expand our understanding of the metabolic / physiologic pathways that contribute to disability to generate novel intervention targets for disability prevention. There is growing evidence that many of the factors that contribute to disability are heritable which has led to the use of genomic approaches to identify novel pathways, and there are currently many large consortia pooling data to explore the genetic basis of longevity, physical and cognitive function, and common chronic disabling diseases. The objectives of this symposium are: 1) to highlight some of the recent findings from these activities and 2) to discuss the opportunities and challenges of genome-based discovery research in aging including the role of genome wide association studies, phenotype characterization in older adults, and variation in mitochondrial DNA and its role in human aging. This symposium is organized on behalf of the Research Committee of the Health Science Section.

### RECENT PROGRESS FROM CANDIDATE GENES TO GENOME-WIDE ASSOCIATION STUDIES (GWAS) AND BEYOND GWAS

Y. Hsu, *1. Hebrew SeniorLife Institute for Aging Research and Harvard Medical School, Boston, Massachusetts, 2. Harvard School of Public Health, Boston, Massachusetts*

GWAS provide the first wave of discoveries for susceptible genes to a wide variety of common diseases and traits. Up-to-date, > 500 GWAS have been published. Greater surprises are that few risk alleles involve previously suspected genes, which provide new leads to gain insight into diseases. However, current GWAS are fundamentally limited by featuring predominantly common SNPs without functional implications. Identification of disease-susceptibility genes by means of statistical signals provides limited information to unveil the molecular functions. In this presentation, I will describe (1) recent progress and challenges of GWAS. To overcome the challenges, I will describe our recent development on (2) systems biology approaches by integrating GWAS to transcriptome and proteomics; (3) multi-phenotypes GWAS analytical methods to identify pleiotropic genetic effects across different diseases; and (4) advances in the next-generation sequencing technologies for whole genome and exome resequencing to fill in the gap of the “missing heritability” phenomenon.

### FROM CANDIDATE GENES TO GWAS AND BACK AGAIN: THE VITAMIN D EXAMPLE

D.K. Houston, *Sticht Center on Aging, Wake Forest University School of Medicine, Winston Salem, North Carolina*

Over the last two decades, the role of vitamin D has been shown to extend beyond the musculoskeletal system to encompass a growing list of health consequences associated with low vitamin D status. Candidate gene studies, primarily in relation to osteoporosis and to a lesser extent in other health outcomes including physical function, cardiovascular disease, diabetes, and cancer, have examined the effects of specific genes in the vitamin D pathway including the vitamin D receptor (VDR), the vitamin D binding protein (GC), and genes involved in the hydroxylation and degradation of vitamin D metabolites (CYP2R1, CYP27B1, CYP24A1). With the advent of genome-wide association studies (GWAS), multi-cohort GWAS have identified common genetic variants influencing vitamin D status. Genetic variants identified in GWAS are then being used in a candidate gene approach to investigate whether vitamin D plays a causal role in a number of health outcomes.

### COMPREHENSIVE SNP ANALYSIS OF THE INSULIN RECEPTOR GENE USING SLIDING WINDOW HAPLOTYPE ANALYSIS

J. Purser[1], D. Crosslin[2,1], S.C. Nelson[2,1], J.S. Johnson[1], E. Hauser[1], S. Gregory[1], *1. Medicine-Geriatrics, Duke University Medical Center, Durham, North Carolina, 2. University of Washington, Seattle, Washington*

In this session, we discuss the use of dense genotyping and haplotype-based candidate gene analysis in epidemiologic studies, and when those methods might be helpful in comparison to other analysis approaches. We will present an application from the Health ABC study, using dense genotyping of Insulin receptor SNPs for 2,495 African Americans (AA) and Caucasians (CA) in the Health and Body Composition Cohort (HABC). We demonstrate how, even when dense genotyping yields insignificant bivariate associations with phenotypes (lean mass, appendicular lean mass, quadriceps torque and gait speed), novel haplotype regions can nevertheless be estimated, along with estimation of specific allelic patterns and dose-response associations within a globally-significant haplotype window. Using this approach, our research team has identified novel haplotype regions in candidate genes that are strongly associated with appendicular lean mass and walking speed.

### EXAMINING THE ROLE OF MITOCHONDRIAL GENETIC VARIATION IN HUMAN AGING

G.J. Tranah, *Research Institute, California Pacific Medical Center, San Francisco, California*

Both mitochondrial DNA (mtDNA) and nuclear DNA encode the genes responsible for assembling mitochondrial enzymes that produce energy and are essential to the normal function and survival of all cells. Impaired mitochondrial function resulting from mtDNA and nuclear DNA variation is likely to contribute to an imbalance in cellular energy homeostasis, increase vulnerability to oxidative stress, and increase the rate of cellular senescence and aging. To date, large-scale genetic studies have emphasized the role of nuclear genetic variation in human disease and aging but have not considered the role of mitochondrial genetic variation. We will present mtDNA genotype and sequence data from the Health, Aging and Body Composition Study cohort in relation to disease prevalence/incidence and several longitudinal and cross-sectional measurements of aging-related traits (e.g. glucose/insulin metabolism, body composition, metabolic rate, physical and cognitive function). The role of mitochondrial-nuclear gene epistasis in human aging will also be explored.

### DEFINING AGING PHENOTYPES

A.B. Newman, *Epidemiology and Division of Geriatric Medicine, University of Pittsburgh, Graduate School of Public Health and School of Medicine, Pittsburgh, Pennsylvania*

There are numerous ways to define aging phenotypes for genetic studies. The aging process and the common age- associated chronic diseases are heterogeneous in onset and rate of progression. Important aspects of aging include the rate of change or disease progression, the age of onset of decline and the role of physiologic reserve. Using a systems approach to characterizing age related changes in physiologic systems, the spectrum of health and illness can be more fully appreciated and illustrate the potential to characterize individuals with very low mortality risk who are examples of exceptional aging. Physical functioning and disability are non-specific manifestations of disease burden that might also summarize aging processes. These relationships between disease and function in old age are confounded by the capacity for older adults to adapt to very high burdens of disease and maintain good function. Specific aging phenotypes may reveal unique pathways to longevity and healthy aging.

## SESSION 1250 (SYMPOSIUM)

### IMPLEMENTATION AND EVALUATION OF INTERVENTION RESEARCH IN THE HOME HEALTH CARE SETTING

Chair: *J.L. Locher, Medicine, University of Alabama at Birmingham, Birmingham, Alabama*
Co-Chair: *M.L. Kilgore, Medicine, University of Alabama at Birmingham, Birmingham, Alabama*
Discussant: *E. Amella, Medical University of South Carolina, Charleston, South Carolina*

Medicare home health services are provided to beneficiaries who are homebound and in need of skilled nursing or therapeutic care after experiencing an acute event or exacerbation of a chronic illness. According to the Medicare Payment Advisory Commission's most recent report to Congress (March, 2010), 3.2 million beneficiaries received home health services from 10,000 home health agencies in 2008. Fewer older persons with functional impairment are entering nursing homes, and more are choosing to remain in the community. Rising health care costs and consumer preferences for aging in place call attention to the potential for home health agencies to deliver timely interventions that may prevent costly and preventable institutionalizations. This symposium presents the experiences of two interventions involving randomized controlled trials that were undertaken in the home health care setting. For the first study, Improving Osteoporosis Care in High-Risk Home Health Patients by a High-Intensity Intervention (supported by the Agency for Healthcare Research and Quality), we report on: 1) development of the protocol and 2) initial findings. For the second study, A Multi-Component Behavioral Nutrition Intervention for Homebound Elderly (supported by the National Institute on Aging), we report on: 1) challenges involved with recruitment of participants and 2) preliminary findings. The home health care setting provides unique opportunities to implement intervention research designed to improve patients' health and prevent subsequent adverse events. There are challenges, as well, involved in undertaking intervention research in the home health environment. This symposium describes our experiences in the field and lessons we have learned.

### DESIGN OF A HIGH INTENSITY INTERVENTION TO IMPROVE OSTEOPOROSIS CARE IN HOME HEALTH PATIENTS

R.C. Outman[1], M.L. Kilgore[1], J.L. Locher[1], J.J. Allison[2], K. Saag[1], J.R. Curtis[1], *1. The University of Alabama at Birmingham, Birmingham, Alabama, 2. University of Massachusetts Medical School, Worcester, Massachusetts*

We developed a multi-modal intervention, delivered in the context of home health services, aimed at increasing osteoporosis drug prescription to prevent fragility fractures. The intervention focused on home health nurses. Key components included: nursing education, development of a nursing care plan, and creation of patient and physician education materials, and preprinted order sheets to facilitate ordering prescription medications and dietary supplements. Feedback from physicians and nurses was obtained on the materials and methods to facilitate nurse-physician communication. The intervention was piloted in one field office of a home health agency. Successful application required nurses to identify high risk patients (i.e., fracture history), initiate the nursing care plan, prompt physicians where indicated on risk status (i.e., untreated patients), and provide patient education. Home health care provides a venue where patients and physicians can be informed by nurses about the risks of osteoporosis and fractures and, consequently, initiate appropriate therapy.

### IMPROVING OSTEOPOROSIS CARE IN HIGH-RISK HOME HEALTH PATIENTS BY A HIGH-INTENSITY INTERVENTION

M.L. Kilgore[1], J.R. Curtis[2], J.L. Locher[1], R.C. Outman[2], J.J. Allison[3], K.G. Saag[2], *1. Health Care Organization & Policy, UAB School of Public Health, Birmingham, Alabama, 2. University of Alabama at Brimngham, Birmingham, Alabama, 3. University of Massachusetts School of Medicine, Worster, Massachusetts*

We conducted a cluster-randomized trial to determine the effect of an intervention designed to increase rates at which high risk home health patients received prescription drugs for osteoporosis. The trial was conducted in a home health agency with field offices located throughout Alabama. Eleven offices were randomized to receive the intervention and twelve served as controls. Nine months into the study, preliminary data were analyzed. 24.8% of high risk patients in the treatment offices received prescription drugs compared with 20.9% of those in the control offices ($p = 0.19$). However, it was also observed that when the intervention was implemented as intended, 39.4% of patients received prescription drugs compared with 23.8% who did not receive the intervention ($p < 0.001$). Thus far the intervention has produced a modest, non-significant, increase in prescription rates. However, when the treatment protocol is followed, the effect is substantial. Refinements to the intervention are ongoing.

### METHODOLOGICAL CHALLENGES OF A WEIGHT GAIN/MAINTENANCE INTERVENTION IN OLDER ADULTS RECEIVING HOME HEALTH CARE

D. Buys, L. Hartin, J.L. Locher, *University of Alabama at Birmingham, Birmingham, Alabama*

Under-eating is common among older adults receiving home health services and is associated with subsequent weight loss and a decrease in lean muscle mass, which ultimately contributes to frailty. The overall goal of our multi-component behavioral nutrition intervention is to interrupt this process during the period of recovery from illness through increased or stable caloric intake. This straightforward goal has met with controversy and resistance, particularly with respect to overweight and obese participants. First, both our institutional review board and our interventionists questioned whether it was ethical or appropriate to promote increased or maintained caloric intake in these participants. Second, overweight and obese patients have refused to participate in our study because they want to lose weight, even if it is while they are ill. Commonly held beliefs that weight loss is appropriate for all overweight and obese persons have figured prominently in our study and we describe our response.

### INITIAL FINDINGS FROM AN INTERVENTION TO IMPROVE NUTRITIONAL STATUS OF OLDER ADULTS RECEIVING HOME HEALTH SERVICES

J.L. Locher[1], A. Ellis[5], J. Lawrence[3], L. Newton[5], C. Ritchie[1], K.S. Vickers[2], C.W. Bales[4], *1. Medicine, University of Alabama at Birmingham, Birmingham, Alabama, 2. Mayo Clinic, Rochester, Minnesota, 3. University of Alabama, Tuscaloosa, Alabama, 4. Duke University, Durham, North Carolina, 5. University of Alabama at Birmingham, Birmingham, Alabama*

The purpose of the study is to evaluate the efficacy of a multi-level self-management intervention designed to improve nutritional intake in a group of homebound older adults who are at high risk for experiencing under-nutrition. A prospective randomized controlled design was used to estimate whether individually tailored counseling results in increased caloric intake. 27 participants (mean age: 79.8, sd: 8.2; 88.9% female; and 44.4% African American) were randomized to either intervention or usual care. At baseline, participants were not consuming enough calories to meet their estimated energy requirements based upon 24-hour dietary recalls (average deficits of -544.4 Kcal in the intervention group and -151.2 for the usual care group). Post intervention, caloric intake increased in both groups, but more so in the intervention group (average increase in the intervention group was 245.2 Kcal and in the usual care group was 67.2, N.S.). Findings are encouraging, and the study is ongoing.

## SESSION 1255 (SYMPOSIUM)

### MAINTAINING A FUNCTION FOCUSED APPROACH TO CARE ACROSS ALL CARE TRANSITIONS

Chair: *B. Resnick, University of Maryland, Baltimore, Maryland, University of Maryland, Baltimore, Maryland, University of Maryland, Baltimore, Maryland*

Older adults typically receive care from many different providers and move across acute care (AC), nursing homes (NHs), assisted living (AL) and home settings. Due to multiple co-morbidities and age associated changes they are at risk for the negative impact of transitions such as medication errors or missed diagnoses and treatments. Less commonly considered, however, is the impact of transitions on function and physical activity. Information about the individual's underlying functional and physical capability or the ways in which function can and should be optimized are not transferred to a new site of care. Function Focused Care (FFC), involves teaching and motivating nurses, patients, and other members of the health care team to focus on and optimize function and physical activity during all care interactions with patients. FFC is a philosophy of care in which the individual's functional capability is evaluated, functional and physical activity goals that are part of routine activities established, which focus on care persistently provided "with" (i.e., doing hand over hand bathing, walking individuals or helping them to self-propel a wheelchair) rather than "for" (e.g., bathing or dressing individuals, pushing them in wheelchairs) older adults. In this symposium we provide evidence of the need for FFC and the successful ways in which to implement Function Focused Care in NHs, AL settings, and AC. We will discuss the challenges to implementing FFC in each setting and the ways to overcome those challenges. Lastly, we will provide a plan for how to transition the Function Focused Care Philosophy across settings.

### FUNCTION AND PHYSICAL ACTIVITY ACROSS SETTINGS: WHERE ARE WE AND WHERE DO WE NEED TO GO?

M. Boltz[2,5,6], E. Galik[1,3,4], B. Resnick[1,3,4], *1. University of Maryland, Baltimore, Maryland, 2. New York University College of Nursing, New York, New York, 3. University of Maryland, Baltimore, Maryland, 4. University of Maryland, Baltimore, Maryland, 5. New York University, New York, New York, 6. New York University, New York, New York*

Physical function is an important determinant of health. Descriptive information related to activities of daily living status (Barthel Index) and physical activity (actigraphy data) across NHs, ALs, and ACs can guide interventions. We found NH residents were the most functionally impaired [mean Barthel score was 58.8 (SD 1.9)] compared to AL residents [mean Barthel 72.3 (SD 12.1)] or AC patients [mean Barthel 89.0 (SD 3.8)]. Conversely, NH residents engaged in more physical activity [mean 63,673.2 (SD 17,378.4) counts and 94.0 (SD 176.0) kilocalories] versus AL residents [40,594.9 (SD 33,239.7) counts and 54.4(SD 47.9) kilocalories] or patients in AC [mean of 17, 224 (SD 9969.5) counts and 16.7 (SD 1.7) kilocalories]. In no settings did the level of activity meet public health guidelines and higher functional ability in AL and AC sites did not relate to more physical activity. Recommendations to improve function and physical activity using FFC will be provided.

### IMPACT AND IMPLEMENTING FUNCTION FOCUSED CARE ACROSS SETTINGS

A.L. Gruber-Baldini[2,3,1], S. Zimmerman[4,5,6], *1. University of Maryland, Baltimore, Maryland, 2. University of Maryland School of Medicine, Baltimore, Maryland, 3. University of Maryland School of Medicine, Baltimore, Maryland, 4. University of North Carolina, Chapel Hill, North Carolina, 5. University of North Carolina, Chapel Hill, North Carolina, 6. University of North Carolina, Chapel Hill, North Carolina*

FFC has been successfully implemented across multiple settings. There is evidence of acceptance of FFC in each setting with consent rates ranging from 65% among NH and AL nursing assistants to 82% among AC nurses, and from 58% among AC patients to 65% among NH and AL residents. Following exposure to the four components of the FFC intervention, nursing assistants had stronger beliefs in their ability and/or the benefits associated with FFC for themselves and residents, demonstrated improved knowledge and performance of FFC in all settings, and in NH settings reported improved job satisfaction. Residents demonstrated improved function, grip strength and physical activity in AL settings and improved function, gait and balance among NH residents. Details of outcomes at four and twelve months post implementation of FFC will be provided and compared across the settings with recommendations for optimal outcome measures discussed.

### IDENTIFYING AND OVERCOMING CHALLENGES ACROSS CARE SETTINGS

E. Galik, *1. University of Maryland, Baltimore, Maryland, 2. University of Maryland School of Nursing, Baltimore, Maryland, 3. University of Maryland School of Nursing, Baltimore, Maryland*

Challenges to implementing FFC across AL, NH, and AC settings are similar and include lack of understanding and belief in the benefits of physical and functional activity; unpleasant symptoms such as fear, pain, fatigue, and anxiety in residents; and fear of punitive responses from administration; lack of administrative support for FFC versus task completion; and policies and environments that create barriers to physical activity. This session will summarize themes (facilitators, barriers and benefits of FFC) from focus groups with nursing participants. The Social Ecological model and Diffusion of Innovation theory provide the theoretical framework for strategies to overcome challenges and sustain FFC. Motivational techniques for older adults and staff include understanding intrapersonal factors, interpersonal interventions using social cognitive theory, environmental interventions and policy initiatives. We will also address use of change agents and champions to integrate FFC in real world settings.

### NEXT STEPS IN TRANSITIONS OF CARE: TRANSFERRING FFC BETWEEN CARE SETTINGS AND INTO HOMES

B. Resnick, *1. University of Maryland, Baltimore, Maryland, 2. University of Maryland School of Nursing, Baltimore, Maryland, 3. University of Maryland School of Nursing, Baltimore, Maryland*

Acute events provide opportunities to change behavior and increase physical activity, which may subsequently prevent functional decline and rehospitalization. To optimize care transitions, the goals established in acute care need to follow individuals to their discharge setting. FFC interventions, which have been implemented successfully across multiple care settings, can be transitioned between settings via the Nurse Change Agent(NCA). Based on prior findings, the NCA needs to provide ongoing education and motivation for health care team members regarding FFC skills (assessment of capability, goal identification and ways to overcome motivational challenges by setting); implement environmental interventions, such as establishing appropriate bed and chair height or setting up walking paths; and developing or changing policies to facilitate a focus on function and physical activity for older adults in each setting. Details for how to transition FFC across settings will be described during the session as well as ways to overcome transition challenges.

## SESSION 1260 (SYMPOSIUM)

### REP SYMPOSIUM: MODELS OF CARE THAT SUPPORT LIFE TRANSITIONS

Chair: *T. Teasdale, Dept of Geriatric Medicine, University of Oklahoma, Oklahoma City, Oklahoma, Veterans Affairs, Oklahoma City, Oklahoma*

Symposium speakers will explain how existing service delivery programs support the care transitions that older adults traverse over their life course. While many examples exist, these models of care were selected based on their innovation and success. Taken together, the presentations illustrate many of the phases of program development: from idea to implementation, evaluation, replication, and sustainability. The session will emphasize the roles of research, education, practice, and policy in support, diffusion and sustainability of effective innovations. Dr. Beverly will present a statewide initiative to improve health outcomes of older Arkansans using interdisciplinary clinical care, innovative education programs, and influence on state policy regarding rural elders; Dr. Shay will present several VA programs that ease transitions between home, acute, and long-term care needs; Dr. Lokon will present on an innovative arts program for people with dementia, which relies on student volunteers who are paired with a participating artist (life course transitions occur for persons moving through stages of dementia and for students transitioning through stereotypical thinking about dementia); the final presentation will describe the role of public policy, national leadership, and the aging services network in supporting transformation of the long-term care system. The symposium chair will lead the audience in a vibrant discussion period with symposium speakers.

### THE ARKANSAS AGING INITIATIVE: SUPPORTING HEALTHY LIFE TRANSITIONS IN A RURAL STATE

C.J. Beverly, R.E. McAtee, *College of Nursing, University of Arkansas for Medical Sciences, Little Rock, Arkansas*

The population in Arkansas ranks number six nationally in percentage of adults 65 and over. Further, the majority of older adults have a high school education or less, live in predominately rural parts of the state, have a higher percent of poverty (16%) compared to national average (10%) and experience worse health outcomes compared to the rest of the country. Challenged with how to care for the burgeoning number of older adults, Arkansas citizens voted through a referendum, to devote a portion of Arkansas' share of the Master Tobacco Settlement to develop the Arkansas Aging Initiative through the Donald W. Reynolds Institute on Aging. An analysis of this Initiative in the context of combining research, clinical practice, education and policy initiatives to facilitate a healthier life transition of older adults will be presented . Additionally, the success of providing geriatric expert clinical care and education statewide will also be examined.

### NEW TRANSITIONS OPTIONS FOR VETERANS WITH EXTENDED CARE NEEDS—REGARDLESS OF AGE

K. Shay, *Department of Veterans Affairs, Ann Arbor, Michigan*

This presentation will describe several new VA programs for optimizing transitions within extended care. The VA convened a State Of The Art (SOTA) Conference in March 2008 to set groundwork for a new Strategic Plan for Geriatrics and Extended Care. SOTA participants were polled on the relative importance of topics to set strategic priorities for the plan. The highest-ranking responses concerned caregivers, transitions among programs, coordination with community services, and need for adapting services to younger veterans. As a result, the new Strategic Plan emphasizes growth in these areas. As an example, this presentation will highlight o "Veteran-Directed Care"—based on the AOA's Cash and Counseling; o "Veteran-Community Partnerships— to reduce barriers to seamless VA/community transitions through VA partnerships with AAAs, caregivers, and other key partners; and o Initiatives for fostering geriatrics knowledge and skills among primary care providers practicing in rural settings

### TRANSFORMATIVE EXPERIENTIAL LEARNING FOR STUDENTS WORKING IN AN ART PROGRAM FOR PEOPLE WITH DEMENTIA

E. Lokon[1], J. Kinney[2,1], T. Yamashita[2], O. Hautz[2], *1. Scripps Gerontology Center, Oxford, Ohio, 2. Miami University, Oxford, Ohio*

This presentation will describe an innovative art program for people with dementia (PWD), which pairs student volunteers with PWD. In addition to outlining the principles behind the program, the presentation will present data on the transformative learning that most of the students experience. Results are measured via a quantitative survey of attitudes toward PWD, and through qualitative analysis of students' reflective journals. Journals and survey data reveal that students typically move from positions of fear and anxiety about working with PWD, to having a meaningful relationship with their artist partner. The program is successful as a model of care for people transitioning through the stages of dementia, and as a means to assist students in their transitions from stereotypical and fearful thinking about dementia to an ability to see a person with dementia as a whole person.

### THE ROLE OF NATIONAL LEADERSHIP IN SUPPORTING TRANSFORMATION OF THE LONG-TERM CARE SYSTEM

S. Kunkel, *Scripps Gerontology Center, Miami University, Oxford, Ohio*

Education about aging and the provision of effective services are essential building blocks for a system that helps people stay in their communities for as long as possible, living full and independent lives even as they experience health transitions. The foundation of that system is public policy that provides core services, seeks to maintain a balanced system of long-term care options, and encourages innovations to meet changing needs of the population. In this presentation, we will describe the role of federal, state, and local levels of the aging network in creating supportive communities for people of all ages. Several specific innovations undertaken by the aging network will be presented: community living programs, evidence-based health promotion and disease prevention, expanded caregiver programs, a streamlined consumer-centered access to information and services, and a collaboration with the Veterans Health Administration to provide veteran- centered home and community based services.

## SESSION 1265 (SYMPOSIUM)

### THE HARTFORD FOUNDATION'S IMPACT ON THE CARE OF OLDER ADULTS IN TRANSITIONS

Chair: *L.L. Popejoy, Univ of Missouri Columbia Sinclair School of Nursing, Columbia, Missouri*
Co-Chair: *D.E. Holland, Mayo Clinic, Rochester, Minnesota*
Discussant: *K.C. Buckwalter, Univ of Iowa College of Nursing, Iowa City, Iowa*

In 2000 the John A. Hartford Foundation, in partnership with the American Academy of Nursing, launched the Building Academic Geriatric Nursing Capacity (BAGNC) program to produce expert researchers, academicians, and practitioners to lead the field of gerontological nursing and change the landscape of care for older adults. This symposium highlights the current work of BAGNC scholars in the Midwest who have focused on strategies to improve the care of older adults in transition across levels of care. The research targets innovative approaches to improving patient care that focus on: A chronic grief intervention for Alzheimer's caregivers; Transitional rehabilitation for cardiac patients in post-acute care settings; The influence of polypharmacy, medication regimen complexity, and inappropriate medications on rehospitalization of older adults in nursing homes; Barriers to medication reconciliation in nursing homes and; Correlates risk factors of functional decline and new institutionalization among critically ill older adults. These papers illustrate and address needs of seniors as they face life-changing transitions across the continuum of care and represent improvements in elder care made possible through Midwest BAGNC scholar initiatives.

### MEDICATION RECONCILIATION IN THE NURSING HOME

A.A. Vogelsmeier, *Nursing, University of Missouri, Columbia, Missouri*

Frail nursing home (NH) elders are at risk of medication order discrepancies and discrepancy- related adverse drug events when transitioning between healthcare settings. Medication reconciliation is a safety practice designed to identify and resolve medication order discrepancies when transitions in care settings occur. In this study, 42 RN and LPN staff from 8 NH were interviewed and observed to describe medication reconciliation practices in the NH when residents transition from other settings. Findings suggest nursing staff did not consistently detect medication order discrepancies, in part because of variable processes. The inadequate detection of order discrepancies was exacerbated by evidence that NH physicians often relied on nursing feedback for medication order decision-making. Future research is needed to explore the differences between RN and LPN staff detection and management of medication order discrepancies when residents transition to the NH.

### TRANSITIONAL REHABILITATION FOR CARDIAC PATIENTS USING POST-ACUTE CARE

M.A. Dolansky[1], R.S. Boxer[4,1,2], P. Murray[3,1], M. Williams[5], S. Landers[2,1], M. Mount[4], M. Rocco[2], *1. Nursing, Case Western Reserve University, Cleveland, Ohio, 2. Cleveland Clinic Foundation, Cleveland, Ohio, 3. Metrohealth Medical Center, Cleveland, Ohio, 4. University Hospitals Case Medical Center, Cleveland, Ohio, 5. Creighton University, Omaha`, Nebraska*

Transitional cardiac rehabilitation (CR) maybe a useful intervention for older adults recovering from a cardiac event discharged to a skilled nursing facility (SNF) or home health care (HHC). This pilot study tested the feasibility, safety, and efficacy of a novel post-acute care- based CR program, "Transitional Rehabilitation Using Self-management Techniques (TRUST). TRUST CR is a family-focused intervention that includes progressive low intensity walking and education on self-management skills to facilitate recovery and promote future participation in a CR program. A quasi- experimental two-group design was used (N=30 SNF; N=10 HHC). Groups were comparable at baseline and at discharge the intervention group had higher levels of outcome expectancy than the usual care group. At 6 weeks, the groups differed in CR attendance and exercise maintenance (number of steps taken). The majority of participants were satisfied with the intervention. The innovative intervention has potential to improve cardiac patient outcomes after transitional care.

### CORRELATES AND RISK FACTORS OF FUNCTIONAL DECLINE AND NEW INSTITUTIONALIZATION AMONG CRITICALLY ILL OLDER ADULTS

M.C. Balas, *CBH, University of Nebrasaka Medical Center College of Nursing, Omha, Nebraska*

Older adults experience multiple transitions as they recover from a serious or life-threatening illness. The aim of this study is to identify correlates and risk factors of functional decline and new institutionalization at hospital discharge among critically ill older adults. Subjects will be fifty, adults, age 65 and older, admitted to an intensive care unit (ICU) at the Nebraska Medical Center and managed by either the medical or surgical CCS. A comprehensive, structured assessment of the older adults' preadmission physical, functional, and cognitive ability will be conducted within 24-48 hours of ICU admission. Subjects will undergo daily delirium and sedation/agitation evaluations throughout their hospitalization. Finally, 24-48 hours prior to hospital discharge, the subjects' functional status and discharge disposition will be assessed. A greater understanding of the variables that influence functional recovery after serious-illness will help us better understands this significant transition in an older person's life.

### MEDICATION RELATED PREDICTORS OF READMISSION IN ELDERLY HOME CARE PATIENTS

M.T. Dierich, *University of MN, Minneapolis, Minnesota*

Nearly 70% of the $177.4 billion dollars spent on drug related morbidity and mortality in the U.S. is due to hospitalizations (Grizzle, 2001). Due to definitional and measurement issues, it is unknown whether high risk medication regimens (HRMR) predict readmission to the hospital. Understanding this relationship is important when evaluating potential errors in administration, the risk-benefit ratio, and readmission risk of medication regimens. Polypharmacy, inappropriate medications or medication complexity have been proposed as indicators of HRMR. Using path analysis, OASIS and medication records from 931 elderly home care clients were analyzed to evaluate the influence of polypharmacy, inappropriate medications, and medication complexity on the odds of readmission. Preliminary results indicate both polypharmacy and medication complexity are significant predictors of readmission. The results add to secondary data analysis strategies, test operational definitions, and increase knowledge about risk stratification in elders receiving home health care.

### A CHRONIC GRIEF INTERVENTION FOR ALZHEIMER'S CAREGIVERS

O. Paun, C.J. Farran, L.F. Fogg, *Rush University College of Nursing, Chicago, Illinois*

Our Hartford-sponsored study indicates that Alzheimer's disease (AD) caregivers (CGs) continue to experience depressive symptoms even after having placed their loved one in a long-term care facility (LTCF). This finding suggests that new losses and chronic grief prevent improvement of CGs' mood. There are no documented interventions to decrease AD caregivers' grief post LTCF placement. This pilot study examined the feasibility of a Chronic Grief Management Intervention (CGMI) designed to increase knowledge and skills and decrease grief and depression in family caregivers of persons with AD. The CGMI is a 12 week group-based program designed to deliver knowledge of AD and teach chronic grief management skills. To date, in a pretest and posttest, two condition randomized design, 66 family CGs received either the CGMI or attention control at different LTCFs. Data were collected at baseline, 12 and 24 weeks. We anticipate that knowledge and skills will increase and chronic grief and depression will decrease for the CGMI group but not for the control condition. This grant was funded by the National Institute of Nursing Research (R21)

## SESSION 1270 (POSTER)

### COGNITIVE, MENTAL, PHYSICAL HEALTH

### PATTERNS OF SOCIAL BEHAVIOR AND VERBAL DESCRIPTIONS OF FRIENDSHIP EXPRESSED BY PERSONS WITH DEMENTIA

D.W. Gavel, S. McFadden, *University of Wisconsin-Oshkosh, Oshkosh, Wisconsin*

Two studies investigated friendship among persons with dementia through observation of their social interactions and interviews with them about their subjective experience of friendships. The research used four of Kitwood's (1997) "access routes" to obtain information directly from 17 persons diagnosed with some form of dementia and living in two community based residential facilities (n = 10 and n = 7). The first study used the Oshkosh Social Behavior Checklist to measure the type and quantity of behaviors using a systematic time-sampling procedure. Results showed a significantly greater number of social verbal and non-verbal behaviors (M = 8.65, SD = 5.99) compared to non-social verbal and non-verbal behaviors (M = 2.59, SD = 1.73) (p = .002). This suggests a preference for social interaction as opposed to isolation. The second study investigated the subjective experience of friendships in two phases. The first employed a semi-structured interview in which participants responded to questions that asked them share their thoughts on friendship. The second phase involved a story telling activity in which participants created stories about photographs of older people interacting. Study two was analyzed by means of Interpretive Phenomenological Analysis (Quinn & Clare, 2008) and revealed two predominant themes: "Time Is of the Essence" and "Friends Are All or Nothing". Resident contribution rates (85% contributed statements to at least one theme and 54% contributed to both) suggest that persons with dementia share common ideas about friendship.

### DOGS, HORSES, AND WALLABIES - OH MY! BENEFITS AND CHALLENGES OF ANIMAL THERAPY IN DEMENTIA CARE

R.J. Karasik[1], J. Berry[2], *1. Community Studies, St. Cloud State University, St. Cloud, Minnesota, 2. The Dementia Care Foundation, Darwin, Minnesota*

While the use of Animal Assisted Therapy (AAT) in health care is not new (Johnson et al., 2002; Odendaal, 2000), its place in the care for persons with dementia is now coming to the forefront (Sellers, 2006; Williams & Jenkins, 2008). Much of the current attention comes as providers seek new ways to improve care quality. To date, animal assisted therapy has been found effective in managing dementia care challenges including agitation (Williams & Jenkins, 2008), social interaction (Richeson, 2003), and nutritional intake (Edwards & Beck, 2002). Despite the growing body of literature on the effectiveness of AAT, little information is found on the practical challenges associated with implementing AAT in dementia care settings. The current case study examines 10 years of data regarding the implementation and practice of AAT in specialized dementia care. Animals are a key component of the Lakeview Ranch (LR) model which focuses on preventing (rather than treating) aggressive symptoms of dementia. Additional components include: a high staff to resident ratio (1:3), in-house full-time RN's, interdisciplinary teamwork, medication reviews, attention to residents' emotional needs, and specialized staff training. Since its inception, LR has been home to a variety of domestic, farm, and exotic animals. While numerous benefits have been documented, so have several logistical challenges, including: state regulations, availability & cost of trained therapists, and cost of animal care. Additional challenges documented in similar settings include concerns regarding attitudes (staff/family/resident), allergies, responsibility for care/cleanup, and the potential for zoonosis (animal born disease) (Simpson, 2003).

### PROBLEM SOLVING THERAPY FOR SUBTHRESHOLD DEPRESSION IN OLDER HOMEBOUND PATIENTS WITH CARDIOVASCULAR DISEASE

Z. Gellis[1], M.L. Bruce[2], *1. School of Social Policy & Practice, University of Pennsylvania, Philadelphia, Pennsylvania, 2. Cornell Weill Medical College, White Plains, New York*

Background. Randomized controlled trial evaluated Problem Solving Therapy in Homecare (PST-HC) for homebound older adults with cardiac disease receiving acute home healthcare services. This study hypothesized that compared to usual care plus education intervention, home-based PST-HC would significantly reduce depression and anxiety scores, lead to improved quality of life, and greater satisfaction with treatment among elderly with cardiac disease. Methods. Thirty-eight participants were recruited from a university-affiliated home health care agency for the trial. Six 1-hour PST-HC sessions included depression education, problem solving, pleasurable activity scheduling, homework, and weekly telephone calls over a 6 week period. The control comparison group received usual care plus two sessions of education and a depression brochure. Outcome measures included the Beck Depression Inventory, Hamilton Rating Scale for Depression, Beck Anxiety Inventory, and the SF-36 quality of life measure. Following the intervention, both groups completed the Patient Satisfaction Questionnaire. Results. Compared with the control group, the PST-HC group showed a significant decrease in depression but not anxiety scores. The PST-HC group generally reported more favorable satisfaction with treatment than the control group. The PST-HC group improved significantly as compared to the control group in only 2 of 8 health-related quality of life subscales: mental health and emotional role function. Conclusions. The brief PST-HC intervention demonstrated that depression improved among cardiac homecare elderly. However, there was no change in 6 out of 8 quality of life measures. Authors discuss integrated depression treatment in the homecare setting.

### EVALUATING SERVICE NETWORKS FOR PERSONS WITH DEMENTIA AND THEIR INFORMAL CAREGIVERS: THE EVIDENT-PROJECT

M. Reichert, *FK 12, Social Gerontology, University TU Dortmund, Dortmund, Germany*

In an aging society like Germany, efficacy of care provision and other support services for people with dementia and their informal caregivers is of particular importance. The project "EVIDENT" - funded by the German Ministry of Health - aims to evaluate the work of six dementia service networks in the Western part of Germany using case study as a method. Every network intends to link different parts of dementia supply (e.g., medical and nursing services, support and counselling for people with dementia and their caregivers) in order to facilitate access to information and to increase service use. In this presentation selceted results from the six case stuides will be presented. They refer especially to the development of networks in community care systems, conditions necessary for success and sustainability (e.g., client centred approach), and barriers for collaboration within the networks (e.g., competition amoung services). Finally, recommendations for effective networking and for social policy to support dementia networks are made.

### RISK FACTORS ASSOCIATED WITH HOSPITAL READMISSIONS AMONG DIABETES PATIENTS

H. Kim[1,2], J. Ross[3,4], Z. Zhao[5], *1. Seoul National University Graduate School of Public Health, Seoul, Republic of Korea, 2. Seoul National University Institute of Health and Environment, Seoul, Republic of Korea, 3. James J. Peters, VA Medical Center, New York, New York, 4. Mount Sinai School of Medicine, New York, New York, 5. New York University College of Dentistry, New York, New York*

The purpose of this population-based study is to examine the rates and risk factors of planned and unplanned hospital readmissions among mid-life and older diabetes patients. Using the 2006 California hospital discharge abstract data, we identified 124,967 patients aged 50 or older with diabetes, who were discharged from acute care hospitals between April and September 2006, and examined readmissions within the 3 months following their index hospitalizations. More than one-quarter (26.3%) of the patients were readmitted within the 3-month period, and about 87.2% of the readmissions were unplanned. Unplanned readmissions were more likely to occur in patients with a higher comorbidity, ethnic minorities with public insurance, and those living in lower income neighborhoods. Having a preceding hospitalization was also a strong predictor of unplanned readmissions. Almost one-fifth of the unplanned readmissions were potentially preventable based on AHRQ's PQI definitions, making up nearly 27,500 inpatient days and costing approximately 72.7 million dollars. Planned readmissions were less likely to occur in patients aged 80 or older, those with no insurance or self-pay, and those with an unplanned index hospitalization. The predictors of planned and unplanned readmissions were different. Transition care to prevent unplanned readmissions in acutely ill diabetes patients may help reduce rates, improving care. Further studies are necessary on potential disparities in planned readmissions.

### COGNITIVELY IMPAIRED OLDER ADULTS: BALANCING AUTONOMY AND BENEFICENCE ON THE SCALES OF JUSTICE

M. Henry, *Utah Commission on Aging, University of Utah, Salt Lake City, Utah*

Various disciplines have shown an association between well being and autonomy, but when older adults with impaired cognitive capacity control their own finances, living arrangements, and health care decisions, they may risk their financial security, health, and safety. These risks create a tension between the principles of autonomy and beneficence. When conflicts between these principles arise, the courts are often forced to resolve them. In this study, more than 150 appellate judicial decisions were reviewed to identify opinions that balance autonomy versus beneficence and contain substantial text describing older adults with impaired cognitive capacity; six cases meeting these criteria were identified. Guided by critical discourse analysis, the language in the opinions was evaluated to gain a better understanding of how judges balance autonomy and beneficence and how they characterize older adults with impaired cognitive capacity. The study showed that even when autonomy was cited as an objective, beneficence drove the results. In some instances, however, a court's emphasis on technical legal requirements worked to promote the older adult's autonomy. Language describing older adults showed a lack of understanding of older adults with dementia. Finally, the opinions revealed an uncritical acceptance of the opinions of medical professionals. The findings of this preliminary study suggest the need for more research on how to assure that judges who decide cases that restrict the autonomy of older adults with cognitive impairment have an accurate understanding of the individuals and the evidence they are considering when engaging in this difficult balancing process.

### ALCOHOL DIAGNOSES AMONG OLDER MEDICARE BENEFICIARIES: RACE AND GENDER DIFFERENTIALS

S. Cummings[1], B. Kilbourne[2], *1. College of Social Work, University of Tennessee, Nashville, Tennessee, 2. Tennessee State University, Nashville, Tennessee*

Little is known about the descriptive epidemiology of alcohol disorders among older adults, especially among older minority subpopulations. Study examined differences between alcoholic and non-alcoholic older adults and differences in alcohol-related diagnoses based on race and gender. Medicare physician-billing records were analyzed for all Tennessee Medicare Part B beneficiaries who saw a physician in 2000. Alcohol-related diagnoses were coded using ICD-9 codes for non-dependent alcohol abuse, dependent alcohol abuse, alcohol psychosis, and alcohol related liver disease. Analyses included difference of proportions tests, logistic and multinomial logistic regression. Among Medicare beneficiaries, 1663 (0.4%) were diagnosed as having a alcohol disorder. Alcoholic beneficiaries were younger and had more chronic illness than did their non-alcoholic counterparts. Alcoholic black men and men had higher rates of health conditions compared to whites or women ($Z=7.22$ & $27.45$ respectively, $p<0.001$). Alcohol dependence comprised the greatest percentage of diagnoses (36.5%), followed by alcoholic cirrhosis (22.9%), alcoholic psychosis (22.3%), alcohol abuse, (16.7%), and alcohol psychosis (1.5%). Black men were twice as likely as other subgroups to be diagnosed as alcoholic. The percent of alcoholic white men exceeded white and black women's prevalence ($Z=20.46$, $p<0.001$; $Z=37.84$, $p<0.001$, respectively). The percent of black men diagnosed as alcohol dependent exceeded that of white men ($Z=2.29$, $p<0.05$), white women ($Z=3.52$, $p<0.001$) and black women ($Z=2.69$, $p<0.01$). Black and White women had significantly higher percentages of cirrhosis diagnoses than did black men. The percent of beneficiaries diagnosed with alcohol abuse was invariant across race and gender groups. Research and clinical implications are discussed.

### IMPLEMENTING A CULTURE OF CHANGE MODEL IN A RESIDENTIAL CARE PROGRAM FOR PERSONS WITH DEMENTIA

D.J. Monahan[1], M. Koenig[2], K. Cahill[2], *1. School of Social Work, Syracuse University, Syracuse, New York, 2. Loretto—Heritage, Syracuse, New York*

A "culture of change" model (Kotter, 1997) provided the theoretical framework for examining how care could be improved for older adults diagnosed with dementia living in a residential care program. An evaluation was conducted to assess the organizational culture and determine how resident "quality of life" could be improved. A steering committee was formed and met 23 times during this period to develop a strategy for change. The New York state EDGE program was adapted for use by the program staff. A 16 hour training program was developed to assess staff perceptions of resident quality of life. Staff reviewed Droes (1996) seven adaptive tasks in dementia care, quality of life in dementia (Edelman, etal. 2005), and the Ettema (2007) quality of life scale. Significant findings were that the average length of stay was 1.8 years, the majority of residents were involved in three activities per week, residents took an average of 11-12 medications per day, average age was 83 and health status was relatively stable. Staff satisfaction with training was high as was their participation in training (95%). Recommended action included the development of a new employee orientation handbook to increase understanding of the resident population, their functional level and their bio-psycho-social needs. An increased use of communication technology for training was also proposed as well as the development of further incentives for collaboration with central administration in curriculum development activities.

### THE MEANINGS OF DELUSIONS IN DEMENTIA

J. Cohen-Mansfield[1,2], H. Golander[3], *1. The Herczeg Institute on Aging, Tel Aviv University, Tel Aviv, Israel, 2. Department of Health Promotion, School of Public Health, Sackler Faculty of Medicine, Tel-Aviv University, Tel Aviv, Israel, 3. Department of Nursing, Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel*

Objectives: Delusions, hallucinations, and a misidentification syndrome in dementia had been often classified under the general term of psychosis, thus reducing the search for understanding the characteristics of these behaviors including their content and meaning. We aim to describe the delusions experienced by older persons with dementia and their context of occurrence, with the goal of elucidating the etiology of such delusions. Method: Participants were 74 nursing home residents aged 65 and over, diagnosed with dementia, from 9 nursing homes in Israel. Assessments included: Behavioral Pathology in Alzheimer's Disease Rating Scale, Neuropsychiatric Inventory: Nursing Home Version, Etiological Assessment of Psychotic Symptoms in Dementia, Activities of Daily Living (ADL), Mini Mental State Examination. Results: Participants with delusions had significantly more difficulties in performing ADLs, poorer vision and hearing, and were more likely to have experienced the Holocaust. Six categories of delusions were identified: 1.One's home is not one's home 2. Theft 3. Danger 4. Abandonment 5. Misidentification 6. Other Non-paranoid. Delusions of theft were most prevalent. Common themes appeared across types of delusion. These included: reality, disorientation, re-experience of past events, loneliness and insecurity, boredom, and trigger. Conclusions: The definition of delusions most often does not apply to the beliefs of persons with dementia, as they sometimes represented reality, or were neither firm nor incontrovertible. Thus, utilizing the term delusion relegates the person's behavior to the domain of severe psychiatric phenomena and precludes understanding the true meaning of it. Implications for care of persons with dementia are discussed.

## SESSION 1275 (PAPER)

## DIVERSITY IN AGING I

### DECREASING RACIAL/ETHNIC DISPARITIES IN ACCESS TO HEALTHCARE AMONG SENIORS: 2000-2007

E. Mahmoudi[1,2,3], G.A. Jensen[1,2,3], *1. Economics and Institute of Gerontology, Wayne State University, Detroit, Michigan, 2. Institute of Gerontology, Detroit, Michigan, 3. Department of Economics, Detroit, Michigan*

Background: Eliminating racial and ethnic healthcare disparities is a major goal of Healthy People 2010. Even though most older adults have Medicare, significant racial/ethnic disparities in access to healthcare have been documented for this age group. Objective: To determine how much progress the U.S. is making toward achieving this goal among adults ages 65 and older, using nationally representative data from the 2000 and 2007 Medical Expenditure Panel Survey (MEPS). Methods: Two access measures are examined: whether the individual reports having a usual source of care, and whether he/she had any doctor visits during the past 12 months. For each measure we examine trends in disparities between White and African American seniors, and between White and Hispanic seniors over the 2000-2007 period. We then estimate multivariate regression models and use regression-based decomposition to quantify the role of various factors underlying the trends observed. Principal Findings: Significant progress occurred between 2000 and 2007. Access improved for older Whites, African Americans, and Hispanics, but the gain was statistically significant only for Whites. When this period began, significant disparities were evident between Whites and African Americans, but they dissipated entirely by 2007. Significant disparities between White and Hispanic seniors were evident in 2007, however. Thirteen percent of Hispanics reported having had no doctor visits during the past 12 months, compared to only 6.2 percent among Whites. Regression decomposition reveals that most of these remaining disparities are due to measurable differences in income, education, and type of Medicare coverage between Whites and Hispanics.

### ETHNICITY, CULTURE AND MIGRATION IN ELDERLY CARE: AN ANALYSIS DAILY PRESS' COVERAGE ON ELDERLY CARE FROM 1995-2008

S. Torres[1], J. Lindblom[2], *1. NISAL, Linkoping University, Norrkoping, Sweden, 2. Malardalen University, Vasteras, Sweden*

This presentation departs from the broader debate on what the globalization of international migration means for different European elderly care regimes and the manner in which they try to adapt to increasing ethnic diversity among both elderly care providers and elderly care recipients. Observations regarding the way in which the media mediates public opinion on these issues are also of interest since the elderly care sector is becoming an increasingly multicultural sector. The presentation will shed light on what daily press reporting on migration, ethnicity and culture-related issues within the context of elderly care has focused on and how the issues in question have been discussed. The empirical material is constituted of the 101 articles published in a daily newspaper between 1995 and 2008. The presentation departs from a quantitative content analysis and shows that although the articles portray migrants as a burden, they also portray them as an asset to this particular sector. Moreover the analysis shows that the articles were mostly about the need to increase the culture-appropriateness of services for elderly immigrants but neglected to address that an increase in the recruitment of migrants to the sector could end up jeopardizing the quality of care that is offered to elderly people from the ethnic majority. The presentation will, therefore, problematize the malleable way in which media representations of ethnic 'Otherness that focus on the context of elderly care are constructed.

### A MULTI-METHOD ASSESSMENT OF OLDER GLBT NEEDS

R. McCaslin, L.A. Smith, *School of Social Work, Cal State Univ, San Bernardino, San Bernardino, California*

This session will report the findings of a recent assessment of the needs of older GLBT people, conducted collaboratively by an Area Agency on Aging and a BASW service learning research methods class in response to the first state mandate for their inclusion in planning. A multi-method survey including an Internet-based questionnaire resulted in a sample that was more diverse than most research on this population, suggesting that this approach was a viable means to reach this largely hidden population. Data analysis indicated areas of greatest unmet need were GLBT-friendly legal advice, social events, grief and loss counseling, social workers, and assisted living. Many participants expected existing services to be unfriendly or even hostile to GLBT persons. Findings are discussed in the context of the personal histories of this "preliberation" generation. Also explored are the risks for late life onset PTSD that may raised by being forced back into the closet by dependence on services unaccepting of their sexual orientation.

## SESSION 1280 (SYMPOSIUM)

### INDEPENDENCE OR DEPENDENCE IN LATER LIFE? EVIDENCE FROM THE NEW DYNAMICS OF AGEING PROGRAMME

Chair: *A. Walker, University of Sheffield, Sheffield, United Kingdom*

This symposium reflects the theme of transitions of care and, specifically, the topic of the loss of independence and autonomy associated with the need for care in later life. Its objective is to examine the causes and outcomes of autonomy loss from a mixture of perspectives: life course, macro policy, individual and professional. Participants will be introduced to new evidence on the independence/dependence transition from multidisciplinary perspectives that span both biomedicine and behavioural and social sciences. Thus the symposium will provide a novel, multidisciplinary and multilayered approach to the association between ageing and independence/dependence. The symposium begins with a brief overview of the New Dynamics of Ageing Programme. The aim here is to provide some essential context for the substantive research papers that follow and, therefore, it will be relatively brief. Then Kuh presents a life course perspective on the risk factors that are associated with physical capability. This research draws on multiple cohort studies. The third paper by Jagger and her colleagues takes a view of quantitative perspective and looks at trends in mortality and morbidity and their implications for healthy ageing. It also adopts the same approach for the discussion of the need for and availability of care and the prospects for financial independence. In contrast, the fourth paper, by Lloyd and colleagues, is a qualitative examination of the everyday lived experiences of the loss of autonomy. The special emphasis here is on dignity (and its loss) and the role it plays in adaptation at the end of the life course. Continuing this theme, the final paper, by Gilhooly et al, concentrates on an extreme case of loss of dignity: the relatively unexplored field of financial abuse. Papers in order: Walker, Kuh, Murphy, Lloyd, Gilhooly

### THE NEW DYNAMICS OF AGEING: A MULTIDISCIPLINARY PROGRAMME OF RESEARCH

A. Walker[1], D. Kuh[3], C. Jagger[4], L. Lloyd[2], M.L. Gilhooly[5], *1. University of Sheffield, Sheffield, United Kingdom, 2. University of Bristol, Bristol, United Kingdom, 3. MRC Unit for Lifelong Health and Ageing, London, United Kingdom, 4. University of Leicester, Leicester, United Kingdom, 5. Brunel University, London, United Kingdom*

This paper provides an introduction to the symposium by briefly locating the following four paper presentations in the context of the overall research programme from which they are drawn. The New Dynamics of Ageing Programme 2005-12, is the largest research initiative on ageing ever mounted in the UK or any other European country. It is multidisciplinary and covers all relevant disciplines from the arts and humanities to the biological sciences. This paper describes the programme and highlights its unique features in terms of disciplinary spread, focus on policy and practice impact and engagement with older people.

### HEALTHY AGEING ACROSS THE LIFE COURSE: FINDINGS FROM THE HALCYON COLLABORATIVE RESEARCH PROGRAMME

D. Kuh, *MRC Unit for Lifelong Health and Ageing, London, United Kingdom*

The Healthy Ageing across the Life Course (HALCyon) collaborative research programme is funded from 2008-2012. It brings together an interdisciplinary group of scientists working with nine UK longitudinal cohort studies on eight inter-related work packages. The purpose is the scientific discovery of life course influences on three aspects of ageing: physical and cognitive capability (the capacity to undertake the physical and intellectual tasks of daily living); psychological and social wellbeing; and the underlying biology of ageing, including genetic programming and physiological regulation (www.halcyon.ac.uk). Cohort participants currently span the fifth decade to the oldest old and most have been followed from childhood. The presentation summarises recent HALCyon findings identifying potential common risk factors, from the cellular to the societal, that impact on capability and wellbeing. It focuses on the effects of lifetime socio-economic conditions and body size on physical capability across these cohorts, including measures of grip strength, walking speed, chair rise time and balance.

### DEMOGRAPHIC CHANGE AND ITS IMPLICATIONS FOR HEALTH, FAMILY SUPPORT, NEED FOR CARE AND PENSIONS: RESULTS FROM THE MODELLING AGEING POPULATIONS TO 2030 (MAP2030) STUDY

C. Jagger[1], M. Murphy[1], A. Comas-Herrera[1], E. Grundy[2], R. Hancock[3], L. Pickard[1], *1. London School of Economics and Political Science, London, United Kingdom, 2. London School of Hygeine & Tropical Medicine, London, United Kingdom, 3. University of East Anglia, East Anglia, United Kingdom*

As in other countries, in the UK the number of people aged 80 and over, where care needs are greatest, is set to nearly double in the next 25 years. The financial, family, social and health resources of the older population have substantial implications for the well-being of those concerned and for public policy, but consistent projections of their likely future circumstances are lacking. This paper brings together the key issues being investigated by the MAP2030 project including how trends in mortality and morbidity will evolve, and if the extra years of life will be lived in good health; the consequences of changes in family circumstances on the availability of informal sources of care and for older people's social participation; the willingness and ability of people to save for their old age; and how these influence future long-term care and pension needs up to 2030.

### PERSEVERANCE: OLDER PEOPLE'S EXPERIENCES OF ADAPTATION TO LOSS OF INDEPENDENCE

L. Lloyd[1], A. Cameron[1], R. Smith[1], K. White[1], M. Calnan[2], J. Seymour[3], *1. University of Bristol, Bristol, United Kingdom, 2. University of Kent, Kent, United Kingdom, 3. University of Nottingham, Nottingham, United Kingdom*

This paper presents emerging findings from an ongoing qualitative research project (Maintaining Dignity in Later Life) which examines participants' everyday experiences of support and care over a period of 2-3 years. Health problems and growing frailty present significant challenges for this group of participants, who place a high value on their independence but who through their everyday experience face questions over how long they will be able to maintain it. Participants' accounts demonstrate a range of ways of thinking about these questions and of strategies for coping with challenges, as their familiar routines and activities are disrupted and curtailed. A key issue concerns the ways in which participants' perceptions of burdensomeness and the consequent loss of dignity are constructed and how these influence their willingness to ask for help or to accept offers of help. The importance of perseverance in maintaining independence can be seen in references to 'doing my best' and 'trying my hardest', which indicate the moral pressure participants feel. However, this needs to be understood in relation to their awareness of the inevitability of their increasing dependency, which can be seen in statement such as 'I know I must be sensible'. This presentation highlights the complex and demanding nature of adaptation at this stage of the life-course.

### DETECTING AND PREVENTING FINANCIAL ABUSE OF OLDER ADULTS: DECISION MAKING BY MANAGERS AND PROFESSIONALS IN HEALTH, SOCIAL CARE AND BANKING

M.L. Gilhooly[1], D. Cairns[1], M. Davis[1], E. Notley[1], P. Harries[1], K. Gilhooly[2], *1. Brunel University, Middlesex, United Kingdom, 2. University of Hertfordshire, Hertfordshire, United Kingdom*

With increasing numbers of cognitively impaired older people cared for in the community, there are growing challenges associated with money handling. Financial abuse of vulnerable older people is of growing concern. It is equally important to protect professionals and carers from unfair allegations of financial abuse. The aim of this project is to examine decision-making in relation to the detection of financial elder abuse. Health, social care and banking professionals are the focus of this study. There are three phases to this study: Phase I - In-depth interviews, using critical incident methods, with health, social care and banking professionals. Phase II - Experiments aimed at testing hypotheses about decision-making using case scenarios. Phase III - Examination of policy documents and guidelines. This research is funded by the UK New Dynamics of Ageing Programme. The aim of this presentation is to present findings from Phase II of the study.

## SESSION 1285 (SYMPOSIUM)

### NEW APPROACHES TO ADDRESSING NURSING HOME INDUSTRY CHALLENGES: INSIGHTS FROM BUSINESS, MANAGEMENT, AND ORGANIZATIONAL SCIENCES

Chair: *E.O. Siegel, Betty Irene Moore School of Nursing, UC Davis Health System, Sacramento, California*
Co-Chair: *B.J. Bowers, University of Wisconsin - Madison, School of Nursing, Madison, Wisconsin*
Discussant: *H.M. Young, Betty Irene Moore School of Nursing, UC Davis Health System, Sacramento, California*

Personnel issues continue to plague our nation's nursing homes, with challenges relating to recruitment of a qualified workforce, training, job satisfaction, staffing practices (appropriate resident/staff ratios and type of staff), and high job turnover across nursing staff and management positions. Limited federal and state reimbursement rates and heavy regulatory requirements are often highlighted as barriers to establishing a well-qualified and stable nursing home workforce. While the impact of reimbursement and regulatory systems are significant and noteworthy, the purpose of this symposium is to consider the personnel challenges within a context of our existing systems and explore new approaches to remedying these challenges based on well-established scientific foundations from a variety of business and management disciplines. The symposium will begin with presentation of a case study that exemplifies several of the challenges listed above, providing a common context for the presentations and facilitated discussions that follow. Our first presentation will offer insights regarding personnel selection, work designs, and leadership, drawing from Industrial and Organizational Psychology, Human Resource Management, and Organizational Behavior. Our second presentation will focus on executive leadership, including executive decision-making processes, organization design and managing innovation in rapid-change environments. The presentations will be followed by a facilitated discussion, exploring conceptual and methodological considerations and practical implications associated with drawing from the business and management sciences to inform directions for future nursing home research.

### PERSONNEL SELECTION, WORK DESIGNS, AND LEADERSHIP IN NURSING HOMES: BUSINESS, ORGANIZATIONAL, AND MANAGEMENT PERSPECTIVES

F.P. Moregson, *Department of Mangement, Michigan State University, East Lansing, Michigan*

This presentation will offer conceptual and methodological insights for addressing personnel selection, work designs, and leadership, drawing from well-established scientific foundations in Industrial and Organizational Psychology, Human Resource Management, and Organizational Behavior. The issues raised in the symposium case study will guide the focus of discussion, highlighting common nursing home challenges. Dr. Frederick P. Morgeson, Professor of Management and Valade Research Scholar at the Eli Broad College of Business at Michigan State University, focuses his research and interests in four distinct areas: (1) leadership, particularly with respect to the role of leadership in self-managing teams and the nature of the relationship between leaders and followers; (2) fundamental questions about the nature of work, which includes how work is structured and how people perceive their work; (3) the effectiveness and consequences of different personnel selection techniques; and (4) theory development to support integrative research in the substantive research areas noted above.

### ORGANIZATIONAL INNOVATION: A DECISION-MAKING MODEL TO INFORM CHANGE EFFORTS

A.L. Delbecq, *Management Department, Leavey Sch of Business & Administration, Santa Clara University, Santa Clara, California*

Accumulating evidence from culture change initiatives suggests that organizational innovations have often fallen short of expectations. Additionally, innovations in long term care frequently focus on the front line workers, providing little guidance for management. This presentation sets forth a step-process decision sequence that can be utilized across organizational settings to address various types of innovation challenges. This model of innovation decision-making is theoretically defensible and can be implemented by practicing organizational leaders. The process can be used to inform both intra-organizational and inter-organizational change efforts. Drawing on research and scholarship on executive decision-making processes, organization design, and managing innovation in rapid-change environments, this presentation will address the case study focusing on decision making by organizational leaders to support organizational innovation.

## SESSION 1290 (PAPER)

### STATE LEVEL POLICY INITIATIVES II

### ASSESSING PATIENT SAFETY CULTURE IN MASSACHUSETTS NURSING HOMES TO PROMOTE SAFE MEDICATION ADMINISTRATION

T.E. Anderson[1], C. Silveira[2], S.M. Handler[3], *1. Commonwealth Medicine, University of Massachusetts Medical School, Shrewsbury, Massachusetts, 2. Massachusetts Board of Registration in Nursing, Boston, Massachusetts, 3. University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania*

Purpose: As an initial step to promoting safe medication administration in Massachusetts nursing homes, the UMass Medical School's Center for Health Policy and Research (CHPR) and the Massachusetts Board of Registration Nursing (BRN) assessed patient safety culture, determined barriers to medication error reporting, and evaluated the social desirability of responses from the perspective of nurses in Massachusetts nursing homes. Methods: The project combines the unaltered Agency for Healthcare Research and Quality (AHRQ) Nursing Home Survey on Patient Safety with two other instruments: "Determining the Barriers to Medication Error Reporting" and the "Marlowe Crowne Social Desirability Scale," to capture response bias. Challenged without a master list of employed nurses for sampling, CHPR used a cluster sampling strategy, randomly selecting a group of nursing homes stratified by the number of licensed beds, to reach 25% of nursing staff. Composite scores will be created by calculating the proportion of positive responses for each SOPS domain. Barriers to reporting will be ranked. Results: Seeking participation from 25% of the 437 facilities, CHPR contacted 142 homes, successfully recruiting 110, for a recruitment rate of 77.5%. We then distributed 3,300 surveys receiving 1,286 returns. Overall average response rate was 41.4%. While a large proportion (86%) of the nurses rated the overall patient safety culture as positive, lower proportions gave positive domain scores for compliance with procedures (57%), training and skills (64%), non-punitive responses to mistakes (41%) and communication openness (52%). Nurses' reporting of medication errors varied directly with the resulting level of harm to the patient. Perceived barriers seen as likely modifiable were lack of an anonymous medication error reporting system, fear of disciplinary action, lack of recognition that a medication error has occurred, fear of being blamed, fear of liability or lawsuits Conclusions: The results funded by the National Council of State Boards of Nursing will establish the first statewide nursing home patient safety culture benchmarks, advise NESP both curriculum development and regulatory stakeholders nationally. A second measure is planned post implementation of the NESP, a non punitive, education oriented,facility based alternative to remediate nursing practice and to promote systems change

### STATE FUNDING FOR DEMENTIA ASSESSMENT - CALIFORNIA'S 25 YEAR EXPERIENCE

F. Segal-Gidan, *1. Rancho/USC CA Alz Disease Center (CADC), Downey, California, 2. University of Southern California, Los Angeles, California*

In 1984 legislation mandated the creation of the Alzheimer's Disease Program in California which included funding in 1985 for 6 dementia assessment centers, each affiliated with a medical school. The number of centers has changed over time, with funding eventually supporting 10 centers from 1998 to the present. The creation of these centers provides a core of funding to support an infrastructure that has been able to attract additional funding, federal and private, to create a statewide, collaborative network that is a model for clinical care, training and research in Alzheimer's disease and related dementias. The State centers developed a collaborative data base which over multiple iterations provides a snapshot of the patient population seeking care at academically-affiliated dementia assessment centers. In 2009 severe budget cuts threatened to dismantle the program. This paper reviews the history of the California Alzheimer's Disease Centers over 25 years, their economic impact in attracting additional funding to the State, the impact of the Centers on training and policy.

### EXPLORATORY ANALYSIS OF THE SILVER ALERT PROGRAM IN NORTH CAROLINA USING THE GEOGRAPHIC INFORMATION SYSTEM (GIS)

T. Yamashita[1,2], D.C. Carr[1,2], J. Brown[1,2], *1. Miami University, Oxford, Ohio, 2. Scripps Gerontology Center, Oxford, Ohio*

As of March, 2009, 23 states in the US had Silver Alert (SA) (or related media alert) policies in place as the primary mechanism to manage the problem of wandering among adults with dementia or other cognitive impairments (DOCI), and 14 states had imminent plans to implement one. These media alert policies utilize both law enforcement and the general public to locate missing adults by providing information to media outlets and/or by activating an emergency alert system to create a coordinated search effort. Despite investments made in SA policies, very little research has examined the problem of wandering among individuals with DOCI; therefore, little is known about how SA programs have been disseminated and utilized to manage the problem. North Carolina (NC) has posted publically available data on Silver Alerts that have been activated since the program began in mid-2007, providing the unique opportunity to examine the characteristics of individual cases as well as the geographical distributions of Silver Alerts activated. Using GIS, a computer-based data management, visualization and analytical tool for spatially referenced data (e.g., county-level data), this paper examines Silver Alerts activated in NC in 2008 and 2009. Results indicate that there are salient geographical patterns related to activation of alerts during this time period across NC counties, with most alerts concentrated in the middle-eastern part of the state. Theoretical and Policy implications will be discussed.

### DATA COLLECTION TO AID IN THE DEVELOPMENT OF LONG-TERM CARE POLICY FOR OLDER PENNSYLVANIANS

C.M. Mara, *School of Public Affairs, Penn State, Middletown, Pennsylvania*

The tendency to need long-term care increases with age. With the fastest growing part of the population being the 85-years-and-older cohort and the leading edge of the baby boomers entering their 70s in six years, long-term care is becoming an area of increasing concern. Related costs for individuals needing such care are escalating as are state Medicaid long-term care budgets. Medicaid, the primary source of long-term care funding, is available only after people have become impoverished. In helping to shape policy for the long-term care system in Pennsylvania, especially as it pertains to Medicaid, the related state agencies required information about older Pennsylvanian's perceptions, preferences, and expectations regarding long-term care. If they would need long-term care, where would older Pennsylvanians want to receive it? How would they expect to pay for it? How worried are they about being able to afford long-term care? From whom would they seek the information they would need to make decisions? Have they planned for the possibility of needing such care? Do they currently provide or receive informal long-term care? A Random Digit Dial telephone survey of 2,630 Pennsylvanians 50 years of age and older was conducted to find the answers to these and other questions. Information about survey construction will be presented as will survey findings and policy and practice implications.

## SESSION 1295 (SYMPOSIUM)

### THE FEDERAL SERVE AMERICA: ACT AND 50+ CIVIC ENGAGEMENT: PROMISING FUNDING, PRACTICE MODELS AND RESEARCH

Chair: *C. Hegeman, Foundation for Long Term Care, Albany, New York*
Discussant: *N. Morrow-Howell, Washington University, St. Louis, Missouri*

There is tremendous potential for Federal support of civic engagement of older adults. Sagawa (2010) notes the ability of the Corporation for National and Community Service (CNCS) to expand and administer additional grants and programs in national service. Focus area four of the Corporation for National and Community Service (CNCS) strategic plan is to "harness the experience of baby boomers." This symposium is a presentation on four diverse projects that used or are using CNCS funding to develop civic engagement programs for older people. Three of these programs use older adults to serve other elders. Two are intergenerational models of civic engagement, joining college students and elders together in service to other elders. The other engages baby boomers to recruit other baby boomer volunteers. Funding for these three programs are the AmeriCorps and the Learn and Serve Components of the CNCS. The last program described is a curriculum development model for agencies on how to recruit and retain older adults in service. Presentation on each project will cover (a) program descriptions as exemplars for other civic engagement programs; (b) lessons learned in the area of project implementation and evaluation design; (c) research findings; and, (d) recommendations for replication. The session will conclude with a summary of CNCS funding options and comments by the discussant.

### INTERGENERATIONAL SERVICE LEARNING: SERVICE WITH (NOT SERVICE FOR) ELDERS

C. Hegeman, K. Bliss O'Flathabhain, *Foundation for Long Term Care, Albany, New York*

In "Intergenerational Service Learning (IGSL): Linking Three Generations," a project funded by Learn and Service Higher Education in the Corporation for National and Community Service, college students from a variety of disciplines, like design, occupational therapy, and social work, served with retirees to provide services to elders in institutional and community settings and also participated in classroom discussions about their joint service projects. As such, it is a prime example of retiree generativity. Generativity, or the sense of "giving back to the community," is a term coined by Erik Erikson, and is seen as an integral part of the aging process. Using a pre/post design, the research showed that students who participated in this IGSL project had modest increases in civic engagement scores. However, older adults who volunteered with the students showed no change in generativity. This session will discuss these findings, successes, challenges, lessons learned, and ideas for replication.

### ELDERS IN AN AMERICORPS PROJECT

C. Hegeman, K. Revitt, K. Bliss O'Flathabhain, *Foundation for Long Term Care, Albany, New York*

AmeriCorps in Eldercare Settings (ACES) is a program that harnesses the experience of baby boomers, eldercare professionals, and graduate students in service to older Americans, using the funding of an AmeriCorps grant and reflecting the new interest of AmeriCorps in engaging baby boomers in service. ACES recruits and supports 50 AmeriCorps members (a mix of retirees and graduate students) to serve at elder care entities in the greater Albany and NYC areas as well as Connecticut. Service models include support of aging in place, increasing volunteerism of other older adults and many unique, site-specific projects, This session provides an overview of the ACES project, its potential as another exemplar for using Federal AmeriCorps dollars to increase civic engagement, recommendations for replication and findings to date, including ways to prepare elder care entities and elders for effective AmeriCorps programs.

### CAPTURING THE ENERGY AND EXPERTISE OF PEOPLE 50+: ENGAGING BOOMERS IN VOLUNTEERISM AND SERVICE

A. Taylor, *Temple University, Philadelpphia, Pennsylvania*

As millions of people in the U.S. enter their second half of life with a new vision and approach to aging, many communities are eager to leverage their talents and skills. Across the country, non-profits see a wealth of possibility as people 50+ reach a stage in life where they may have time to connect and contribute. Through an initial cooperative agreement with the Corporation for National and Community Service, the Intergenerational Center has developed curricula and training materials focused on the recruitment of the 60 million leading edge baby boomers that are poised to turn their skills and passions into action to support communities. This session will focus on some strategies and lessons learned for recruiting, training and supporting older adults in a continuum of volunteer roles. At the conclusion of this session participants will: 1. Understand the changing paradigm of volunteerism and service; and 2. Identify three strategies for successfully engaging people 50+ in a continuum of roles to support non-profits

### AN INTERGENERATIONAL APPROACH TO HEALTH LITERACY

N. Henkin, *Temple University, Philadelpphia, Pennsylvania*

Promoting the civic engagement of culturally diverse older adults and college students to improve the health literacy skills of older immigrants is a strategy that is both cost effective and culturally appropriate. Through a national AmeriCorps grant from the Corporation for National and Community Service, The Intergenerational Center at Temple University is coordinating a national initiative designed to enhance healthy aging and improve access to health services among older immigrants and refugees. This session will discuss best practices for recruiting, training, and supporting multi-generational /cultural service teams, share effective strategies for building the capacity of ethnic-run organizations to support the leadership development of elders, and provide data on early evaluation results. At the conclusion of this session participants will: 1. Understand the ways in which older refugees/immigrants are civically engaged in their communities; and 2. Identify three strategies utilized by community-based non-profits in engaging foreign-born elders as volunteers.

## SESSION 1300 (SYMPOSIUM)

### OCCUPATIONAL INJURIES AMONG HOME HEALTH AIDES WORKING IN HOME HEALTH AND HOSPICE AGENCIES

Chair: *G. Khatutsky, Aging, Disability and LTC, RTI, International, Waltham, Massachusetts*

Home health aides working in home health and hospice agencies are at significant risk for work-related injuries, but little is known about the frequency and types of such injuries or how newly available technology such as patient lifts affect injury rates and whether this technology is available in patient homes. Aside from determining the direct impact of injuries on workers, understanding the prevalence and nature of injuries is important for assessing their impact on productivity, retention, and job satisfaction. This descriptive study uses data from the newly released 2007 National Home Health Aide Survey (NHHAS) to describe the prevalence and nature of self-reported injuries among home health aides. Preliminary analysis suggests that 12% of home health aides reported work-related injuries to their employers in the past year and 14% reported a need for more equipment to make their jobs safer. Moreover, when reporting the causes of their injuries, home health aides attributed their injuries to abuse and assault by their patients twice as often as back injuries, strains, and pulled muscles.

### NURSE AIDES OPINIONS OF HAZARDS IN THE WORKPLACE

N. Castle, *University of Pittsburgh, Pittsburgh, Pennsylvania*

In this research, a survey was developed and used to assess nurse aides opinions of hazards in the workplace. The survey was sent to nurse aides included in the Pennsylvania nurse aide registry. A total of 4,117 questionnaires were returned (response rate = 59%). The descriptive results show more than half of the nurse aides indicated that they had suffered an injury while working, but only 12% had taken time-off (over the prior 2 years). Most of these were back-related injuries. Responses also indicated that some nursing homes were perceived to be more hazardous than others. The multivariate results show that these opinions of the workplace environment were not related to available equipment or training, but to the type of residents and staffing levels. Further details of the scale and scope of nurse aides opinions of injuries and hazards in the workplace will be discussed.

### THE HOME CARE WORK ENVIRONMENT FOR PERSONAL ASSISTANCE SERVICE WORKERS

R. Newcomer, J. Faucett, T. Kang, R. Eversley, *University of California, San Francisco, California*

Occupational injury is a prevalent problem in long-term care. However, there is a noticeable lack of research related to workers providing Personal Assistance Services (PAS) – the personal care and housekeeping tasks that enable elderly and other disabled adults to live in community settings. We conducted a statewide computer assisted telephone survey of PAS providers (n=855) from California's In Home Supportive Services program to describe the homecare environment and its impact on the worker's health and ability to provide care. PAS providers reported on a variety of household and personal care tasks, including client lifting and transfers, as well as on barriers to care delivery. 283 providers (33%) reported musculoskeletal problems or acute injuries causing at least moderate pain that had occurred in the prior 12 months. Because of these, 30 workers missed work, 57 changed their work duties, and 13 had to drop work hours or clients. Funded by NIOSH.

### AVOIDING INJURY: DEVELOPMENT AND IMPLEMENTATION OF AN EMPLOYEE SAFETY PROGRAM FOR DIRECT CARE PROVIDERS IN LONG TERM CARE

E.G. Weingast, A.R. Wathen, *Jewish Home Lifecare, New York, New York*

Jewish Home Lifecare has grown its employee safety program significantly over the past two years. Worker's compensation costs have a great impact on our budget, this led us to scrutinize the type of employee incidents that cause injury. We found that patient handling is the primary cause of work-related injury in our organization, with slips and falls a close second. Utilizing resources from both our insurance broker and insurance company, we have developed programming to avoid these injuries. The presentation will include the development and implementation of a safe-lifting policy to minimize patient handling injuries as well as structured environmental rounds to avoid the slips and falls leading to injury. Barriers to safe handling practices and possible solutions will also be discussed. Jewish Home Lifecare is an organization with nearly 3,000 employees providing care to elders in nursing homes, day centers, and their own homes. An overwhelming majority of our workforce provides hands on personal care, these caregivers are Certified Nursing Assistants and Home Health Attendants.

## SESSION 1305 (SYMPOSIUM)

### HUMAN LONGEVITY GENES

Chair: *G.J. Lithgow, Buck Institute for Age Research, Novato, California*

Healthy aging is clearly a combination of genetics and environmental influences. Many genes that determine lifespan have been discovered in lab animals. Do the same genes influence longevity in humans? Do humans have a unique set of genes that modulate aging? What do human longevity genes tell us about the link between aging and disease? Speakers: Cummings, Steve M.D., California Pacific Medical Center Yousin Suh Ph.D., Albert Einstein College of Medicine Thomas Perls M.D. M.P.H., Boston Medical Center Paola Sebastiani, PhD, Boston University Greg Tranah, PhD., California Pacific Medical Center

## SESSION 1310 (PAPER)

## AFTER HOSPITALIZATION: HEALTH CARE DILEMMAS

### CAREGIVER AND CARE RECIPIENT AGENCY: TRANSITIONS FROM CURE TO CARE, AND BACK AGAIN

J. Ford, *Child and Family Development, University of Georgia, Athens, Georgia*

In 2008 there were 23,442,000 veterans in the United States; with 7.3 million enrolled in the Veterans Affairs (VA) Health Care System; over one-third were 65 years old or older. Enrolled aging veterans and their caregivers face innumerable mental and physical health care dilemmas. Challenging transitions from curative interventions to provision of comfort care, and sometimes back again, were salient in this research. Four-stage grounded theory methodology was applied to explore health care delivery at a Veterans Affairs Medical Center (VAMC). Atlas.ti qualitative software was used to systematically analyze data. All veterans aged 65 years or older (n=15) were selected from a population of veteran cases (N=25), representing all inpatient cases between October 2003 and January 2008 requiring involvement of the VAMC ad hoc ethics committee. The purpose was to clarify health care decision making processes and develop substantive theory with the potential to improve outcomes. Social structural symbolic interaction theory guided the research. Agency emerged as the core category. Agency was capacity to make choices and act on those choices in ways that impacted attempts to cure or comfort. When veterans' agency was compromised, due to schizophrenia or brain injury for example, formal caregivers' roles were more salient. Substantive theory was the dynamic process of clarifying agency. Dynamics of changing case circumstances, a patient choosing to stop dialysis knowing he would die, another only responsive to pain, meant that resolution of health care dilemmas was elusive and transitory.

### CHARACTERISTICS OF OLDER ADULTS REHOSPITALIZED WITHIN SEVEN DAYS OF DISCHARGE FROM A COMMUNITY HOSPITAL

D.J. Hain, S. Diaz, J.G. Ouslander, R.M. Tappen, *Christine E Lynn College of Nursing, Florida Atlantic University, Boca Raton, Florida*

Rehospitalizations of older adults consume a significant portion of healthcare costs. It is important to gather preliminary data before developing potentially effective interventions. The purpose of this pilot study was to examine 7 day rehospitalizations rates and characteristics of older adults (≥75) who were discharged from a community hospital. A retrospective analysis of data was collected over one year. Descriptive statistics were used to describe the rates of rehospitalization and the characteristics associated with 7 day rehospitalization of all people who were discharged. There were 5, 282 people discharged during the project period. Of this population 352 people were rehospitalized within seven days, almost half were ≥85 and there were slightly more males (56%) than females (44%). People who discharged to skilled nursing facilities (36%) had the highest rehospitalization, followed by home with home health care (31%) and home with self-care (27%). The most prevalent index admission diagnoses were related to cardiovascular conditions (32%), infections (22%), or musculoskeletal disorders (10%). The most frequent reason for rehospitalization was digestive disorders, and if the index admission diagnosis was digestive disorders the most common reason for rehospitalization was pneumonia or other infections. A substantial number of rehospitalizations came from SNFs, which warrants further attention. Interventions aimed at improving care of older adults during transition to SNFs may be an effective way to reduce rehospitalization. These include: improved communication, education, disease specific protocols, and/or using an advanced practice nursing model for follow up visits on targeted patients who at risk for rehospitalization.

### CARE TRANSITIONS POST HIP FRACTURE: WHAT'S WORKING FROM THE HEALTH PRACTITIONER PERSPECTIVE?

J. Sims-Gould[1], K. Byrne[1], K. Khan[1], P. Stolee[2], *1. The University of British Columbia, Vancouver, British Columbia, Canada, 2. The University of Waterloo, Waterloo, Ontario, Canada*

Transitions between health care settings are a high-risk period for care quality and patient safety (Coleman, 2003; Picker Institute 1999), particularly for older patients - such as those with hip fracture who have complex needs and may undergo multiple care transitions. We sought to understand the key elements of "success" in care transition, including characteristics of effective communication among health care providers and the successful transfer of patient information. Using a strengths-based perspective (Rapp, 1998; Saleebey, 2009), we focused on health care providers' perspectives of what constitutes a 'good' care transition for elderly hip fracture patients. Data were gathered and analyzed using an interpretive descriptive approach (Thorne et al, 2004). Participants were purposively sampled. Semi-structured interviews were conducted with fifteen health providers (e.g., occupational therapists, social workers, nurses, surgeons, etc.) employed across the continuum of post-hip fracture management in a large teaching hospital in Vancouver, British Columbia, Canada. Documents that facilitated transitions were collected and analyzed. We found three hallmarks of "success" in care transitions: (i) multiple and flexible modes of communication; (ii) role clarity (i.e., responsibilities of health care providers, patients and families) and, (iii) health care provider ingenuity – the ability to engage in divergent thinking and respond to the dynamic needs of patients, families and other health care providers.

Strategies for promoting and improving success in transitions, ranging from individual practitioner level solutions to system wide suggestions, will be discussed.

## SESSION 1315 (SYMPOSIUM)

### AN EXCITING RANGE OF SCIENTIFIC DISCOVERIES ON WOMEN AND AGING: THE WOMEN'S HEALTH INITIATIVE

Chair: *S.A. Shumaker, Wake Forest University School of Medicine, Dept of Social Sciences and Health Policy, Winston-Salem, North Carolina*
Co-Chair: *L. Coker, Wake Forest University School of Medicine, Dept of Social Sciences and Health Policy, Winston-Salem, North Carolina*
Discussant: *S.B. Kritchevsky, Wake Forest University School of Medicine, Sticht Center of Aging, Winston-Salem, North Carolina*

An Exciting Range of Scientific Discoveries on Women and Aging: the Women's Health Initiative Memory Study (WHIMS) Chair: Sally A. Shumaker, PhD; Co-Chair: Laura H. Coker, PhD; Discussant: Stephen B. Kritchevsky, PhD Ancillary to the WHI hormone therapy (HT) trials, WHIMS was the first large, long-term study to address the cognitive effects of postmenopausal HT. WHIMS consisted of two parallel, randomized, double-blind, clinical trials of conjugated equine estrogen with medroxyprogesterone (E+P) or E-Alone compared to placebo. The primary objective was to examine whether postmenopausal HT reduced the risk of all-cause dementia and, secondarily, mild cognitive impairment and global cognitive functioning in healthy women age 65-79 (mean 69) years at WHIMS baseline). WHIMS E+P and E-Alone trials began in 1996 and ended in 2003 and 2004, respectively, when the WHI parent studies were terminated earlier than planned due to significantly more non-cognitive adverse events associated with active HT. Subsequently, the WHIMS E+P trial reported a two-fold increase in incident probable dementia in the active HT group compared to placebo; and E-Alone increased the risk for probable dementia by 49%, but this was not significant. To explore a possible mechanism of the WHIMS cognitive findings, the WHIMS MRI study was designed to examine the association of HT compared to placebo on silent cerebrovascular disease. WHIMS MRI reported a significant association between HT and smaller frontal lobe and hippocampal brain volumes, but no association between HT and ischemic lesion volumes. WHIMS post-trial cognitive assessment continues annually. The current WHIMS GSA symposium highlights new findings on how women's cognitive health is associated with cardiovascular disease, prior education, retinopathy, and postmenopausal hormone therapy. Data to support these abstracts are from the WHI, WHIMS and the WHIMS MRI studies.

### RELATIONSHIP OF RETINOPATHY TO REGIONAL BRAIN VOLUMES AND COGNITIVE FUNCTION

M.A. Espeland[1], M.N. Haan[2], K. Yaffe[2], S.A. Gaussoin[1], S.M. Resnick[3], J.E. Rossouw[4], S.A. Shumaker[5], *1. Dept of Biostatistical Sciences, Wake Forest University Health Sciences, Winston-Salem, North Carolina, 2. University of California, San Francisco, San Francisco, California, 3. Intramural Research Program, National Institute on Aging, Baltimore, Maryland, 4. National Heart, Lung, and Blood Institute, Bethesda, Maryland, 5. Division of Public Health Sciences, Wake Forest University Health Sciences, Winston-Salem, North Carolina*

Retinopathy, even without frank diabetes, may serve as a marker of early microvascular changes that signal increased risk for cognitive deficits and adverse neuroradiologic findings. We examined associations between the presence of retinopathy and several markers of neurodegeneration (ischemic lesion and regional brain volumes from structural MRI and longitudinal Modified Mini-Mental State test scores) collected from 511 women, aged 65-80, who had standardized retinopathy evaluations. In models adjusted for diabetes and other risk factors for cognitive impairment, the 39 women classified as having retinopathy, compared to those without retinopathy, had approximately 50% greater mean total brain ischemic lesion volume (p=0.02) but little difference in mean total brain volume. Similar relationships were found for sub-regions of the brain. These women also had lower mean levels of global cognitive function over time (p=0.02). Retinopathy is associated with greater levels of diffuse brain ischemic lesion volumes and lower cognitive function in older women.

### EDUCATIONAL ATTAINMENT, MRI CHANGES AND COGNITIVE FUNCTION IN POSTMENOPAUSAL WOMEN

S. Rapp[1], M.A. Espeland[2], J.E. Manson[3], S. Resnick[4], N.R. Bryan[5], L.H. Coker[6], L. Phillips[7], M.L. Stefanick[8], *1. Wake Forest University School of Medicine, Dept of Psychiatry, Winston-Salem, North Carolina, 2. Wake Forest University School of Medicine, Dept of Biostatistics, Winston-Salem, North Carolina, 3. Harvard School of Public Health, Department of Epidemiology, Boston, Massachusetts, 4. National Institutes on Aging, Baltimore, Maryland, 5. University of Pennsylvania, Department of Radiology, Philadelphia, Pennsylvania, 6. Wake Forest University School of Medicine, Dept of Social Sciences and Health Policy, Winston-Salem, North Carolina, 7. Emory University, Department of Internal Medicine, Atlanta, Georgia, 8. Stanford University, Stanford Prevention Center, Stanford, California*

Educational attainment predicts performance of a wide range of cognitive abilities. Whether it predicts cognitive decline and pathological changes in the brain has important implications for the cognitive reserve hypothesis. The present analysis of is of a subset (n= 1,394) of postmenopausal women (> 65 yr.) in the Women's Health Initiative Memory Study (n = 7,479). Participants received assessments of cognitive performance and magnetic resonance imaging used to derive total ischemic lesion and brain volumes. Incident cases of probable dementia and mild cognitive impairment were centrally adjudicated. After adjustment for total lesion and total brain volumes (atrophy), higher educational attainment predicted better cognitive performance (p<0.001). Following conversion to dementia/MCI, higher education predicted steeper declines in cognitive function (p<0.001). Higher educational attainment may protect cognitive performance and delay functional decline enabling maintenance of a higher level of cognitive function in the face of growing neuropathological load and delay diagnosis of dementia.

### APPLICATION OF MACHINE LEARNING METHODS TO DESCRIBE THE EFFECTS OF CONJUGATED EQUINE ESTROGENS THERAPY ON REGION-SPECIFIC BRAIN VOLUMES

R. Casanova[1], M.A. Espeland[1], J. Goveas[2], C. Davatzikos[3], S.A. Gaussoin[1], B. Wagner[4], J.A. Maldjian[4], S.M. Resnick[5], *1. Wake Forest University of Health Sciences Department of Biostatistical Sciences, Winston-Salem, North Carolina, 2. Medical College of Wisconsin Department of Psychiatry, Milwaukee, Wisconsin, 3. University of Pennsylvania Department of Radiology, Philadelphia, Pennsylvania, 4. Wake Forest University of Health Sciences Department of Radiology, Winston Salem, North Carolina, 5. National Institute on Aging, Baltimore, Maryland*

Conjugated equine estrogens (CEE) have been linked to smaller hippocampal and frontal lobe volumes in older women; however, it is unknown whether this results in a broad-based regional pattern. Regional volumes of normal tissue and ischemic lesions were measured using structural MRI in 513 women who had been enrolled for an average of 6.6 years in a randomized clinical trial of CEE therapy, when aged 65-80 years. A multivariate pattern analysis was applied to identify patterns of regional volumes associated with therapy and to discriminate treatment groups. Women assigned to CEE therapy had smaller normal tissue volumes within the limbic and temporal lobes. Mean decreases (5-

7%) were found in the left entorhinal and perirhinal cortex. CEE in older women is associated with lower regional brain volumes, but may not induce a characteristic spatial pattern of changes in brain volumes of sufficient magnitude to discriminate the active from the placebo groups.

### COGNITIVE FUNCTION AND COGNITIVE CHANGE ON INCIDENT CVD: THE WHI MEMORY STUDY (WHIMS)

S.A. Shumaker[1], M.A. Espeland[2], X. Leng[2], M. Limacher[3], J.E. Manson[4], M.L. Stefanick[5], *1. Wake Forest University School of Medicine, Department of Social Sciences and Health Policy, Winston-Salem, North Carolina, 2. Wake Forest University School of Medicine, Department of Biostatistics, Winston-Salem, North Carolina, 3. University of Florida, Division of Cardiovascular Medicine, Gainesville, Florida, 4. Harvard School of Public Health, Department of Epidemiology, Boston, Massachusetts, 5. Stanford University, Stanford Prevention Research Center, Stanford, California*

There is growing recognition that vascular disease increases cognitive decline and impairment. There is less knowledge of how cognitive decline may signal increased risks of cardiovascular disease. The WHIMS cohort presents a unique opportunity to provide critical information on how cardiovascular disease and cognition interact later in life. We describe the associations among global cognitive function (3MS) and a battery of cardiovascular disease (CVD) risk factors and examine the relationships that baseline 3MS scores have with risk of CVD events. Using baseline and changes in 3MS scores as time-varying covariates, we develop proportional hazards regression models to explore how the hazard of CVD events are related longitudinally to cognitive function. Finally, we will examine the degree to which these associations may be influenced by changes in traditional CVD risk factors and medication use. The WHIMS data support the hypothesis that cognitive decline is associated with increased CVD in older women. A number of possible mechanisms will be discussed.

## SESSION 1320 (SYMPOSIUM)

### APPLICATIONS OF REMINISCENCE AND LIFE REVIEW TO DIVERSE ASPECTS OF GERONTOLOGICAL RESEARCH AND PRACTICE

Chair: *L. Yancura, University of Hawaii, Honolulu, Hawaii*
Discussant: *T.W. Pierce, Radford University, Radford, Virginia*

Reminiscence and Life Review are techniques used in both research and clinical settings with older adults. Although there are many variations on these techniques, they all involve the core aspect of the recollection of memories of one's self in the past. This recollection may be volitional or nonvolitional, and can be done alone or in the company of others. These techniques may be extremely useful in many aspects of gerontological research and practice because they have been associated with positive development in psychological, physical, and spiritual domains. Research presented in this symposium will cover applications of Reminiscence and Life Review to a broad range of issues of interest to gerontologists. Presenters will discuss applications of reminiscence theory to: preserving identity and planning for advance care for individuals with dementia; exploring how community-dwelling older adults use reminiscence to construct their social identities around health and social activity; demonstrating the value of reminiscence with stigmatized minorities from the transgendered population; and strengthening intergenerational bonds between grandparents and grandchildren. After attending this symposium, participants will be able to describe basic aspects of some reminiscence and life review techniques, recognize the applicability of these techniques to a wide range of theoretical and applied gerontological issues, and come away with practical strategies for incorporating reminiscence into their own work.

### IDENTITY CONSTRUCTION AND REMINISCENCE: HOW CENTER-GOERS CREATE "HEALTHY," "SOCIAL" SELVES

J. Weil, *University of Northern Colorado, Greeley, Colorado*

This study utilizes the theory of integrative reminiscence to illustrate the way community-dwelling persons 70 years of age and older attending a senior center use narratives to construct their social identities around topics of health and social activity. As part of an on-going ethnographic project begun in 2008, narratives of thirteen focal cases explore how individuals use reminiscence as a spontaneous, evolving, and dynamic process to construct identities. Through content analysis of interviews and participant observation, it is found that integrative reminiscence, although not always positive, allows individuals to work through conflicts about their current health and social statuses, gives their lives a sense of meaning, and re-shapes their identities. Reminiscence lets individuals put their current health and activity statuses, favorable or unfavorable, in the larger context of their life's experience. More work is needed to see how reminiscence can affect the resolution of past and current identities for elders.

### PRESERVING IDENTITY IN THE EARLY STAGES OF DEMENTIA: FEASIBILITY OF A BRIEF REMINISCENCE-BASED INTERVENTION

M.M. Hilgeman[1,2,3], D.W. Durkin[1,3], G. Harris[1,3], P.P. Haley[1,3], R.S. Allen[1,3], *1. The University of Alabama, Tuscaloosa, Alabama, 2. VA Boston Healthcare System, Boston, Massachusetts, 3. Center for Mental Health & Aging, Tuscaloosa, Alabama*

Self-maintenance therapy techniques (Cohen-Mansfield et al.) have recently emerged to address psychosocial needs of individuals with dementia. However, this approach has not been applied in the early stages of the disease, when there could be the greatest benefit. The Preserving Identity and Planning for Advance Care intervention uses reminiscence activities to guide the creation of a project (e.g., scrapbook) documenting an important role from the individual's life (e.g., mother, artist). A second component uses "living well" questions to guide discussion of future care. Seventeen individuals with dementia (M=80.1 yrs; CDR=0.5 or 1) and a family contact were randomly assigned to the four-session intervention or a phone-call control group. Pilot data results suggest reminiscence-based activities increased coping strategies from Time 1 to Time 2 for intervention individuals compared to controls (M=27.0 & M=22.75, respectively). Self-rated quality of life also increased for intervention individuals compared to controls (M=54.4 & M=51.8, respectively).

### GRANDCHILD-GRANDPARENT LIFE REVIEW: STRENGTHENING INTERGENERATIONAL BONDS

L. Yancura, *University of Hawaii, Honolulu, Hawaii*

Structured life review has positive psychological benefits for older adults. Life review shared with grandchildren may have the additional benefit of strengthening intergenerational bonds. This presentation describes a project within which grandparents and their adolescent grandchildren worked together to make short reminiscence films about the grandparent's lives. Participants were six grandparent-grandchild dyads. The protocol for film making included five sessions, an introductory session and four sessions each based on a phase of the grandparents' lives: childhood, adolescence, young adulthood, and the present. Films made with i-movie used scanned family photographs, period-appropriate musical selections, and videotaped interviews of grandparents describing important events in their lives. Grandparents and grandchildren reported benefits associated with joint participation in this project. After attending this presentation participants will be able to identify the benefits of dyadic reminiscence between grandparents and grandchildren and describe the one process by which grandchildren can make reminiscence films.

### REMINISCENCE WITH STIGMATIZED MINORITIES: EXAMPLES FROM THE TRANSGENDER-IDENTIFIED POPULATION

T.M. Witten, *Center for the Study of Biological Complexity, Virginia Commonwealth University, Richmond, Virginia*

Oral histories can document much history, not just of an individual but of a community as well. Reminiscence can help an individual to find closure on a life. However, in many cases revisiting the past, especially when an individual is a member of a stigmatized minority, can bring up memories that may have been suppressed, may be disturbing or may lead to unwanted discussion. Thus, oral history documentation and reminiscence methodologies must understand the history of the stigmatized/marginalized community within which they seek to record a history. In this presentation we address the challenge of reminiscence within the transgender-identified population. We provide a variety of examples from the presenter's ongoing fieldwork and open the floor for discussion.

## SESSION 1325 (POSTER)

## AT THE END OF LIFE

### END OF LIFE PLANNING: DO PARENTS WITH DISABLED ADULT OFFSPRING STAND OUT?

J.J. Benson, T.M. Cooney, *Human Development and Family Studies, University of Missouri, Columbia, Missouri*

Current research documents the influence of several sociodemographic characteristics, such as gender, age, marital status, education, and religious affiliation on the propensity to engage in end-of-life planning. Prior experience with end-of-life issues is also known to influence end-of-life planning. Older adults who know someone with a severe cognitive impairment, or a serious illness or injury, are more likely to make plans for end-of-life. Less attention has been directed toward examining the influence of caregiving experiences, such as whether caring for a disabled adult child affects aging parents' end-of-life decision-making. Using data from the 2004 wave of the Wisconsin Longitudinal Study we explore whether having a developmentally disabled, mentally ill, or severely depressed adult child distinguishes the end-of-life planning of 358 older adults (aged 65, on average) from 6373 peers who are parents without a disabled child. Both informal and formal measures of end-of-life planning were examined (durable power of attorney for health care, having a living will, and discussions of plans). Preliminary chi-square analyses yielded no differences in end-of-life planning either between parents in the three disability groups, or between parents with a disabled child versus those without. Further analyses explore factors such as the adult child's health and living arrangements, level of care required for the child and future care decisions for the child that may influence end-of-life planning among parents with a disabled child. Policy and practice implications are considered.

### AN EVALUATION OF THE INTERNATIONAL CLASSIFICATION OF FUNCTIONING, DISABILITY AND HEALTH (ICF) AS A PREDICTOR OF SIX MONTH SURVIVAL AMONG HOSPICE PATIENTS WITH DEMENTIA

J.Y. Allen[1], R.S. Schonwetter[2], S. Kim[2], B. Small[1], W.E. Haley[1], *1. Aging Studies, University of South Florida, Tampa, Florida, 2. HPC Healthcare, Inc, Tampa, Florida*

Objective: Although hospice can provide quality care to dying dementia patients and their families, research suggests that difficulty determining survival prognoses has limited service utilization (Schonwetter et al., 2003; Hanrahan, & Luchins, 1995). Recently, a Medicare intermediary encouraged use of the International Classification of Functioning, Disability and Health (ICF) to determine patient eligibility. The goal of the present study was to assess the validity of the ICF for use in predicting survival. Methods: A retrospective chart review of over 150 hospice patients with dementia admitted to a large community-based hospice was conducted. Additionally, longitudinal follow-up until time of patient death or discharge was performed. The predictive validity of the Reisberg FAST Scale and the Palliative Performance Scale (PPS) were also assessed. Results: Cox regression analysis revealed that a subscale of the ICF (i.e. Impairments of Body Functions) was a significant predictor of survival ($p < .05$) such that greater impairment was associated with increased risk of death. However subscales that assessed impairments of body structures and activity limitations and participation restriction, as well as the FAST scale were not significantly associated with survival. Finally, analyses revealed that the PPS was a significant predictor ($p < .001$) such that lower scores were associated with increased relative risk. Implications: ICF assessments of impairments of body functions and PPS scores may improve estimates of prognostication and determining hospice eligibility among patients with dementia. Health care providers and policy makers should consider if utilization would be improved by revising eligibility guidelines.

### PATIENT CHARACTERISTICS OF THE 2007 NATIONAL HOME AND HOSPICE CARE SURVEY

R.C. Intrieri[1], C.A. Yeager[2], L. Hyer[3], *1. Psychology, Western Illinois University, Macomb, Illinois, 2. Essex County Hospital Center, Cedar Grove, New Jersey, 3. Mercer University School of Medicine & The Georgia Neurosurgical Institute, Macon, Georgia*

The 2007 National Home and Hospice Care Survey (NHHCS) represents survey data collected from home health and hospice agencies and their current patients and discharges. The National Center for Health Statistics (NCHS) began surveying these agencies in 1992 as a result of their explosive growth throughout the United States. Participating agencies were either Medicare and/or Medicaid certified or held a state license to provide home health and/or hospice services. Survey data were collected in person from agency directors and staff between August 2007 and February 2008. Patient data were abstracted from the medical records. One thousand thirty-six agencies participated with data for 9,416 home health and hospice patients. There were 4,733 individuals identified that received hospice services. This presentation focuses on the characteristics of the hospice care patients. The survey consisted of 2,117 men and 2616 women. Men were on average younger (M=74.98; SD=13.48) than women (M=79.28; SD=13.57) with the mean age for the sample being 77.36 (SD=13.70). The racial composition of the sample was 91.6 percent white (n=4335), 6.7 percent black (n=315), 1.8 percent other racial groups. Approximately 43 percent of the sample was married or living with a partner, 39 percent were widowed, 8 percent were divorced or separated, 6 percent were never married, and 4 percent were missing information. Approximately 53 percent of the sample lived with family members before entering hospice. Information regarding the diagnosis at admission and the current primary diagnosis will be provided along with additional information regarding services received.

### AGENCY CHARACTERISTICS OF THE 2007 NATIONAL HOME & HOSPICE CARE SURVEY

R.C. Intrieri[1], C.A. Yeager[3], L. Hyer[2], *1. Psychology, Western Illinois University, Macomb, Illinois, 2. The Georgia Neurosurgical Institute and Mercer University Medical School, Department of Psychiatry, Macon, Georgia, 3. Essex County Hospital Center, Cedar Grove, New Jersey*

The 2007 National Home and Hospice Care Survey (NHHCS) represents survey data collected from home health and hospice agencies and their current patients and discharges. The National Center for Health Statistics (NCHS) began surveying these agencies in 1992 as a result of their explosive growth throughout the United States. Survey data were collected between August 2007 and February 2008. Participating agencies were either Medicare and/or Medicaid certified or held a state license to provide home health and/or hospice services. Data were collected in person from agency directors and staff. Patient data were abstracted from the medical records. One thousand thirty-six agencies participated with data for 9,416 home health and hospice patients. This presentation will report on the characteristics of the agencies providing hospice care. There were 695 agencies that provided hospice divided between those that provided only hospice care (n= 359) and those that provided both home health and hospice care (n= 336). Twenty-two percent of agencies that provided hospice only were part of chain while 78 percent were not. Fourteen percent of home health and hospice agencies were part of a chain compared to 86 percent that were not part of a chain. Thus, 18 percent of all agencies belonged to a chain compared to 82 percent that did not. Approximately 22 percent of all agencies were for profit while 78 percent were designated as private, not-for-profit, or government. Additional data will be presented further describing the agencies and the services provided.

### NURSES' AND CARE WORKERS' ATTITUDES TOWARD DEATH AND CARING FOR DYING OLDER ADULTS IN LONG-TERM CARE SETTING

M. Matsui[1], K.L. Braun[2], *1. Nagasaki University, Nagasaki, Japan, 2. University of Hawaii, Honolulu, Hawaii*

Background:Japan is a super-aging society. Nurses (RNs) and care workers (CWs) play an important role in the care of older adults at the end-of-life. This study examined RNs' and CWs' attitudes toward death and caring for dying older adults. Method:In the present study, a self-administered questionnaire was completed by 388 RNs and CWs employed in convalescent hospitals, intermediate nursing homes, and group homes in Nagasaki Japan. Survey items included demographic data, experience with death or dying patients, experience of providing end-of-life care, and previous seminar attendance regarding end-of-life care. Attitudes toward caring for dying patients were assessed by the Frommelt Attitude Toward Care of the Dying Scale, Form B, Japanese version (FATCOD-Form B-J). Attitudes toward death were measured Death Attitude Profile (DAP), Japanese version. The researchers obtained institutional review board approval from Nagasaki University. Results:The convenience sample consisted of 388 individuals (190 RNs, 177 CWs, and 21 unknown). 80.7% were female, with a mean age of 37.9 years. Mean years of work experience were 9.2, 71.9% were experienced with death and dying patients, 33.5% provided end-of-life care, and 32.6% had attended educational seminars on end-of-life care. Multiple regression analysis showed the better attitudes toward caring for the dying were positively associated with seminar attendance and negatively associated with fear of death. Job type and work setting were not associated. Conclusions:Education for staff regarding end-of-life care is key to promoting positive attitudes and better end-of-life care for older adults.

### ATTITUDES TOWARD LIFE-SUSTAINING TREATMENTS AMONG KOREAN AMERICAN AND MEXICAN AMERICAN OLDER ADULTS

E. Ko*, Social Work, San Diego State University, San Diego, California*

Increasing number of ethnic minority older adults heightened the needs for culturally appropriate health care practice. The use of Life Sustaining Treatments (LST) has brought much attention in relation to beliefs and attitudinal difference among ethnic groups. This study aims to explore the factors influencing attitudes toward LST among Korean American and Mexican American older adults. This study used a cross sectional research design that 122 Korean American (n = 64) and Mexican American (n = 58) community-dwelling older adults were interviewed at the selected sites. Measures included attitudes toward LST, End-Of-Life(EOL) decision making preference, acculturation, fatalism, spiritual perspectives, and other socio-demographic variables. Bivariate analysis showed the significant ethnic difference in personal LST preferences. As compared to Korean Americans, Mexican Americans significantly favored for CPR (9.4% VS, 27.6%), Artificial Ventilation (12.5% vs. 32.8%), Artificial nutrition/hydration (17.2% vs. 46.6%) and surgery (10.9 vs. 31.0%). Multivariate analysis showed that attitude toward LST was significantly accounted for by ethnicity, gender, EOL decision making preference, and fatalism. Mexican Americans and males were more likely to have positive attitudes toward using LST. EOL decision making preference and fatalism had positive effects. Culture is an abstract term. These two ethnic groups share some similarities including collectivism and fatalism, yet their LST preferences was dissimilar. It is important for health care professionals to recognize the unique needs of each population in EOL care. At the same time, EOL care approach needs to be individualized, focusing on quality of care, regardless of their ethnicity or cultural background.

### COMPLEMENTARY AND ALTERNATIVE THERAPIES (CAT) IN HOSPICE CARE

A. Bercovitz, M. Sengupta, A. Jones, *National Center for Health Statistics, Hyattsville, Maryland*

Anecdotal studies find provision and use of CAT (products and practices not part of standard care) is relatively common in end-of-life care. However, nationally representative data are not available. Using data from the 2007 National Home and Hospice Care Survey, we examined the provision and use of CAT in hospice. Forty-two percent of providers of hospice care offered CAT services, had a CAT provider on staff, or both. Providers offering only hospice care were more likely to offer CAT than providers offering both home health and hospice care (54% vs. 21%). Among providers offering CAT services, the most commonly provided services were massage (78% of providers), supportive group therapy (75%), music therapy (68%), pet therapy (64%), guided imagery and relaxation (58%), and therapeutic touch (53%). Over half of hospice discharges received care from a hospice provider which offered CAT. There were no differences in demographics or length of service between hospice discharges who received care from providers which offered or did not offer CAT. Among hospice discharges receiving care from a provider which offered CAT, only 9% received a CAT service from the provider. There were no differences between hospice discharges who received at least one CAT service and those who did not in demographics, care location, length of service or diagnoses, with the exception of symptoms and signs, which were more common among discharges receiving CAT. Results of this study suggest that CAT services are being more widely offered by hospice providers than they are being used.

### RELIGION AND FORMAL PREPARATIONS FOR END OF LIFE MEDICAL CARE: ASSESSING THE EFFECTS OF RELIGIOUS DENOMINATION, BELIEFS, AND PRACTICES

S. Sharp[2], D. Carr[1], *1. Rutgers University, New Brunswick, New Jersey, 2. University of Wisconsin, Madison, Wisconsin*

We use data from the Wisconsin Longitudinal Study (WLS) to assess whether religious denomination, beliefs, and practices affect older adults' formal (i.e., living will and durable power of attorney for health care [DPAHC] appointments) and informal (i.e., discussions) preparations for end of life care. The WLS is a large random sample survey of persons who graduated from Wisconsin high schools in 1957. Slightly more than half have a living will (55%) and a DPAHC (52%), while nearly three-quarters have discussed their end of life treatment preferences with significant others or care providers. We find no significant differences among religious denominations (i.e., Catholic; liberal, moderate and conservative Protestant; Jewish; other; no religion) in advance care planning. Persons who say that their religious beliefs would guide their end-of-life medical decisions did not have significantly higher rates of advance care planning. However, other religious beliefs and practices are powerful predictors of preferences. Persons who endorse Fundamentalist beliefs, attend religious services weekly, and identify closely with their religious group are significantly less likely to engage in advance care planning. General attitudes towards death and medical decision making were powerful predictors of advance care planning. Persons with high levels of death avoidance, low levels of death acceptance, and strong beliefs that doctors rather than patients should dictate medical decisions – were less likely to engage in end of life planning. The effects of religious attitudes and practices on advance care planning did not differ significantly by denomination. We discuss the implications for policy and practice.

### DISCLOSURE OF TERMINAL DIAGNOSIS AND PROGNOSIS: WHETHER AND HOW KOREAN AND MEXICAN AMERICAN OLDER ADULTS TO BE INFORMED?

E. Ko, *Social Work, San Diego State University, San Diego, California*

Disclosure of medical information provides opportunities for a patient to have an appropriate end-of-life plan and also enhances self- determination. Many people prefer to be informed of their diagnosis and prognosis, but there has been a concern about how health care professionals deliver the bad news. The purpose of this study was to explore whether and how Korean American and Mexican American older adults to be informed of their terminal diagnosis and prognosis. This study used a mixed method design. At stage one, 122 Korean American (n = 64) and Mexican American (n = 58) community-dwelling older adults were interviewed with a structured questionnaire. At stage two,38 participants (20 Korean Americans and 18 Mexican Americans) of the total samples were interviewed in depth. Bivariate analysis indicated no ethnic difference in the preferences for a physician informing 1) a patient and2) family members that a patient has cancer and informing 3) a patient and 4) family members that a patient might die of cancer. Majority of the participants agreed with each statement. The themes from qualitative interviews include 1) truth telling with empathy; 2) providing information in timely manner; 3) cautions in the selection of words, and 4) ending conversation with leaving hope. Both ethnic groups preferred to know their terminal diagnosis and prognosis, but opinions and expectations about how they should be addressed varied. Health care professionals need to be sensitive toward what is culturally expected in patient-health care professional communication regarding end-of-life care.

## SESSION 1330 (PAPER)

## BODY WEIGHT AS A HEALTH FACTOR

### BODY MASS AND C-REACTIVE PROTEIN LEVELS IN US ADULTS AND ELDERLY: SHAPE OF THE ASSOCIATION

A. Zajacova, *University of Wyoming, Laramie, Wyoming*

OBJECTIVE. This paper determines the shape of the relationship between body mass index (BMI) and C-reactive protein (CRP), a marker of systemic inflammation. We describe the association in the total population, by age, and across demographic subgroups. BACKGROUND. Excess body weight is known to be associated with chronic inflammation. Previous studies have not considered whether this association is linear or takes on other forms. Little is known also about the influence of age on the BMI-CRP association, although both BMI and CRP vary systematically from young adulthood to old age. METHODS. Analyses are based on NHANES 2005-2008 data. The sample includes adults age 20-80, with measured BMI (from 15 to 45) and CRP. Nonparametric regression-based multivariate linear and logistic models (generalized additive models) were used to model the shape of the BMI-CRP association, both in stratified analyses and in interaction with age. Results are presented as line graphs and 3D plots illustrating the shape of the BMI-CRP association. RESULTS. Among women, CRP levels increased monotonically from lowest to highest BMI across all ages. Among men, the results were similar except for younger white men, who evidenced a J-shaped association, with lowest CRP at high-normal BMI. Age was a significant modifier of the BMI-CRP association (p<.01 for men and women). CONCLUSION. CRP levels increase systematically with BMI for most population groups from underweight to morbid obesity. The findings are useful for health-behavioral recommendations, as well as for study of biological mechanisms linking adiposity to inflammation.

### OBESITY: ADVERSE HEALTH EVENTS AND THE UPDATING OF SURVIVAL EXPECTATIONS IN 1996 AND IN 2006

B. Novak, *University of Wisconsin-Madison, Madison, Wisconsin*

Context: There has been an increasing trend in obesity prevalence, observed worldwide during the last decades. Consequently, the interest in investigating the causes and consequences of this trend has also increased. How individuals perceive the effect of their excessive body weight on their health and ultimately on their survival expectations have been scarcely studied. Objective: Determine whether individuals at different levels of body weight update their survival expectations differently after acquiring information regarding their health (health shocks). Data: Health and Retirement Study (HRS): 1996, 1998, 2004, 2006 waves. Subjects: Individuals aged 50-59 in 1994 and 50-59 in 2004. Method: Survival expectations at time, are hypothesized to be a weighted function of two things. First, of the individuals' own survival expectations stated at time . Second, of an unobserved risk equivalent that is implied by any new information the individual acquires regarding a new fatality risk. This new fatality risk may have appeared between times and, and could induce a revision of the previous survival assessment. Two measures are estimated: the risk equivalent value of the new health information and the relative informational value of the new information. Two different groups of health shocks are considered: obesity-related health shocks and general health shocks. Results: The relative informational value shows that the new health information is not viewed as more instructive than the information previously had. However, among the obese health shocks occurring between 2004 and 2006 lead to slightly higher mortality risk assessments in 2006 compared with 2004 assessments.

### BMI TRAJECTORIES AS PREDICTORS OF MORTALITY AMONG OLDER ADULTS

A. Zajacova[1], J.A. Ailshire[2], H. Beltran-Sanchez[2], *1. University of Wyoming, Laramie, Wyoming, 2. Andrus Gerontology Center, USC, Los Angeles, California*

OBJECTIVE. The aim of the project is to analyze how changes in body weight among older adults predict future mortality. The paper will determine the most common types of body weight trajectories, and analyze which trajectories are associated with an increased risk of dying. BACKGROUND. A large body of literature has documented a U-shaped association between BMI and mortality, with high-normal weight or overweight typically associated with lowest mortality. These descriptive survival-analysis results are often interpreted in terms of a causal effect of body mass on health and longevity. This is despite well-known methodological problems in this literature, especially 'reverse causality' whereby a low body weight is the result of a disease process ending in death. This problem can be solved with longitudinal data and appropriate methodological approaches, as proposed here. METHOD. Using 8 waves of the Health and Retirement Survey (HRS) collected biannually from 1992 to 2006, the sample (N>8,000) includes respondents aged 50-80 at baseline (mean BMI=26.4). Mortality followup is available through 2007. Data are analyzed using generalized growth mixture models (GGMM). First, age-adjusted GGMMs are used to determine the optimal number and shape of BMI trajectories. Second, the classes are used as predictors in discrete-time survival models. EXPECTED RESULTS. It is expected that data will fit multiple classes of BMI trajectories, with considerable variability within each class. It is further expected that declining BMI trajectories, indicating weight loss during the study, will be associated with higher mortality than stable or increasing body weights.

# SESSION 1335 (PAPER)

## CAREGIVER BURDEN

### DOES CAREGIVER BURDEN MEDIATE THE EFFECTS OF BEHAVIORAL DISTURBANCES ON NURSING HOME ADMISSION?

J.E. Gaugler[1], M.M. Wall[1], R. Kane[1], J. Menk[1], K. Sarsour[2], J.A. Johnston[2], K. Schuh[2], R. Newcomer[3], *1. School of Nursing, University of Minnesota, Minneapolis, Minnesota, 2. Eli Lilly and Company, Indianapolis, Indiana, 3. University of California-San Francisco, San Francisco, California*

The primary objective of this study was to determine whether caregiving burden mediated the relationship between specific behavior disturbances and time to nursing home admission (NHA) in persons with dementia. The study used secondary longitudinal data from The Medicare Alzheimer's Disease Demonstration, a Medicare-covered home care benefit and case management program for family caregivers of persons with dementia. Primary caregivers of persons with dementia were assessed via in-person and telephone interviews every 6 months over a 3-year period. Dementia caregivers were recruited from 8 catchment areas throughout the United States. The baseline sample included 5,831 dementia caregivers. Just over 40% (43.9%; n = 2,556) of persons with dementia permanently entered a nursing home during the 3-year study period. Individual behavior problems were measured with the Memory and Behavior Problem Checklist. Caregiving burden was assessed with a short version of the Zarit Burden Inventory. Key covariates, including sociodemographic background, functional status, and service utilization was also considered. Event history analyses revealed that time-varying measures of caregiver burden mediated the relationship between 4 behavioral disturbances (episodes of combativeness, property destruction, repetitive questions, and reliving the past) and NHA. The findings highlight the multifaceted, complex pathway to NHA for persons with dementia and their family caregivers. The results emphasize the need for comprehensive treatment approaches that incorporate the burden of caregivers and the behavioral/psychiatric symptoms of persons with dementia.

### SUBJECTIVE VERSUS OBJECTIVE SLEEP OUTCOMES: DOES THE CAREGIVER ALWAYS KNOW BEST??

S.M. McCurry, K.C. Pike, R.G. Logsdon, L. Teri, M.V. Vitiello, *University of Washington, Seattle, Washington*

In most insomnia treatment studies, improvements in self-reported sleep equal or exceed those for objective sleep outcomes. In dementia sleep studies, however, subjective sleep ratings are obtained from proxy caregivers rather than patient self-report. We compared subjective and objective sleep outcomes for 132 patients enrolled in a randomized clinical trial testing the efficacy of walking, light exposure, and a combination treatment to improve sleep in community-dwelling patients with Alzheimer's disease. Patients were 81 years old (range 59-95), 55% female, with a mean MMSE score of 19 (range 0-30). Caregivers were 71 years old (range 36-96), 65% female, and 72% spouses. Active treatment patients had significant ($p < .05$) post-test actigraphic reductions in total wake time (TWT) at night compared to control subjects, but no significant improvements on caregiver ratings of patient sleep on the Pittsburgh Sleep Quality Index (PSQI). We subsequently defined objective sleep improvement as a reduction of 40+ minutes TWT/night (actigraphy), and subjective improvement as PSQI < 5 or a drop of 5+ points. Subjective ratings more often agreed with actigraphy non-improvement than improvement. All cases showing congruent actigraphy and PSQI score improvement had a minimum TWT decrease of 66 minutes/night. No patient or caregiver demographic, mood, health, or behavioral variables predicted congruence. However, 8 of the 12 patients (67%) with objective TWT improvement but no PSQI improvement had caregivers who slept in a different room. Findings suggest large changes in TWT and close sleeping proximity are necessary for caregivers to recognize patient sleep improvements when they occur.

### ASSESSING QUALITY OF LIFE OF FAMILIES CARING FOR MEMBERS DIAGNOSED WITH DEMENTIA

I. Canty Williams, K. Rose, S. Parvulescu-Codrea, *School of Nursing, University of Virginia, Charlottesville, Virginia*

A diagnosis of a dementing illness affects the entire family unit and the person with the diagnosis. The diagnosis often forces the family to confront numerous issues that influence the entire family's quality of life. Yet, there is a paucity of studies on the impact that dementia has on the family of the person with the diagnosis. The purpose of this study was to develop and pilot-test an instrument to measure family quality of life in dementia (FQOL-D). The first phase employed professionals with expertise in dementia care and providers of services for persons with dementia and their families, to reach a consensus on items to be included in a FQOL-D scale. Twelve expert health care providers completed three Delphi survey rounds to determine face validity of items that they deemed important for determining FQOL care. Results indicated that 42 items (with a mean rating of 3.5 or higher on a 5 point scale), representing five overall domains, remained: family interactions; direct care/activities of daily living support; emotional/behavioral well-being; physical and cognitive well-being; and disease-related support/medical care. We also examined preliminary data from focus group interviews with persons with mild-moderate stage dementia and their family members. The focus group interviews allowed us to refine the instrument and fully capture the participants' unique perspectives on FQOL-D. Findings will be used to develop and test a clinically-meaningful instrument to be used to evaluate the effectiveness of interventions and supportive services for families and persons with dementia.

### THE EFFECTS OF INCIDENT AND PERSISTENT BEHAVIORAL PROBLEMS ON CHANGE IN CAREGIVER BURDEN AND NURSING HOME ADMISSION

J.E. Gaugler[1], M.M. Wall[1], R. Kane[1], J. Menk[1], K. Sarsour[2], J.A. Johnston[2], D. Buesching[2], R. Newcomer[3], *1. School of Nursing, University of Minnesota, Minneapolis, Minnesota, 2. Eli Lilly and Company, Indianapolis, Indiana, 3. University of California-San Francisco, San Francisco, California*

The individual contributions of behavior problems to key outcomes in dementia, such as nursing home admission (NHA) or caregiver distress, remain unclear. Similarly, whether changes in specific behavioral disturbances account for expedited NHA or increases in caregiving burden is not well understood. This study sought to determine the ramifications of temporal change in individual behavior problems when accounting for increases in caregiver burden and time to NHA. A sample of 4,545 dementia caregivers who participated in the Medicare Alzheimer's Disease Demonstration Evaluation was selected for this secondary analysis. Various patterns of change in individual behavior problems were considered as predictors of time to NHA and increases in caregiver burden over a 3-year period via Cox proportional hazards and mixed effects models, respectively. Caregivers who did not indicate a care recipient's dangerous behavior initially but did so subsequently (i.e., an "incident" behavior problem) were more likely to experience increases in burden. Alternatively, the persistent occurrence of behavior disturbances (particularly memory problems) emerged as the strongest predictors of time to NHA. The findings of this study suggest the benefit of examining temporal patterns of individual behavioral disturbances, and that incident and persistent problems account for different dementia outcomes over time. Considering the temporal ramifications and potency of specific behavior problems can facilitate the targeted and timely delivery of effective clinical interventions.

## SESSION 1340 (SYMPOSIUM)

### CHALLENGES AND STRATEGIES IN DOING RESEARCH IN END OF LIFE: LESSONS LEARNED FROM THREE SUCCESSFUL STUDIES

Chair: *D. Parker Oliver, University of Missouri, Columbia, Missouri*
Co-Chair: *E. Wittenberg-Lyles, University of North Texas, Denton, Texas*
Discussant: *D. Porock, University of Nottingham, Nottingham, United Kingdom*

Although methodological rigor is one of the central tenets of scholarly training, real-world applications of methodology can reveal true learning curves in the establishment of scientifically sound research. The leap from textbook instruction to application of inquiry can expose key gaps that far exceed a scientific lens. This learning curve can be especially problematic for researchers studying end-of-life care (namely hospice and palliative care), as there are additional challenges related to ethics, funding and recruitment. Recent literature in palliative medicine has documented these challenges with reports of studies that were not successful because they were unable to overcome the ethical challenges presented by un-informed institutional review boards or the gatekeeping barriers presented by professional staff. This symposium extends the discussion of these challenges by identifying methodological barriers to end-of-life research and sharing successful strategies previously used in four separate research projects. Each participant will share their experiences and lessons learned in their role as PI while conducting funded research in this population. Strategies used to address the challenges will be compared between studies, providing various ideas for future researchers seeking to successfully implement research with this population. Themes common to all projects will include ethical issues, funding obstacles, grant management demands, and subject recruitment barriers.

### ASSESSING CAREGIVER NEEDS IN HOSPICE: A PROBLEM SOLVING INTERVENTION

G. Demiris[1], D. Parker Oliver[2], *1. University of Washington, Seattle, Washington, 2. University of Missouri, Columbia, Missouri*

This pilot equivalency trial, funded by the National Institute of Nursing Research, randomized hospice caregivers into a group that received a problem solving intervention face to face and one that received the intervention via videophone technology. The presentation will discuss the strategies used in designing the study, partnering with diverse hospice agencies, selecting clinical measurement instruments, and managing a complex intervention in two large urban hospice agencies. Furthermore, the presentation will highlight two successful referral processes pursued in this study and the challenges of using information technology as a platform for cognitive behavioral interventions. In addition, the management of a changing community technology infrastructure, randomization challenges with hospice caregivers, budgetary considerations, staffing challenges, and subject recruitment in the context of hospice will be shared.

### ASSESSING CAREGIVERS FOR TEAM INTERVENTION VIA VIDEO ENCOUNTERS (ACTIVE)

D. Parker Oliver[1], G. Demiris[2], E. Wittenberg-Lyles[3], K. Washington[4], D. Porock[5], *1. Family and Community Medicine, Univesity of Missouri, Columbia, Missouri, 2. University of Washington, Seattle, Washington, 3. University of North Texas, Denton, Texas, 4. University of Louisville, Louisville, Kentucky, 5. University of Nottingham, Nottingham, United Kingdom*

This pilot project, funded by the National Cancer Institute, was a two phase mixed methods study which used videophone technology to empower hospice caregivers to join hospice interdisciplinary team meetings in two rural hospice programs. This two year pilot study gave us the experience necessary for a full scale RCT to begin in the Summer of 2010. The presentation will discuss the challenges of moving from a pilot into a larger study. Issues discussed will include funding for large scale projects, working across multiple sites at a geographic distance from the PI, strategies for managing large amounts of video data, experiences coordinating an international research team, challenges imposed by weather emergencies, and strategies for managing the new NIH public access for manuscripts from NIH funded work.

### EXPLORING CAREGIVING AT END-OF-LIFE: THE QUALITATIVE RESEARCH EXPERIENCE

K. Washington[2], D. Parker Oliver[1], *1. Family and Community Medicine, Univesity of Missouri, Columbia, Missouri, 2. University of Louisville, Louisville, Kentucky*

Researchers using qualitative approaches to study caregiving at end-of-life must often employ strategies to meet the sometimes conflicting demands posed by a commitment to the qualitative process, desire to obtain funding, and real or perceived need to demonstrate the rigor of one's work to others. Drawing from qualitative research experiences gained during a dissertation study funded by the John A. Hartford Doctoral Fellows Program, this presentation will consist of a candid discussion of the rewards and challenges associated with conducting qualitative work in end-of-life settings. Special attention will be paid to the unique circumstances facing students whose research will contribute to completion of their dissertation and serve as a mechanism to market themselves to potential employers.

## SESSION 1345 (POSTER)

## FAMILY CAREGIVING II

### RURAL AFRICAN AMERICANS' RETROSPECTIVE PERCEPTIONS OF NURSING HOME PLACEMENT

Y. Eaves, *University of Alabama at Birmingham, Hoover, Alabama*

Few studies have examined developmental, situational, and illness related transitions in rural African American caregiving families. Therefore, little is known about the experiences of African American older adults and their family caregivers and how they manage during critical transitions, and how and when they make decisions about long-term care (LTC). The purpose of this ethnographic study was to identify and analyze episodic and/or emergent health events that result in caregiving transitions, namely decision-making about LTC placement, in rural African American families. This study is ongoing, but at this point nine care recipients (older adults who were current LTC residents) and primary caregivers ages 36-91 have participated in semi-structured audiotaped interviews. Ethnographic analytic techniques are being used to code and classify the data and then formulate meaningful categories, themes, and patterns into an explanatory framework. One-half of the older adults living in the nursing home scored too low on the MMSE during pre-screening to take part, thus, only their primary caregivers were interviewed. Preliminary data analysis uncovered two stories of previous elder abuse, neglect, and violence by an unknown perpetrator. Two older adults verbalized satisfaction with care provided by the nursing home staff and viewed their stay at the nursing home as an improvement over previous living conditions and arrangements. The remaining older adults were angry at family members for institutionalizing them, and expressed a desire to go home. Next, findings from this work will be used to develop culturally relevant caregiving transitions interventions for this vulnerable group of older adults.

### THE BIRTH OF THE BLUES: DESCRIPTION AND VALIDATION OF A COMPOSITE MEASURE OF CAREGIVING DISTRESS

P.C. Griffiths[1,2], B. Center[3], K. Lindstrom Bremer[4], K. Hepburn[5], *1. Rehab R&D, Atlanta VAMC, Decatur, Georgia, 2. Emory University School of Medicine, Atlanta, Georgia, 3. University of Minnesota, Minneapolis, Minnesota, 4. Minnesota State University, Mankato, Minnesota, 5. Emory University School of Nursing, Atlanta, Georgia*

BACKGROUND: This study reports on an effort to establish validity for a multidimensional measure of caregiving Distress developed for use in the Partners in Caregiving Study (PIC). We report the results of a confirmatory factor analytic study of a dementia caregiving population entirely independent from the population on which we developed the Distress measure, using an exploratory factor analytic strategy. METHODS: We sought to validate a Distress measure derived and calculated on the original PIC data which was an efficacy study (Hepburn et al.,2005) using a new sample, recruited for the SAVVY Caregiver Program (Hepburn et al.,2007) a translational study led by volunteer trainers in three totally different locations in the US. We did not re-compute our formula for Distress, or optimize it in any way for the new data. RESULTS: Our Distress measure demonstrated strong content, construct, external and discordant validity, good stability over time and showed itself generalizable to three different populations under vastly different circumstances. A confirmatory factor analysis on this new population showed an excellent fit (GFI=.91; CFI=.98; NF=.95; RMSEA = .058). Our factor loadings ranged from $\lambda = .31$ to $\lambda = .85$ and were all significant ($p < .0001$). The Distress measure provides the field with a measure that is robust, stable over time, sensitive to experimental manipulation (such as our intervention), generalizable, applicable to a wide variety of caregiver populations, and relatively easy to compute and to use.

### UNDERSTANDING CAREGIVERS: VALIDITY OF THE CAREGIVING STYLE SCALE

K.S. Page[1], B. Hayslip[1], J. King[1], C. Henderson[2], *1. Department of Psychology, University of North Texas, Denton, Texas, 2. Sam Houston State University, Huntsville, Texas*

Caregivers face many challenges including financial issues, family conflict, time limitations, and conflicting role demands. The Caregiving Style Scale (CSS; King & Hayslip, 2005) was constructed to identify unique caregiving styles among caregivers in various contexts. The sample consisted of 437 caregivers (M age = 56.63; SD age = 11.13). Caregivers either cared for their grandchildren (N = 278) or a person with a dementia diagnosis (N = 159). Exploratory factor analysis identified the following factors (styles): authoritative, supportive/obligatory, authoritarian/anger, physical/emotional control, child-centered, and structured (see Page et al., 2010). The alpha coefficients of the factors ranged from .70 to .85. For the current study, these factors were correlated with measures relating to caregiving to establish the construct validity of the CSS. All but one of the six caregiving styles (not structured) correlated with the Positive Aspects of Caregiving scale (PAC; Tarlow et al., 2004), the Caregiver Appraisal Scale (CAS; Lawton et al., 1989), the Modified Caregiver Strain Index (MCSI; Thornton & Travis, 2003), and the Medical Outcomes Study 36-item Short Form (SF-36; Ware & Sherbourne, 1992). The authoritarian/ anger style correlated with various scales indicating poorer mental and physical health, fewer positive aspects of the caregiver role, and increased caregiver strain. These data speak to the construct validity of the CSS and suggest that professionals consider the manner in which caregivers interact with the family for whom they are providing care and their potential impact on both the caregiver and the care receiver.

### RECIPROCITY IN OLDER CAREGIVERS OF ADULTS WITH INTELLECTUAL DISABILITIES

E.A. Perkins[1], W.E. Haley[2], C. Vanderweerd[3], *1. University Center for Excellence in Developmental Disabilities, University of South Florida, Tampa, Florida, 2. School of Aging Studies, University of South Florida, Tampa, Florida, 3. College of Public Health, University of South Florida, Tampa, Florida*

Background: Parent caregivers of adult children with intellectual disabilities (ID) are unique because the lifespan duration of their caregiving responsibilities. Previous research has indicated that adult children with ID may provide help with household chores, and be an enduring source of companionship. The purpose of this study was to determine whether reciprocity (i.e. the balance between what is given versus what is received) was associated with quality of life variables of older caregivers of adult children with ID. Reciprocity was investigated using both tangible reciprocity (e.g. help with household tasks), and emotional reciprocity (e.g. verbal/non verbal affection). Method: A cross-sectional convenience sample of 91 parental caregivers (aged 50+ years, M=60.8) of coresiding adult children with intellectual disabilities, (aged 18+ years, M=29.7), were interviewed. Results: Caregivers reported giving more tangible support and emotional support than received. Relative disadvantage (i.e. giving more than received) in tangible reciprocity was associated with increased depressive symptomatology and poorer mental health, but also reduced desire for seeking alternative residential placement of the care recipient. Tangible reciprocity was not associated with physical health or life satisfaction. Emotional reciprocity was not associated with any quality of life measures. Discussion: In older caregivers, the salience of reciprocal imbalance with tangible tasks may be particularly noteworthy for ascertaining current psychological well-being. The greater commitment to the continued coresidence of less reciprocal care recipients, suggests a reticence of these lifelong caregivers to consider alternative residential placement, and may indicate captivity in their caregiving role.

### HOW DO INFORMAL CAREGIVERS AFFECT FUNCTIONAL DEPENDENCE OF OLDER ADULTS RECEIVING FORMAL HOME HEALTH CARE SERVICES?

E. Cho, *Yonsei University College of Nursing, Seoul, Republic of Korea*

Aim: The aim of this study was to examine differences in functional dependence between older adults with and without informal caregivers. Furthermore, this study examined whether those differences were attributable to the type of informal caregiver. Background: Most dependent older adults receive care from informal caregivers. Nevertheless, few studies have investigated the effects of informal caregivers on the functional dependence of older adults. Methods: We performed a secondary data analysis using a computerized patient care database, the Outcome and Assessment Information Set (OASIS). Our sample population included 8,750 people aged 65 and more who were admitted to a home health care (HHC) agency from acute care hospitals between January 1 and June 30, 2002. We conducted multiple linear regression analysis with functional dependence after a 60-day episode of formal HHC as the outcome variable. Results: The majority of older adults (83.4%) receiving formal HHC services also receive care from informal caregivers. These older adults show less functional dependence at discharge ($\beta=-0.821$, $p<0.05$) than do those with no informal caregiver, and older adults who have a spouse ($\beta= -3.886$, $p<0.001$), offspring ($\beta= -3.614$, $p<0.001$), relative ($\beta= -4.360$, $p<0.001$), or non-relative ($\beta= -4.977$, $p<0.001$) caregiver show less functional dependence at discharge compared to those who have a paid caregiver, when controlling for risk factors. Conclusions: The professional nursing staffs at HHC agencies need to fully assess caregiver arrangements. HHC agencies should consider interventions aimed at reducing the functional dependence of older adults with no caregiver or with a paid caregiver.

### CORRELATES OF POSITIVE AND NEGATIVE APPRAISAL OF CAREGIVING IN VARIOUS TYPES OF CARE RELATIONSHIPS

M. Broese Van Groenou[1], A.D. Boer[2], J. Iedema[2], *1. Sociology, VU University, Amsterdam, Netherlands, 2. The Netherlands Institute for Social Research, The Hague, Netherlands*

The present study investigated the pathways underlying the dual (positive and negative) appraisal of caregiving in different types of relationships. Based on the caregiver stress model, it is examined to what degree objective stressors, motivational factors, coping behavior, external support and background characteristics of caregivers impact positive and negative appraisal of caregiving among spousal, adult child and other types of caregivers. Data from a large national sample of informal caregivers of 1434 older persons in the Netherlands allowed structural equation modeling (SEM) to examine the direct and indirect effects among independent and dependent variables. Descriptive results showed that spouses report more positive appraisal and more burden than adult children and other types of caregivers. The SEM analyses showed that the correlates of burden differed from correlates of positive appraisal and in part varied by type of relationship. Motivational factors were most important for positive appraisal, whereas objective stressors, coping style and assistance from others were, in addition to motivation, more important for burden. Which type of motivation, which type of assistance and which objective stressors impact caregiver appraisal, depended on the type of care relationship. In none of the care relationships, positive appraisal was directly associated with burden. The results underscore the dual nature of caregiving and showed that the pathways underlying appraisal of caregiving vary by type of care relationship. Implications for different types of intervention programs to support caregivers are discussed.

### CARE NEEDS OF OLDER ADULTS WITH DEPRESSION AND THEIR FAMILIES: A QUALITATIVE ANALYSIS

M. Luptak, *College of Social Work, University of Utah, Salt Lake City, Utah*

As the most widespread mental health issue in late life, depression affects the lives of numerous older adults and their families in this country. To better understand care needs in these families, this study explored the experiences of families involved with community-dwelling relatives age 60 and above with a diagnosis of major depression. In-depth individual face-to-face interviews were conducted with family members in 20 families to elicit their views about various aspects of their experiences (e.g., how they understand and respond to the older adult's depression, needs that surface, and coping strategies employed to meet those needs). Interviews were digitally recorded and transcribed and qualitative analysis was conducted using QSR NVivo 8 software to identify and refine codes and categories as new themes and patterns emerged within families and across families. Family members included primary kin (spouses, adult children, siblings, and significant others), secondary kin (nieces, grandchildren, step-relations, and in-laws), as well as individuals who were identified as family by the older relative with depression. Results provide rich descriptions of the family members' roles (e.g., providing hands-on assistance, helping with decision making, offering emotional support to the older adult and/or to other family members) and needs (e.g., affordable family therapy, educational resources, respite), and suggest family-centered approaches should be considered when planning interventions for older adults with depression.

### CAREGIVER STRAIN AND FUNCTIONAL STATUS

J. Saunders, C. Cookman, *Texas Tech University Health Sciences Center, Lubbock, Texas*

Most research is focused on the relationship between caregiver strain and the care recipient's functional status; however, equally important is an understanding of the caregiver's functional status and it relationship to strain. A study (n= 613) was conducted using mailed surveys to explore health-related needs of older adults (65 & older) in West Texas, which included caregivers (n=365). This analysis examines differences in functional status between two groups of caregivers; one that reported caregiver strain and one that did not. Caregivers completed a demographic questionnaire, the 13-item Caregiver Strain Index (CSI) and the Medical Outcomes Study Short Form 36 (SF-36). The mean age was 75.26 with a range of 65 to 95. The majority were female (61%), married (58%), Caucasian (85%), living in a house (85%), 2 person household (52%), retired (81%), and caring for spouse (33%). An item analysis was conducted to explore mean differences in functional status between caregivers who indicated that an item was a source of strain and those that indicated that it was not a source of strain for them. The three sources of caregiver strain with the greatest numbers of significant differences in functional status mean scores (p=<.05)—hence most likely to influence functional status were (1) financial strain, (2) feeling completely overwhelmed, and (3) changes in personal plans. It is important to understand that quality of care for the care recipient is intertwined with the functional status of both the care recipient and the caregiver: empirical knowledge of each is needed.

### INFORMAL CAREGIVING IN STROKE FAMILIES: LINKS BETWEEN THE MENTAL HEALTH FUNCTIONING OF CAREGIVERS AND CARE RECEIVERS

G. Smith, *Kent State University, Kent, Ohio*

Prior research on family care for stroke survivors has relied mainly on data from caregivers (CG) without corresponding data obtained from care recipients (CR). Especially lacking are investigations of relationships between diverse indices of psychosocial functioning as reported by each member of the CR-CG dyad, despite the growing belief that the mental health of both members is entwined. The present study extends past research by examining the patterns of interrelationships between baseline measures of psychological distress, competence, mastery, self-esteem, and social support obtained from 30 male stroke survivors (SS) and their CG spouses enrolled in a randomized clinical trial of a psychoeducational intervention for stroke families. Pearson Product Moment correlations revealed that multiple indices of CG distress (depression, anxiety, anger, and burden) were related significantly and adversely to the levels of perceived overprotection, mastery, self-esteem and social support reported by SS. However, the relationships between SS psychological distress (depression and anxiety) and all indices of CG psychological distress failed to reach significance. From a stress and coping perspective, these findings suggest that psychological distress experienced by the CG may operate to erode the coping resources of the SS. Implications for interventions with caregiving families will be discussed. [Funded by R21NR010189-01A1].

### PHYSICIANS' AND NURSES' PERCEPTIONS OF THE INFORMATION NEEDS OF CAREGIVERS OF PERSONS WITH DEMENTIA

V. Steiner, L.L. Pierce, *University of Toledo, Toledo, Ohio*

Understanding of and attention to family caregivers' challenges/needs are essential aspects of caring for people with dementia. This study identified information needs of dementia caregivers as perceived by primary care physicians (PCPs) and registered nurses (RNs). Both groups were mailed a 48-item survey and asked to choose the top ten information needs they thought family caregivers experienced in caring for someone with memory problems. PCPs (n=44) worked in outpatient clinics in two Midwest states and were primarily white males who were, on average, 49 years old and had spent 21 years caring for dementia patients. RNs (n=102) worked in long term care settings in the eastern half of the United States and were primarily white females who were, on average, 56 years old and had spent 24 years caring for dementia patients. Managing the care recipient's (CR's) loss of bladder/bowel control was the top information need identified by both PCPs (59%) and RNs (67%). Although in a different order of frequency for the two groups, the next three top needs were also the same. These included: 1) managing the CR's forgetfulness/confusion [PCPs=57%; RNs=55%], 2) dealing with the caregiver's changing relationship with the CR [PCPs=52%; RNs=52%], and 3) providing personal care to the CR [PCPs=57%; RNs=50%]. The top needs related mostly to help the caregivers required in caring for the person, and not help they required for themselves. These information needs can be used by healthcare professionals who care for families experiencing dementia to develop educational materials and supportive interventions.

### THE ROLE OF EMBARRASSMENT IN CAREGIVER DISTRESS: MEASURE DEVELOPMENT AND VALIDATION

J. Montoro-Rodriguez[1], K. Kosloski[2], K. Kercher[2], R. Montgomery[3], *1. California State University San Bernardino, San Bernardino, California, 2. University of Nebraska at Omaha, Omaha, Nebraska, 3. University of Wisconsin, Milwaukee, Wisconsin*

Recent research indicated that two factors that appear to capture the effect of embarrassment associated with the care receiver's illness appeared to increase depression in a sample of caregivers. Embarrassment was measured as two distinct factors, with two indicators of each factor. The goal of the present study was to develop a broader measure of embarrassment and to evaluate the construct validity of this measure by relating it to relevant antecedent and outcome variables. Data were obtained from 280 adults participating in the League of Experienced Family Caregivers (LEFC) who were caregivers primarily of dementia patients. The League is a registry of family caregivers who volunteer to complete questionnaires and share information about their caregiving experiences. Data were collected on the antecedent variables of problem behaviors and neuroticism. Three types of burden (stress, interpersonal, and objective burden) served as logical outcomes. Twelve embarrassment items were added to the original four. The analyses proceeded in two phases. First, exploratory factor analyses revealed three embarrassment factors – two originally hypothesized by Goffman: (1) discredited embarrassment (e.g., I avoid company in my home), (2) discreditable embarrassment (e.g., It is embarrassing to take my relative out in public), and a third embarrassment factor that reflects fear of public exposure (e.g., I often feel the need to hide my relative's illness from others). Second, a causal model linking the three embarrassment models to the antecedents and outcomes fit the data reasonably well (CFI=.93, T-L=.92, RMSEA=.05), offering substantial support for the construct validity of the embarrassment factors.

### ASSOCIATIONS OF POSITIVE AND NEGATIVE AFFECT WITH STRESS BIOMARKERS IN CAREGIVERS AND NON-CAREGIVERS

L. Fredman[1], C. Mezzacappa[1], S.O. Stuver[1], T. Heeren[2], *1. Epidemiology Department, Boston University School of Public Health, Boston, Massachusetts, 2. Biostatistics Department, Boston University School of Public Health, Boston, Massachusetts*

The protective associations between optimism and positive affect with stress-related biomarkers are thought to be distinct from the absence of depression, but few studies have compared these relationships. We evaluated associations between optimism (LOT-R scale), the 4-item positive affect (PA) and 7-item depressive affect (DA) subscales from the Center for Epidemiologic Studies-Depression Scale on Interleukin-6 (IL-6), Dehydroepiandrosterone-Sulfate (DHEA-S), and Cortisol in a sample of 51 caregivers to a person with Alzheimer's Disease or Parkinson's Disease and 124 non-caregivers from the Boston metropolitan area. Caregivers were significantly younger (mean age=71.6 vs. 75.6, $p<0.01$) and more stressed than non-caregivers, but did not differ on optimism (mean = 18.8), PA (mean = 10.5), or DA (mean = 2.3). They had lower lnDHEA-S scores than non-caregivers (mean=3.7 vs. 4.0, p=0.09), but did not differ on lnIL-6 or lnCortisol. The LOT-R and PA were highly correlated (r=0.61), and were negatively correlated with DA score (r=-0.48 and -0.63, respectively). In linear regression analyses adjusted for age, gender, and comorbidities, optimism and PA had the same association with lower lnIL-6 (LOT-R beta=-0.038, $p<0.01$; PA beta =-0.037, p=0.16) as DA had with higher lnIL-6 (beta = 0.033, p=0.11). There were non-significant trends toward higher PA and elevated lnDHEA-S (beta = 0.039, p=0.21) and higher optimism and lower lnCortisol (beta = -0.023, p=0.13). Most of these associations were stronger in caregivers. These results suggest that the associations between optimism and PA with IL-6 are similar to the inverse of depressive affect, while those with neuroendocrine markers are less consistent.

### CAREGIVER IDENTITY DISCREPANCY SCALE: RELIABILITY, CONSTRUCT VALIDITY AND UNIDIMENSIONALITY

K. O'Connell Valuch[1], J. Kwak[1], M. Brondino[1], K. Kosloski[2], R. Montgomery[1], *1. Applied Gerontology, UW-Milwaukee, Milwaukee, Wisconsin, 2. University of Nebraska-Omaha, Omaha, Nebraska*

The Caregiver Identity Discrepancy (CID) Scale, a six-item global measure, was originally developed to measure the discrepancy between caregivers' expectations about their roles and actual behaviors based on the Caregiver Identity theory (Montgomery & Kosloski, 2009). The current study examines reliability, validity and unidimensionality of the CID scale. The sample of 399 family caregivers from four states was screened for a large randomized control study of a care management intervention. Cronbach's alpha for the scale was 0.8320. Results from the CFA analysis indicate that the fit of the model to the data is acceptable (X2=1121.46, p=0.001; CGI=0.98, T-L=0.98; RMSEA=0.046; and SRMR=0.051). For the Rasch analysis, the person reliability for non-extreme persons was low (Real RMSE=0.74, Model RMSE=0.80), however, the item reliability for all 6 items was high (Real RMSE=0.97, Model RMSE=0.97). Infit statistics for 5 of the 6 variables were within normal range (-2 to 2), as were outfit statistics for 4 of the 6 variables. The PCA of the residuals suggested unidimensionality of the scale, with 51.6% of the raw variance being explained by the scale, 35.9% of the raw variance explained by the items, and the first eigenvalue of the first contrast being less than 2. Findings from this study demonstrate (1) reliability and validity of the CID Scale and (2) CID as a distinct unidimensional construct.

### PARTNERS IN CAREGIVING: EFFECTS OF A PSYCHOEDUCATIONAL INTERVENTION ON ALZHEIMER'S CAREGIVING DAUGHTERS

K. Hepburn[1], K. Lindstrom Bremer[2], P.C. Griffiths[3,4], B. Center[5], *1. Emory University School of Nursing, Atlanta, Georgia, 2. University of Minnesota, Minneapolis, Minnesota, 3. Rehab R&D, Atlanta VAMC, Decatur, Georgia, 4. Emory University School of Medicine, Atlanta, Georgia, 5. Minnesota State University, Mankato, Minnesota*

Adult daughters provide much of the informal care for elders with Alzheimer's disease, at substantial cost to their own health and well-being. Because daughters will be providing much of the care for the millions of AD sufferers over the next 50 years, it is imperative that interventions be developed and tested to help these caregivers. This study evaluated a six-week group psychoeducational intervention on daughter caregivers using data from a larger study: The Partners in Caregiving program (PIC). PIC was a randomized-waitlist control trial which aimed to strengthen caregivers' skills, caregiving strategies, knowledge of AD, and acceptance of the caregiving role (Hepburn et al., 2005). We tested the PIC intervention's ability to relieve caregiver distress in a subsample of daughters only (N=54) using a mixed methods approach of standardized quantitative instruments augmented by qualitative interviews. The daughters ranged in age from 33 to 70 (mean=48,sd=9) and were caring for recipients who ranged in age from 55 to 96 (mean=78,sd=7) and who were predominately mothers to the caregivers(87%). Half(.50) of the dyads lived together in the same home. Unlike the larger PIC study, there were no significant differences in the global measure of caregiver distress for the daughters. However, significant increases in Caregiving Competence were found for the caregivers in the intervention group. The results of the qualitative analysis are used to discuss these findings and to highlight directions for future research in light of the unique needs of caregiving daughters.

### FAMILY CAREGIVERS OF ADRD PATIENTS IN LTC: AN EXPLORATION OF STAFF & FAMILY PERCEPTIONS

T. Walker, M.K. Keaveny, V. Felix, D.W. Coon, *Arizona State University, Phoenix, Arizona*

This research project used structured surveys and focus groups as well as focused interviews to explore staff (N = 51) and family member (N=19) perceptions of the needs of family caregivers of ADRD (Alzheimer's disease and related disorders) patients in long-term care (LTC) facilities. Four overarching themes emerged regarding family caregiver needs: 1) REASSURANCE that this was "not your grandma's nursing home" (e.g., reliance on family member expertise, the power of touch, provision of comfort and safety, and embracing the circle of care); 2) EMOTIONAL SUPPORT (e.g., helping families face fears about dementia and accept patient decline, as well as normalize emotions, such as guilt, grief, and loneliness); 3) INFORMATION & EDUCATION about LTC facilities, ADRD, and available resources, as well as, the need for permission to place their loved ones; and, 4) IMPROVED COMMUNICATION & ADVOCACY to address frequent staff turnover, poor channels of communication, and lack of relationships with physicians. Ways to address these needs emerged at multiple levels of interventions: 1) INDIVIDUAL & INTERPERSONAL (e.g., communication skills training, dementia education); 2) ORGANIZATIONAL/SYSTEM (e.g., fax referral systems, staff orientations, video series on LTC & dementia); 3) COMMUNITY (interprofessional education on LTC; public awareness campaigns to reduce LTC stigma); and, POLICY (including local, state and national policy such as demonstration project on LTC and family caregiving, as well as organizational policy such as active use of family advisory councils, and revised policies and procedures for family orientation and involvement in care planning).

### ROLE OF SPIRITUALITY/RELIGIOUS PRACTICES AMONG HISPANIC FAMILY CAREGIVERS: A QUALITATIVE APPROACH

S.S. Koerner, Y. Shirai, R. Pedroza, *Family Studies and Human Dev., University of Arizona, Tucson, Arizona*

There is evidence that religion/spirituality may be a coping strategy that is particularly important for Hispanic caregivers (Dilworth-Anderson et al., 2002; Mausbach et al., 2003). However, because the extant research relies almost entirely on quantitative standardized measures, it does not permit insights into the way in which religion/spirituality functions in the daily lives of Hispanic caregivers and it does not fully reveal how these caregivers themselves view religion/spirituality as beneficial in their role as caregiver. To obtain a more nuanced, emic look at the role of religion/spirituality in the lives of Hispanic caregivers, we posed an open-ended question to a sample of 67 informal caregivers of Mexican-descent, living in southern Arizona. 86.6% cared for an older parent; mean age of the caregivers and care-recipients was 52.9 and 80.6 years, respectively. The caregivers described (in English or in Spanish) how their spiritual beliefs and practices have been important or meaningful in their role as a caregiver. Inductive thematic analyses conducted by a bilingual-bicultural coder (and confirmed via a secondary coder) yielded 6 thematic categories with 2-7 codes per category. Example categories and codes include: (a) Practices: pray, meditate, attend mass; (b) When Practiced: daily, at difficult caregiving times; (c) Beliefs: fate/God's desire, bible/God's teachings (honor thy parents); and (d) How Practice/Belief Helps Caregiver: provides inner strength/peace, helps caregiver manage the many day-to-day caregiving tasks, allows caregiver to vent, helps caregiver to forgive past resentments, provides caregiver hope for the future. Implications for further research and scale development will be discussed.

### DEMENTIA CAREGIVERS WHO REPORT CLOSER RELATIONSHIPS WITH CARE RECIPIENTS DISPLAY DECREASED EMOTIONAL WELL-BEING OVER TIME

E.B. Fauth[1], K. Piercy[1], M.C. Norton[1], K. Hess[1], A. Morrison[2], P. Rabins[2], C. Lyketsos[2], J. Tschanz[1], *1. Family, Consumer, and Human Development, Utah State University, Logan, Utah, 2. Johns Hopkins University, Baltimore, Maryland*

Recent research finds that higher care dyad closeness (as reported by the caregiver) predicts slower cognitive decline in the person with dementia (PWD). The current study examines whether physical and emotional outcomes for caregivers also change in relation to care dyad closeness. We would not expect that closer relationships necessarily protect caregivers. In fact, research suggests that cognitive impairment in the PWD is related to poorer emotional outcomes for the caregiver, which we suspect may be exacerbated in caregivers who are more emotionally attached to the PWD. The current analyses use longitudinal data from a representative sample of dementia caregivers residing in Cache County, Utah (N=247 caregivers assessed every 6 months for up to 6 years; 76.5% female, 56% with at least some college, 90% married). Mixed models tested whether baseline caregiver-reported dyad closeness (6-item scale, 6-24) predicted change in affect balance, the Beck Depression Inventory (BDI), and all eight SF-12 subscales (caregivers' physical and emotional well-being), adjusting for covariates of caregiver age, gender, education, and PWD dementia duration. On average, caregivers' scores on the BDI and the four physical health and one vitality SF-12 subscales did not change over time, nor were interactions present with caregiver closeness. For affect balance, and the mental, emotional, and social SF-12 subscales, there was no significant change over time for the whole sample, but significant interactions emerged with caregiver closeness, with closer caregivers reporting decreases in well-being over time. This study suggests that closer caregivers may need greater monitoring for changes in well-being.

## SESSION 1350 (PAPER)

## IMMIGRATION AND CAREGIVING

### RESOURCES PREPAREDNESS AND CAREGIVING SELF-RATING AMONG OLDER INFORMAL CAREGIVERS

S. Ahn[1], A. Hochhalter[2,1], M.L. Smith[1], J. Covin[3], A.B. Stevens[2,1], M. Ory[1], *1. Texas A&M University System Health Science Center School of Rural Public Health, College Station, Texas, 2. Scott & White Healthcare, Temple, Texas, 3. University of Mary Hardin-Baylor, Belton, Texas*

Background. Current research documents that having sufficient social support, financial preparedness, and satisfactory health status is associated with increased probability of being an informal family caregiver. The purpose of this study was to identify characteristics associated with being a family caregiver and one's self-rating of the quality of care provided in community-based sample of older Texans. Methods. Data were collected from 1,071 adults (≥ 60 years) responding to a statewide telephone survey of a random sample of Texas households in 2008. The survey was designed to evaluate aspects of successful aging. Study variables included: demographics; community and family support system; caregiving resources (financial, other preparedness); health resources; and caregiving duration. Logistic regression analyses were performed. Results. Respondents who had sufficient resources were more likely to provide informal care. Caregiving was more common among those who talked to family or friends on the phone daily (OR=1.78); were married (OR=1.61); and had better physical health (OR=1.71). However, caregiving was less common among those who were non-Hispanic white (OR=0.53) and well prepared for future financial needs (OR=0.60). High self-rated quality of care provided was associated with better physical health (OR=3.18); not having limitations in activities of daily living (ADL) (OR=2.5); and caregiving longer than 10 years (OR=3.96). Conclusions. Findings suggest that interventions to encourage preparing financially, maintaining strong support systems, and encouraging maintenance of optimal health may foster informal caregiving and more positive feelings about the care provided to loved ones.

### WE ARE THEM: MULTICULTURAL WORKERS AND FAMILIES CARING FOR A PERSON WITH DEMENTIA

D.L. Boughtwood[1,2], C. Shanley[2], J. Adams[1], Y. Santalucia[2], H. Kyriazopoulos[3], *1. University of Queensland, Sydney, New South Wales, Australia, 2. Aged Care Research Unit, Liverpool Hospital, Sydney, New South Wales, Australia, 3. Alzheimers Australia South Australia, Adelaide, South Australia, Australia*

‘We are them’ is an extract from an interview with an Arabic Multicultural Worker who was discussing the culturally appropriate services she provided in dementia day-care. In Australia, where this study was conducted, the term culturally and linguistically diverse (CALD) has been used since 1996 to refer to groups from backgrounds other than the majority Anglo culture. This study examined Arabic, Chinese, Italian and Spanish speaking family carers of people with dementia, living in South Western Sydney, which has a high proportion of people from CALD backgrounds. The specific aspect of the study discussed in the paper is qualitative interviews with multicultural aged care workers. These workers have an important role in assisting people with dementia and their families in accessing health and welfare services, yet despite their essential role, little research has focused on what workers actually do. The paper explores the roles of workers in individual family work, in supporting carers and in community education and engagement. These findings offer valuable evidence to inform policy and practice and further support the need for workers to receive ongoing training, supervision and support.

### PATIENTS’ RIGHT NOT TO KNOW: EXPLORING THE ATTITUDES OF OLDER IRANIAN IMMIGRANTS ABOUT MEDICAL DISCLOSURE OF TERMINAL ILLNESS

S.S. Martin, *social work, university of alabama, Tuscaloosa, Alabama*

Health care providers in America have legal and ethical responsibilities to disclose a diagnosis of terminal illness to their patient, no matter how painful the news may be to the patient. The literature reveals that the desire to know about terminal illness is not shared by all people. As noted by Brotzman and Butler (1991), “All cultures do not share Western views on the positive value of disclosure” (p. 426). Few studies have explored patients’ preferences for disclosure of unfavorable medical information. Despite the large number of older Iranian immigrants in the United States, little research has been conducted concerning the health of this population. Salari (2002) described older Middle Eastern immigrants as “invisible” in the aging literature. This study aimed to explore 1) the attitudes of older Iranian immigrants about disclosure of terminal illness by health care providers, 2) how attitudes about medical disclosure of terminal illness may influence the care seeking behaviors of older Iranian immigrants in the U.S.? Using a phenomenological methodology, in-depth, semi-structured interviews were conducted with 15 older Iranian immigrants. Data was analyzed using methodology developed by Colaizzi (1978). The major themes were: 1) preferences for delivery of bad news, 2) the right not to know, 3) treat me without scaring me to death, 4) strength of the heart (quvvat-I qalb). The participants’ desire to not know about terminal illness was demonstrated by their reluctance to seek preventive care as well as an equal reluctance to seek care when a serious illness was suspected.

## SESSION 1355 (SYMPOSIUM)

### INTERACTION SETTINGS IN INSTITUTIONS OF RESIDENTIAL CARE

Chair: *R. Rupprecht, Institute of Psychogerontology, Friedrich-Alexander-University of Erlangen-Nuremberg, Erlangen, Germany*
Co-Chair: *F. Oswald, Interdisciplinary Ageing Research, Faculty of Educational Sciences, Goethe University, Frankfurt, Germany*
Discussant: *H. Chaudhury, Department of Gerontology, Simon Fraser University, Vancouver, British Columbia, Canada*

Residential care has been in the focus of gerontology for a long time and a great body of empirical research work shows the importance of the physical as well as the social environment for the residents quality of life in care settings. However, there are open questions concerning the complex role of interaction patterns between residents, relatives, staff, the physical setting and the administration. The aim of this symposium is to gather recent findings on interaction settings, conducted in institutions of residential care. We start with a paper by Doyle and deMedeiros presenting findings from an ethnographic study of social environments within a dementia care residence emphasizing the importance of friendly contacts among small group of residents. The second paper by Oswald et al. focuses on the role of processes of social interaction and everyday behavior in a combined resident and caregiver assessment of life quality. In the third paper Engel and Heyder will present a training program that attempts to improve the interaction of dementia care triads (patients, staff members and relatives) in long-term care facilities. Next, Rupprecht and Lang deal with aspects of organizational environment in nursing homes. Different models of administration are analyzed with reference to the satisfaction with quality of nursing care by residents, their relatives and staff members. Finally the study findings will be discussed by Chaudhury in the light of existing challenges in the field.

### NESTED SOCIAL GROUPS WITHIN THE SOCIAL ENVIRONMENT OF A DEMENTIA CARE ASSISTED LIVING

P.J. Doyle[2,1], K. de Medeiros[1,4], P. Saunders[3], A. Mosby[1], *1. The Copper Ridge Institute, Sykesville, Maryland, 2. Doctoral Gerontology Program, University of Maryland - Baltimore County, Baltimore, Maryland, 3. Department of Neurology, Georgetown University, Washington, District of Columbia, 4. Department of Psychiatry and Behavioral Sciences, Johns Hopkins University, Baltimore, Maryland*

The social environments of people with dementia are unique and complex. Research investigating how residents in a dementia care setting successfully/unsuccessfully navigate and participate within social groups is critical as the therapeutic benefit of social engagement is unequivocal. This paper will present findings from an ethnographic study of social environments within a dementia care residence. While previous literature has highlighted the importance of cognitive abilities in maintaining social relationships, this study found that there is active socialization between residents and even strong and lasting friendships formed. Interestingly, many of these friendships exist within small groups that are ‘nested’ within the larger social environment. These ‘nested social groups’ have unique social dynamics and are often influenced by outside forces (e.g., staff preferences). These groups and their composition have implications for the larger social environment and individual residents. The importance of nested social groups in this setting will be discussed.

### THE DEVELOPMENT OF A COMBINED RESIDENT AND CAREGIVER ASSESSMENT OF QUALITY OF LIFE IN INSTITUTIONAL SETTINGS: QUALITATIVE FINDINGS

F. Oswald[1], I. Himmelsbach[1], H. Wahl[2], C. Koniecny[2], C. Heusel[3], *1. Interdisciplinary Ageing Research, Goethe University Frankfurt, Frankfurt, Germany, 2. Institute of Psychology, Dept. of Psychological Ageing Research, University of Heidelberg, Heidelberg, Germany, 3. Paul Wilhelm von Keppler-Foundation, Sindelfingen, Germany*

The presentation is based on the development of a multidimensional quality of life assessment for people living in institutional settings, including both a semi-structured face-to-face interviews with the resident and a moderated group session addressing the resident from the caregivers' perspective. The assessment addresses 12 dimensions for life quality. The aim of this presentation is to analyze the content structure of each category in relation to processes of interaction. Currently, 634 assessments have been accomplished (78.2% women; 33.2% demented) in 21 nursing homes (mean duration: 3.9h), of which 250 have been analyzed qualitatively. Among other aspects, findings revealed that 5 out of 12 dimensions are particularly characterized by processes of social interaction and everyday behavior (e.g., spirituality, social relationships, meaningful activities, eating and drinking). The results contribute to a more complex understanding of life quality in institutional settings as well as to the important role of fit between the residents' and the caregivers' perspectives.

### EDUKATION TANDEM – AN INTERVENTION TO IMPROVE COOPERATIVE TRIADIC COMMUNICATION BETWEEN NURSING HOME STAFF, FAMILY MEMBERS AND DEMENTED RESIDENTS

S. Engel, M. Heyder, *Institute of Psychogerontology, Friedrich-Alexander-University of Erlangen-Nuremberg, Erlangen, Germany*

The authors report on a pilot study designed to develop a model program that attempts to improve the triadic interaction of dementia care triads in long-term care facilities. Data were collected from focus groups of nursing home staff and of family members of demented resident to understand the different adversarial positions leading to conflicts, stress and dissatisfaction. Addressing these results EduKation TANDEM was designed to improve the relationship between families and nursing and to enable dementia communication. EduKation TANDEM consists of eight 2-hour joint sessions for staff and family participants, to be conducted weekly. EduKation TANDEM was pilot tested in a nursing home and revised accordingly. To evaluate this program interviews with the participants were conducted and a communication observation instrument was developed and tested. The program and findings will be presented.

### MODELS OF NURSING HOME ADMINISTRATION: EFFECTS AND IMPLICATIONS ON SATISFACTION WITH CARE QUALITY

R. Rupprecht, F.R. Lang, *Institute of Psychogerontology, Friedrich-Alexander-University of Erlangen-Nuremberg, Erlangen, Germany*

It is not well understood, in what ways models of nursing home administrations have direct or indirect effects on the living conditions and life quality of the residents. In 2008 we have compared three prototypical administration models in a sample of 75 randomly selected nursing homes: (1) standard model (one nursing home administrator (NHA) and one director of nursing (DoN) are responsible for one nursing home), (2) alternative "A" (one NHA is responsible for more than one nursing home) and (3) alternative "B" (the NHA is also responsible for the tasks of the DoN). N=404 residents, N=468 nurses, N=417 relatives and N=140 NHDs respectively DoNs volunteered for the study. Assessing information from different perspectives of professionals, respondents and relatives allowed for improved understanding on the context-dependent effects of administrative nursing home models. Generally, standard models were adequate in larger units, whereas concatenated functions prove more adequate in small units.

## SESSION 1360 (SYMPOSIUM)

### INTRODUCING PROJECT TALENT: DEVELOPMENT OF A COMPREHENSIVE LONGITUDINAL DATABASE FOR STUDYING AGING

Chair: *S.J. Lapham, American Institutes for Research, Washington, District of Columbia*
Discussant: *R. Suzman, NIH/NIA, Bethesda, Maryland*

This symposium is specially designed to introduce Project TALENT (PT) to the GSA membership. PT is a large-scale longitudinal study of 440,000 people, and began in 196, when the participants were in high school. The American Institutes for Research (AIR), with support from the National Institute on Aging, is planning a 50-year follow-up study to measure early life influences on participants who are now in their mid-sixties. The base year survey collected information on hundreds of items measuring aptitude and ability, spatial visualization, personality and inventories, and a 394-item background questionnaire. Plans for data expansion include linkages to the National Death Index, Social Security Administration employment and disability records, and Veteran Administration military records. Plans for additional data collection include measures of cognition, saving and financial literacy, behavioral genetics, health and mortality. Dissemination and broad use of the data by the research community is a major goal and through presentations such as this, we plan to inform researchers about the study's aims, design, data content, and availability. This presentation also provides the Project TALENT team with the opportunity to hear from the research community as the study is being developed. Individual presentations will cover the following topics: 1) Overview of Project TALENT: Design, Data and Dissemination; 2) Designing Data Linkage Systems for Project TALENT; 3) Cognition in Later Life; and 4) Financial Literacy and Savings.

### OVERVIEW OF PROJECT TALENT

P.K. Peltola, *American Institutes for Research, Washington, District of Columbia*

This paper examines the scientific, public policy, and organizational background out of which Project TALENT emerged. It describes the evolution of the major parameters of the survey and the unique planning structure designed to ensure that the substantive insights of the research community were fully reflected in the content of the database; highlights key survey innovations contained in Project TALENT; and provides a preliminary assessment of the quality of the data as reflected by sample size, sample composition, response rates, and survey content. This paper also describes the types of administrative data that are expected to be added to Project TALENT: mortality and cause of death from the National Death Index and earnings and benefits data from the Social Security Administration.

### DESIGNING DATA LINKAGE SYSTEMS FOR PROJECT TALENT

C.B. McPhee, *AIR, Washington, District of Columbia*

Probabilistic linkage techniques make it feasible and efficient to link large databases in a statistically reliable manner. The problem addressed by the methodology is that of matching two files of individual data under conditions of uncertainty. This paper describes the process used to improve the linking algorithm for deaths and Project TALENT data to achieve a high matching rate. Mortality ascertainment is based primarily upon the results from a probabilistic match between the Social Security Administration's Death Master File (DMF), the National Death Index (NDI), and Project TALENT. Linkage of Project TALENT with the NDI provides the opportunity to conduct studies designed to investigate the association of early adulthood health factors with mortality, using the richness of the Project TALENT questionnaires.

## SESSION 1365 (PAPER)

## LIFE COURSE AND DEVELOPMENTAL CHANGE

### AGE EXACERBATES PHYSIOLOGICAL VULNERABILITY TO INCREASING NEGATIVE WORK-FAMILY SPILLOVER AMONG WOMEN

N. Dmitrieva[1], S.T. Charles[2], D. Almeida[1], *1. Human Development and Family Studies, The Pennsylvania State University, University Park, Pennsylvania, 2. University of California, Irvine, Irvine, California*

Strength and Vulnerability Integration (SAVI; Charles & Piazza, 2009) posits that although older age is linked to better skills in avoiding or minimizing exposure to negative emotions, age-related physiological vulnerabilities—defined by difficulties in returning to physiological homeostasis—will make regulating emotional experiences more difficult, particularly under conditions of persistent or inescapable chronic stressors. As a result, increasing conflict between family and work domains over time may produce a greater physiological toll in the later years. The current study assessed the extent to which age exacerbates the impact of increasing negative family-to-work spillover (NFWS) on endocrine system functioning—a primary system linking stressor exposure to physical health. Participants were a subsample of women from the National Study of Daily Experiences (N=376, mean age at Wave I: 41 years old, mean age at Wave II: 50 years old) who reported working for pay at least 20 hours/week and having at least one child living at home. Respondents reported NFWS at Waves I and II, and provided bedtime salivary cortisol samples for four consecutive evenings at Wave II. Taking control variables and Wave I NFWS into account, a greater longitudinal increase in NFWS over nine years was associated with higher bedtime cortisol level among older, but not younger women. Results suggest that heightened arousal produced by persisting NFWS may make it particularly challenging to disengage from stressful events at the end of the day for older working women with children, and underscore how age-related physiological vulnerabilities become amplified under conditions of chronic stressors.

### CHANGES IN ACTIVITY AND INTEREST IN THE THIRD AND FOURTH AGE: ASSOCIATIONS WITH HEALTH, FUNCTIONING AND DEPRESSIVE SYMPTOMS

K.B. Adams, A. Roberts, *Mandel School of Applied Social Sciences, Case Western Reserve University, Cleveland, Ohio*

This study examined changes in activity investment among older adults, differences in these changes between the Third Age (ages 64-79) and the Fourth Age (age 80 plus), and how these affect the association of health concerns with depression. Residents (N = 178) of six independent or assisted living facilities with an average age of 82.9 completed self-administered questionnaires including the Geriatric Depression Scale (GDS), health and functioning measures, and the Revised Change in Activity and Interest Index (CAII-R). The CAII-R measures older persons' perceived changes in interest level in social and leisure activities from ten years previous to the present day. We examined three relevant subscales: Active Instrumental, Active Social, and Passive Social Spiritual. Mean subscale scores indicated overall more disengagement from Active Instrumental and Active Social activities and more engagement in Passive Social Spiritual activities. Fourth Age adults reported greater reductions in Active Instrumental activities than Third Age adults, suggesting there may be a normative reduction in these activities over time. Reduced investment in Active Social activities had the strongest direct association with depression and appeared to increase the association of health concerns with depression. The study provides evidence of distinct differences in activity investment within the parameters of normal aging and suggests that some changes may be more adaptive than others. The activity categories identified and their associations with depression may guide health and mental health providers in selecting the focus of intervention for older clients according to their life stage.

### TRANSITIONING ACROSS THE LIFESPAN WITH TOURETTE SYNDROME

L.E. Cox[1], M.C. Fulcomer[2], M.M. Sass[3], *1. School of Social & Behavioral Sciences, The Richard Stockton College of New Jersey, Pomona, New Jersey, 2. University of Medicine and Dentistry of New Jersey, Piscataway, New Jersey, 3. University of Medicine and Dentistry of New Jersey, Piscataway, New Jersey*

Information on what happens to people with Tourette Syndrome (TS) as they age across the lifespan is nearly non-existent. Researchers have not adequately studied how tics and psychosocial stressors change with age. This research elucidates how older TS persons, from a community sample, described their experiences and adaptive abilities. Data were collected via structured interviews, visual analogue scales, YGTSS, QOL, Hope, Gratitude and Creativity scales. Descriptive statistics from a first stage analysis of 19 of the 31 study participants revealed that study participants ages ranged from 28-77 (median age of 56) and their co-morbidities included ADHD (42%), OCD (73%), and anxiety (37%). Participant's symptom severity levels ranged from mild (n=8) and moderate (n=8) to severe (n=3). Unlike previous studies that have reported that tics diminish with age, 79% of this study's preliminary sample analysis reported that they still found their TS to be annoying. Also unlike previous research mostly deficit focused and on clinic samples of the severest sort, this study theorizes that while TS symptoms and co-morbidities might still trouble TS persons, many have learned to successfully adapt by creatively hiding their TS. Therefore, after attending this presentation, participants will be encouraged to consider an asset model wherein the condition of TS may confer advantages as well as symptoms to its population over the life course. The reported experiences of the current older TS persons in this study may be applied to others who must also cope with similarly challenging and stigmatizing late-life disabilities or conditions.

### IS THERE A LINK BETWEEN PARENTAL DIVORCE DURING CHILDHOOD AND STROKE IN ADULTHOOD?: FINDINGS FROM A POPULATION BASED SURVEY

E. Fuller-Thomson, A.D. Dalton, R. Mehta, *Faculty of Social Work, University of Toronto, Toronto, Ontario, Canada*

Few studies have focused on the association between adverse childhood experiences and stroke in adulthood while controlling for age, gender, race and a wide number of known risk factors. This study examined the parental divorce-stroke association. Data from the provinces of Manitoba and Saskatchewan were selected from the 2005 Canadian Community Health Survey (n=13,093). The regional level response rate was 84%. Respondents with missing data on either the parental divorce question or the stroke question were excluded from the analysis, resulting in a final sample of 13,066. During their childhood, 10.4% of these respondents (n=1,361) had experienced parental divorce. Of the 13,066 respondents, 1.9% (n=248) reported that they had been diagnosed with a stroke at some point in their life. When adjusting for age, race and gender, the odds of stroke were much higher (OR=2.30, 95% CI=1.45, 3.65) for those who had experienced parental divorce. When other risk factors including socioeconomic status (education, household income), health behaviors (obesity, smoking status, alcohol consumption, inactivity), mental health (history of mood disorders, anxiety disorders, self-reported stress) and other adverse childhood experiences (parental abuse, parental addictions, long-term parental unemployment) were controlled in the logistic regression analysis, the odds ratio of stroke for those who had experienced parental divorce remained significantly elevated (OR=2.63, 95% CI=1.56, 4.43). Further research is needed to investigate the "biological embedding" of adverse childhood experiences and other potential pathways through which parental divorce and stroke may be linked.

## SESSION 1370 (SYMPOSIUM)

### PARTNERS IN DEMENTIA CARE: DESCRIPTION AND RESULTS OF A CARE COORDINATION INTERVENTION FOR INDIVIDUALS WITH DEMENTIA AND THEIR INFORMAL CAREGIVERS

Chair: *K. Judge, Department of Psychology, Cleveland State University, Cleveland, Ohio, The Margaret Blenkner Research Institute, Benjamin Rose Institute, Cleveland, Ohio*
Discussant: *M.E. Kunik, Houston Center for Quality of Care & Utilization Studies, Health Services Research and Development Service, Houston, Texas*

Dementia affects the entire family unit and negatively impacts multiple domains including physical health, emotional health, social relationships, and legal and financial issues. Particularly challenging is the provision of services and programs that address the diverse care needs of both care partners. This symposium describes an innovative Care Coordination intervention, Partners in Dementia Care (PDC) that was delivered to 508 caregiving families, where the individual with dementia was a veteran receiving primary care from the VA healthcare system. PDC is a telephone-based coaching intervention that is consistent with components of the Chronic Care Model and assists families by: 1) providing disease-related education and information; 2) offering emotional support and coaching; 3) linking families to medical and non-medical services and resources; and 4) mobilizing and organizing the informal care network. Distinguishing features of PDC include: 1) a formal partnership between a VA medical center and a local Alzheimer's Association Chapter; 2) a comprehensive assessment and treatment protocol; and 3) a shared computerized record for tracking and documenting intervention use. Paper presentations will: 1) describe the PDC intervention and present findings about the assessment and treatment components of PDC; 2) discuss and present data regarding recruitment and retention, sample attrition, and inclusion/exclusion criteria for the sample; 3) present caregiver data collected at baseline that examined caregiver characteristics and predictors of caregiving outcomes at T1; and 4) present and discuss 6-month outcome data for caregivers that examined the impact of PDC on Unmet Needs, Care-Related Strains, and Depression.

### IDENTIFICATION OF PERSONS WITH DEMENTIA IN PRIMARY CARE, A JOINT EFFORT OF PHYSICIANS, CLINICAL TEAMS, AND RESEARCHERS: PARTNERS IN DEMENTIA CARE RECRUITMENT AND RETENTION EFFORTS

A. Snow[1], E. Archambault[2], J. Moye[2], B. Murry[5], G. Odenheimer[3], P. Pirraglia[4], T. Teasdale[3], *1. Cntr for Mental Health & Aging/Psychology, University of Alabama/Tuscaloosa VAMC, Tuscaloosa, Alabama, 2. VA Boston, Brockton, Massachusetts, 3. Oklahoma City VA Medical Center, Oklahoma City, Oklahoma, 4. Providence VA Medical Center, Providence, Rhode Island, 5. Michael E. DeBakey VA Medical Center, Houston, Texas*

Successful recruitment for the Partners in Dementia Care (PDC) trial rested upon a foundation of successful identification of persons with dementia in the VA primary care clinics that served as the study sites. This was a significant task, given that 24-72% of cases go undiagnosed by primary care physicians, with a 4-year delay in dementia diagnosis after the onset of symptoms (Leifer, 2003; Bradford et al., 2009). Strategies to improve identification included education sessions for physicians and clinical teams to discuss the need for identification and provide multiple identification strategies and tools. A second recruitment strategy was case finding through computerized search of VA patient databases for dementia diagnoses as well as acetylcholinesterase inhibitor prescriptions. Relationship building between research staff and PDC participants was key to recruitment and retention success. Clinical implications for implementation of PDC and similar primary care interventions for dementia care will be discussed.

### UNDERSTANDING THE SCOPE OF NEEDS AND ACTIONS IN THE PARTNERS IN DEMENTIA CARE INTERVENTION

N.L. Wilson[1], K. Judge[2], *1. Huffington Center on Aging, Baylor College of Medicine, Houston, Texas, 2. Department of Psychology, Cleveland State University, Cleveland, Ohio*

The PDC intervention encompassed two individuals collaborating by telephone and a computerized information system across two different locations and care systems (VA and AA). Using structured protocols and tools care coordinators assessed needs of veterans and primary caregivers to develop, monitor, and refine care plans and action steps. Care coordinators addressed needs through providing education; offering emotional support and coaching; linking families to services and resources; and mobilizing informal care. This presentation presents findings of an analysis of the computerized intervention records of 93 veterans and their caregivers after 12 months of participation in PDC. Caregiving spouses were most typically involved in completing action steps and participants were contacted an average of twice monthly by PDC coordinators. Addressing the diverse medical and non-medical needs required use of VA resources as well as services from the AA chapters and the broader community. Implications for further refinement and replication will be discussed.

### PREVALENCE AND PREDICTORS OF DEPRESSION AND CARE-RELATED STRAIN AMONG CAREGIVERS OF PATIENTS WITH DEMENTIA

K. Judge[1,2], D. Bass[2], *1. Department of Psychology, Cleveland State University, Cleveland, Ohio, 2. Margaret Blenkner Research Institute, Benjamin Rose Institute, Cleveland, Ohio*

This paper presents findings from baseline interviews completed with 486 caregivers who participated in PDC that examined characteristics related to negative caregiver outcomes across twelve diverse outcomes: Caregiver Depression, five Care-Related Strains, and six categories of Unmet Needs. Overall, data suggest some but not all caregivers in PDC experienced negative outcomes. Specifically, one-half of caregivers had clinically significant symptoms of depression and one-third were at high risk on at least one care-related strain, with Emotional Strain and Social Isolation most common. Nearly two-thirds were high risk on at least one category of unmet need, with VA Benefits, Service Access, and Understanding Memory Problems most common. The strongest predictors of variation in outcomes included characteristics of the Caregiving Context and Veteran Impairments. These findings highlight the need for supportive interventions that specifically target negative caregiver outcomes and revealed important disparities in care for minority veterans and their caregivers.

### OUTCOMES FOR CAREGIVERS AFTER SIX-MONTHS IN PARTNERS IN DEMENTIA CARE

D.M. Bass[1], W.J. Looman[1], C. McCarthy[1], A. Walder[2], R.O. Morgan[3], *1. Margaret Blenkner Research Institute, Benjamin Rose Institute, Cleveland, Ohio, 2. Michael E. DeBakey Veterans Medical Center, Houston, Texas, 3. University of Texas School of Public Health, Houston, Texas*

A variety of psycho-social outcomes were examined after six months of enrollment in "Partners in Dementia Care" (PDC) for 400 family caregivers of veterans with diagnosed dementia. Outcomes included caregiver depression, five types of care-related strain, and six categories of unmet needs. Multiple regression analyses were used to test for intervention effects after controlling for any baseline differences. Five of the six categories of unmet needs were significantly reduced after six months in PDC. The strongest benefits were for unmet needs related to understanding memory problems and accessing services. For caregivers with more unmet needs at baseline, improvements also were found for managing care tasks, managing medications, and legal-financial issues. Fewer significant differences were found for caregiver depression and care-related strains. Results indicated that after six months the PDC intervention was effective in meeting a variety of dementia-related care needs.

## SESSION 1375 (SYMPOSIUM)

### PERSONALITY AND HEALTH RESEARCH IN ADULTHOOD AND OLD AGE

Chair: *H. King, The Pennsylvania State University, University Park, Pennsylvania*
Discussant: *I.C. Siegler, Duke University, Durham, North Carolina*

Psychological research has long been interested in the links between personality and health. The purpose of this symposium is to highlight recent directions and advances. Staudinger examines positive personality development in later life and demonstrates the importance of distinguishing between the goals of adjustment and growth. Choun, Mejia, Pham, Metoyer, and Hooker investigate how personality traits, specifically neuroticism and conscientiousness, as well as state positive affect are related to daily health goal progress. Turiano, Spiro, and Mroczek identify three facets of conscientiousness: carelessness, responsibility, and orderliness; only increases in orderliness are associated with a reduction in mortality risk. King, Almeida, Mroczek, Gerstorf, Turiano, and Stawski show that higher neuroticism is associated with more within-person variation in and higher levels of salivary waking cortisol, particularly in old age. Finally, Sliwinski, Smyth, Stawski, and Mogle demonstrate that unconstructive repetitive thought connects daily stressors and aspects of personality such as neuroticism to a variety of health-related outcomes. This set of presentations is diverse, incorporating several features of personality such as various traits, states, facets, and personality change as well as multiple indicators of physiological functioning, health, and well-being from daily biomarkers and health goal progress to mortality. In addition, the various methods employed in the studies (e.g., longitudinal, daily diary, measurement-burst, experience sampling, and internet-based designs) illustrate the possibilities and versatility of examination of the links between personality and health. The discussant, Ilene Siegler, integrates the studies and comments on the future of personality and health research in adulthood and old age.

### PERSONALITY DEVELOPMENT IN ADULTHOOD AND OLD AGE: ADJUSTMENT AND/OR GROWTH?

U.M. Staudinger, *Jacobs Center, Jacobs University Bremen, Bremen, Germany*

Does personality stay stable after young adulthood or is there continued change throughout middle and later adulthood? For decades, this question caused heated debate. Over the last couple of years, a consensus has emerged based on recent cross-cultural as well as longitudinal evidence. This consensus confirms that indeed there is personality change in middle and later adulthood. Many authors have labeled this change, personality maturation or growth. Growth and maturity are clear development goals, when we speak of biological development at the beginning of life. When it comes to the development of personality characteristics in later stages of life, however, many different goals can be observed. In this vein, two goals of positive personality development are distinguished and defined, adjustment and growth, and empirical findings are presented to support the distinction. A lack of differentiation between these two phenomena may severely hamper the development of further related insights.

### THE EFFECT OF TRAITS AND STATES IN PREDICTING HEALTH GOAL PROGRESS

S. Choun[1], S. Mejia[1], T. Pham[2], R. Metoyer[2], K. Hooker[1], *1. Human Development and Family Sciences, Oregon State University, Corvallis, Oregon, 2. School of Electrical Engineering and Computer Science, Oregon State University, Corvallis, Oregon*

We examined how daily health goal progress can be predicted by personality traits and positive affect. Our analysis utilized data collected from the Personal Understanding of Life and Social Experiences (PULSE) Project, a 100 day internet-based study of Oregonians over the age of 50. Health goal progress was self-reported daily by participants. Data visualization techniques were used to encourage compliance with the daily measurement design. With specific interest in neuroticism and conscientiousness, which are acknowledged to predict longevity, disease progression, and mortality, we used the NEO-FFI at Time1 to measure personality traits. Positive affect was measured using the Affect Scale. Multivariate latent growth curve modeling was used to test dynamic processes of intraindividual and interindividual changes over time in health goal progression and positive affect by integrating neuroticism and conscientiousness as predictors in the longitudinal model. Results will be discussed within the comprehensive framework of the six-foci model of personality.

### FACETS OF CONSCIENTIOUSNESS AS PREDICTORS OF MORTALITY

N.A. Turiano[1,2], A. Spiro[3,4], D. Mroczek[1,2], *1. Child Development & Family Studies, Purdue University, West Lafayette, Indiana, 2. Center on Aging and the Life Course, West Lafayette, Indiana, 3. Normative Aging Study, VA Boston Healthcare System, Boston, Massachusetts, 4. Boston University School of Public Health, Boston, Massachusetts*

Conscientiousness is a significant predictor of health behaviors and health outcomes, including mortality. We sought to identify specific facets of conscientiousness that might predict mortality. The current investigation utilizes data from the VA Normative Aging Study that includes 20 Conscientiousness adjectives of the Goldberg Unipolar markers of the Big Five. In 1990-91, 1,349 men (mean age =64.9) completed the personality measure and were followed until 2008 (mean survival =15.47 years), during which 547 deaths occurred. We used principal axes extraction with oblimin rotation to identify 3 facets of conscientiousness: Carelessness (inefficient, negligent), Responsibility (systematic, thorough), and Orderliness (conscientiousness, careful). Proportional hazards modeling examined the 18-year mortality risk for each facet. Controlling for age, education, and smoking status, only the Orderliness facet predicted mortality risk. A 1-unit increase in Orderliness was associated with a 7% reduction in mortality risk. Results suggest specific facets of conscientiousness may be protective for mortality risk.

### NEUROTICISM, AGE, AND DAILY SALIVARY CORTISOL

H. King[1], D. Almeida[1], D. Mroczek[2], D. Gerstorf[1], N.A. Turiano[2], R.S. Stawski[1], *1. The Pennsylvania State University, University Park, Pennsylvania, 2. Purdue University, West Lafayette, Indiana*

Personality research has long been interested in how personality features are interrelated with aspects of health; however, the role of neuroticism in the functioning of the hypothalamic-pituitary-adrenal axis is less well understood. We investigated links between neuroticism and salivary cortisol in 2,022 participants (mean age = 56 years, range = 33 – 84; 57% women) of the second wave of the National Study of Daily Experiences (part of MIDUS). Respondents completed 8 consecutive daily telephone interviews and provided 4 saliva samples per day on 4 days. Multilevel models indicated that higher neuroticism was associated with greater day-to-day fluctuations in and higher levels of waking cortisol. Analyses also revealed age interaction effects with older participants high in neuroticism experiencing the highest waking cortisol. The results are discussed within the context of stress and suggest a link between neuroticism and hyperactivity of the HPA axis, particularly in old age, perhaps due to kindling.

### UNCONSTRUCTIVE REPETITIVE THOUGHT AS A COMMON PATHWAY LINKING STRESS AND HEALTH

M. Sliwinski[1], J. Smyth[2], R.S. Stawski[1], J. Mogle[1,2], *1. Pennsylvania State University, University Park, Pennsylvania, 2. Syracuse University, Syracuse, New York*

Unconstructive repetitive thought (URT) consists of repeated and attentive thinking about problematic situations or events and encompasses a wide range of related concepts, such as worry, rumination and preservative cognition. We hypothesize that URT operates as a final common pathway that links environmental influences (e.g., daily stressors) and personality characteristics (e.g., neuroticism) to adverse age-related cognitive, physical and mental health conditions. We describe findings from several studies of health and aging, including measurement-burst and experience sampling designs. Across these studies our findings point to URT as a mediator stress effects on a wide range of outcomes, including cognition, metabolic risk, sleep quality, and hypothalamic-pituitary-adrenal activity. Results from an experience sampling study suggest that URT functions to amplify and prolong negative emotional responses to stressful events. We discuss these findings in light of theories of stress and aging.

## SESSION 1380 (SYMPOSIUM)

### SHIFTING AGING’S PARADIGM TO HEALTH AND WELLNESS: THE CREATIVE GENIUS AND LEGACY OF GENE D. COHEN

Chair: *T.A. Abramson, New York Institute of Technology, New York City, New York*

This symposium honors the life work of Gene D. Cohen, MD PhD, a founder of geriatric psychiatry and researcher who broke new ground producing seminal work documenting the health benefits of creativity in later life. The session explores the importance of Dr. Cohen’s work in shaping new research and policy agendas and protocols for service delivery in aging services and in the humanities and arts. Dr. Cohen’s research investigated the assets and potential of the mature mind in gaining mastery through immersion in creative activities, thereby improving health and well-being. His research abandoned the prevailing paradigms centered on decline and decrement and uncovered the strengths and satisfaction elders’ derived from creative engagement. Consequently, new avenues were opened for practitioners in the design of health promotion and disease prevention programs focused on creative and artistic expression. In terms of policy, his research provides an evidence base for public funding of services that bridge the aging services and arts community and are less costly and more empowering for older people. As such, it supports a new level of workforce development by fostering health and social services and arts and humanities collaboration designed to extend person-centered care. This session will be used to set the stage for the announcement of the first NCCA/GSA Gene D. Cohen Research Award for Creativity in Aging. The award winner will deliver remarks on his or her work in this area of endeavor and personal experience of the elders’ benefits from creative engagement in later life.

### VISIONARY INVESTIGATOR AND ADVOCATE: GENE D. COHEN

S. Perlstein, *National Center for Creative Aging, Washington, District of Columbia*

Gene D. Cohen, M.D., Ph D., a visionary leader in the field of aging and a rare human being that embraced both the ability to conduct outstanding research and advocate effectively and influence public opinion and policy. Not long ago, aging was seen as a time of disease. Today, greatly due to Dr. Cohen’s extraordinary work, we understand the potential of aging and have begun to create structures to change the way Americans see themselves growing older. My presentation will illuminate his achievements with examples from my professional experience working with Dr. Cohen. I was the Research Project Director for the New York City component of the landmark “Creativity and Aging Study.” Dr. Cohen served as a member of the NCCA Board of Directors and invited the NCCA to Washington, DC in order to put practice, research and policy under one roof.

### IMPACT OF AGING PARADIGM CHANGES ON PRACTICE

A. Basting, *University of Wisconsin-Milwaukee, Milwaukee, Wisconsin*

This presentation will translate Dr. Cohen’s research in terms of its growing impact on new practice developments. Dr. Basting will explore his work particularly in the area of practice serving people with dementia and memory loss. Dr. Cohen conducted extensive research and developed practices that profoundly improved the quality of life for people with these conditions. Combined with Dr. Basting’s research and practice, Dr. Cohen’s legacy has contributed to new models building upon imagination and brain reserve to encourage confidence and increase communication. Dr. Basting will focus on model programs used in Dr. Cohen’s studies as well to illustrate the ability of these centers of excellence to raise the standards of care thereby increasing the quality of life experience founded in promoting creativity as vital to healthy aging. These practices challenge the mind with engaging and meaningful activities that are authentic contributions to self and community worth.

### CONTRIBUTIONS TO THE EVIDENCE BASE FOR BENEFITS OF ARTS PARTICIPATION

L. Noelker, *Benjamin Rose Institute, Cleveland, Ohio*

This presentation features Dr. Cohen’s research contributions to the evidence base regarding the health and well-being benefits of older adults’ participation in professionally-led creative and performing arts programs. It also reports on a meta-analysis of the research literature in this area that identified 11 empirical studies meeting the inclusion and exclusion criteria. These studies’ findings are presented; the conclusion reached is these programs appear to have a significant impact on delineated health outcomes, however, the scant body of literature and design limitations preclude wide generalizations. The results are used to frame the agenda for future research in this area and to advocate for closer connections between the aging network and the arts community.

### THE ADVOCACY AND POLICY AGENDA: FURTHERING DR.COHEN’S WORK

R. Blancato, *Matz, Shea & Blancato, Washington, District of Columbia*

This presentation will explore the implication of Dr. Cohen’s research on policy development. Mr. Blancato will re-display Dr. Cohen’s research in relationship to healthcare reform. He will discuss the potential for it impact related to the re-authorization of the Administration on Aging in terms of shifting the paradigm of aging services to person center care encouraging independence through community based strategies to engage older adults in meaningful cultural activities in the humanities and the arts. He will correlate the potential costs saving of these high quality low costs programs with reducing the risk of long term care.

## SESSION 1385 (POSTER)

### SOCIAL NETWORKS AND SUPPORT

### OLDER ADULTS’ MARITAL STATUS AND SOCIAL NETWORKS

H. Kang, *HDFS, Texas Tech University, Lubbock, Texas*

This study examined the relationships between social networks and marital status of older adults. Social networks include quantity and quality of relationships with family, friends, and religious networks in the current study. Data from the National Social Life, Health, and Aging Project (NSHAP) survey (Waite et al., 2007) were used. The NSHAP study sampled persons 57-85 years of age (n=3005). The respondents completed a telephone survey in which they reported their background information (e.g., income, gender, race, age, health, retirement status, and marital status) and social network characteristics. It was hypothesized that older adults' marital status differentially influenced their social networks' size and quality. In comparison to married older adults, divorced or never married older adults had more trouble (smaller and lower quality) social networks. In order to identify the associations between marital status and social networks, multiple regression analysis was used. This study's findings will build on an ambivalence theory to account for how divorced and life-long single older adults associate with their family, friends, and religious networks.

## DAILY SOCIAL EXCHANGES AND AFFECT IN MIDDLE AND LATER ADULTHOOD: THE IMPACT OF LONELINESS AND AGE

A. Russell, C.S. Bergeman, *Psychology, University of Notre Dame, Notre Dame, Indiana*

Are lonely individuals more profoundly affected by characteristics of their daily social exchanges? The present study assesses a community sample of adults ranging in age from 31 to 91, and specifically explores whether loneliness moderates the relationship between daily affect and a) daily social exchange exposure and b) daily social exchange appraisal. Results suggest that there are differences between social events involving family and friends, and that lonely individuals may be more affected by positive events than less lonely adults. Moreover, results suggest that older adults' affect is more independent of both positive and negative social events when compared with middle-aged adults. Results are interpreted with regard to the importance of daily social exchanges, daily social stress vulnerability, and the influences of loneliness across middle and later adulthood.

## RECIPROCAL RELATIONSHIP BETWEEN SOCIAL SUPPORT AND PSYCHOLOGICAL DISTRESS IN OLDER ADULTS

A. Robitaille[1], H. Orpana[1], C.N. McIntosh[2], *1. University of Ottawa, Ottawa, Ontario, Canada, 2. Independent Statistical Consultant, Ottawa, Ontario, Canada*

The current study investigated the longitudinal relationship between the different dimensions of social support and psychological distress using an autoregressive cross-lagged model for fives waves of data. A total of five models were tested to investigate the various dimensions of social support (affectionate support, tangible support, positive social interaction, emotional/informational support, and structural support). Data from 2564 older adults who participated in a multiwave national survey were included in the analyses. Support for the reciprocal relationship between affectionate support and distress with higher distress being associated with higher affectionate support and higher support being related with higher distress two years later was found. Higher distress was related with subsequently higher levels of positive social interaction but little support was found for the role of support on distress two years later. Higher psychological distress was significantly related with subsequently higher emotional/informational support. No support was found for a reciprocal relationship between tangible and structural support and psychological distress. This study is among the first to demonstrate that different results can be found for the long-term relationship between social support and psychological distress depending on the type of support being studied. It would appear that psychological distress in the general population of older adults may be important in predicting levels of social support two years later. Implications of findings and future research needs are discussed.

## THE ASSOCIATIONS BETWEEN MARITAL STATUS, SOCIAL SUPPORT AND WELLBEING

L.K. Soulsby, K.M. Bennett, *University of Liverpool, Liverpool, Merseyside, United Kingdom*

The physical and mental health benefits of marriage are well documented in the literature, and there is a large body of research suggesting that being married has a positive impact on psychological wellbeing compared to being divorced, widowed or single. In addition, married individuals typically have more social and emotional support compared to their unmarried counterparts, and a link has been made between higher levels of social support and better health. The poster presents findings from a questionnaire study investigating the relationships between marital status, perceived social support, and psychological wellbeing. Measures included the General Health Questionnaire (GHQ-12), Center for Epidemiologic Studies Depression Scale (CES-D), and the Medical Outcome Study (MOS) Social Support Instrument. Men and women across a broad range of ages, marital status and social backgrounds were surveyed (n=510). Mediation analyses were performed in SPSS using techniques outlined by Preacher and Hayes (2008). Results suggest that perceived social support acts a mediator in the relationship between marital status and psychological wellbeing. Put another way, the results showed that compared to being married, being widowed, divorced or single significantly affects psychological wellbeing through its effect on perceived social support. Being widowed, divorced or single predicted lower levels of psychological distress, through lower levels of perceived social support. Gender was not found to be a significant predictor. The findings have important implications for the provision of support to widowed, divorced and single marital status groups.

## THE ROLE THAT COMPANION ANIMALS PLAY IN SOCIAL SUPPORT IN LATER LIFE

M.P. Meehan, A. Ueda, B. Massavelli, N.A. Pachana, *School of Psychology, The University of QLD, Brisbane, Queensland, Australia*

Animals play an important role in providing social support to older adults in a variety of settings. Relationships between animal companions and mood, social interaction, loneliness, perceived quality of life, and agitation associated with dementia are reported in the literature. However, measuring such relationships has proven problematic, and many measures used in such research have not demonstrated strong psychometric properties. Studies with student and older community samples investigated the psychometric properties of new scales of perceived social support and pet attachment, as well as the relationship between companion animals, attachment and attachment hierarchy, and perceived emotional social support. 161 university student pet owners completed an adapted measure of perceived social support and a pet attachment scale with items derived from attachment theory. Results showed pets are perceived as a unique source of emotional social support and the perceived social support scale showed good reliability ($\alpha = .97$) as did the new pet attachment scale ($\alpha = .96$). Pets were included in a person's attachment hierarchy and ranked higher than siblings but lower than romantic partners, parents and close friends. In a second study, 167 community dwelling older adults completed the measures of perceived social support and pet attachment; 60% of participants cited pets as a key source of emotional support, with 20% ranking their pets as the most important source of such support. These findings speak to the power of the human-animal bond, which may be just as critical for the well-being of older people as the human-human bond.

## TREMOR AND REDUCED FACIAL EXPRESSIVITY IN PARKINSON'S DISEASE STIGMATIZE MEN AND WOMEN DIFFERENTLY

A. Hemmesch[1], L. Tickle-Degnen[2], L.A. Zebrowitz[1], *1. Psychology, Brandeis University, Waltham, Massachusetts, 2. Tufts University, Medford, Massachusetts*

Many individuals with Parkinson's disease (PD) report difficulties with their social relationships after diagnosis, which may be related to the stigmatizing appearance of PD symptoms. This study investigated the effects of tremor and facial masking on older adults' interest in getting to know individuals with PD, and how gender may moderate these effects, since physical competence is valued in more men and social competence is valued more in women. Thirty-one older adult observers viewed thin-slice videotapes of 24 individuals (12 women) with PD who varied in tremor and facial masking. Results showed that observers were more positive toward individuals who had lower facial masking than higher facial masking, F(1, 30) = 37.89, $p < .01$. The negative effect of high masking was stronger when greater tremor was present, F(1, 30) = 5.00, $p < .05$, but this was qualified by a three-way interaction, F(1, 30) = 6.36, $p < .05$. The tendency for tremor to increase the negative response to high masking was significant for men, but not for women. The fact that physical disability exacerbated the stigma of facial masking for men, but not for women, is consistent with the greater social value placed on physical competence in men. This research demonstrates that the presence of PD symptoms can have stigmatizing effects on social relationships across the lifespan as it may violate expectations regarding gender norms.

### FINANCIAL STRESS, NEIGHBORHOOD QUALITY, AND WELL-BEING: MEDIATIONAL AND MODERATIONAL MODELS

A.E. Kapp[1], M.A. Montpetit[1], C.S. Bergeman[2], *1. Illinois Wesleyan University, Bloomington, Illinois, 2. University of Notre Dame, Notre Dame, Indiana*

This study explores how aspects of the community environment might facilitate the stress-and-coping process – specifically, the protective effects of social integration and high quality neighborhoods on psychological well-being. Previous research suggests that low levels of financial stress, positive neighborhood quality, and social integration are each associated with greater levels of well-being; few studies, however, investigate these contextual variables in conjunction with one another. Data from the Notre Dame Study of Health and Well-Being were used to investigate whether (1) neighborhood quality moderates the relationship between financial stress and psychological well-being and (2) social integration mediates the relationship between neighborhood quality and psychological well-being. Although the results did not support the moderational hypothesis, *post hoc* analysis did indicate that neighborhood quality mediates the financial stress → psychological well-being relationship. Data supported hypothesis 2. From an ecological systems perspective, these results suggest that proximal contextual variables such as social integration and neighborhood quality can buffer individuals' psychological well-being from the negative effects of less proximal contextual variables, such as economic conditions.

### CHILDHOOD SOCIAL ACTIVITY PREDICTS PARTICIPATION IN GROUP ACTIVITIES AND VOLUNTARY WORK IN LATER LIFE

H. Hietanen[1], S. Read[2], T. Lyyra[1], *1. Department of Health Sciences, University of Jyväskylä, Jyväskylä, Finland, 2. London School of Hygiene and Tropical Medicine, London, United Kingdom*

Background and objective: Even though previous research has revealed many factors related to social engagement, less is known how lifetime factors predict engagement later in life. The purpose of this study was to assess how social activity in childhood predicts participation in group activities and volun-tary work in later life with a follow-up time of 35 years. Material and methods: The data was derived from a longitudinal the National Child Development Study (NCDS), seeking to follow the lives of 17 500 persons born in March 1958 in England, Scotland and Wales. Subjects of this study consisted of 3519 men and 3666 women who were followed from the age of 11 to the age of 46-47 years. Frequency of participating in clubs outside school was asked from the participants at the age of 11 and participation in different group activities and voluntary work at the age of 46-47. Results: Logistic regression analysis showed that participating in clubs outside school in childhood predicted social engagement in later life. Those women who often had participated in clubs in the age of 11 were over one and a half times more likely to attend in group activities in later life (OR 1.57; 95% CI 1.34, 1.84) compared to those who hardly ever participated. In men the association was slightly weaker (OR 1.36; 95% CI 1.15, 1.60). The corresponding figures for voluntary work participation were in women (OR 1.34; 95% CI 1.06,1.70) and in men (OR 1.47; 95% CI 1.12, 1.94). The models were con-trolled for middle age self-rated health, and personal assessments of financial situation and control of life as well as childhood socioeconomics, depressiveness and cognitive ability. Conclusion: This study shows that social activity in childhood is likely to have long-term effects on social engagement in later life.

### VARIETIES OF SPOUSAL AGREEMENT ABOUT EMOTIONAL AND INSTRUMENTAL SUPPORT

E.Y. Sakai, B. Carpenter, *Psychology, Washington University, Clayton, Missouri*

Social support is an important component of late-life marriage, as couples face new challenges such as retirement, illness, and loss. In this study we examined agreement about social support in 68 married couples. We identified three types of agreement between spouses based on perceptions of emotional and instrumental support: consensus (the difference between the support one spouse reported receiving and the other reported giving), reciprocity (the difference between the support a spouse reported having received and given), and equity (the difference between support each spouse reported they had given, or had received). Discrepancies in consensus, reciprocity, and equity were more common in reports of instrumental than emotional support. Husbands reported receiving more instrumental support than they gave ($t = 6.667$, $p < .001$), and more than their wives reported receiving ($t = 3.166$, $p = .002$). Wives' responses were consistent with their husbands', reporting that they received less instrumental support than what husbands said they received ($t = -3.946$, $p < .001$). Although there are different ways to measure agreement about social support, across methods, spouses are more likely to disagree about instrumental than emotional support exchanges. Agreement should be better regarding relatively observable activities, yet the discrepancies identified in this study suggest real differences in perspectives that could influence marital adjustment.

### THE ROLE OF SIMILARITY, PERSONALITY, AND ATTRACTIVENESS IN SAME-SEX AND CROSS-SEX FRIENDSHIP FORMATION

A.H. Coats, M. Owen, S. Daroga, M.E. Miller, K. Sorceneau, *Department of Psychology, Westminster College, Fulton, Missouri*

Past studies suggest that maintenance of friendship ties is important for achieving life satisfaction in late adulthood. When older adults move to new communities or have friends pass away, they may choose to initiate new friendships. Platonic friendships with adults of the opposite sex can provide important emotional support, especially for older men, whose available new friends are likely to be women. Further research is needed to explore factors related to friendship formation in young and older adults of both sexes. The present study examined how similarity, personality, and attractiveness relate to same- and cross-sex friendship formation in young and older adults. After a context instantiation procedure, participants reflected on two of their recent friendship formation experiences (one with a male friend and one with a female friend). For each friend, participants completed a researcher-developed questionnaire about the importance of different factors for the formation of that friendship. The questionnaire had good psychometric properties. Results suggested that having positive personality traits, such as dependability and loyalty, is important for both young and older adults. Similarity in interests and values was important for friendship formation in both genders and age groups. Young adult participants placed greater value on attractiveness in forming cross-sex friendships than same-sex friendships. In older adults, attractiveness was relatively unimportant for both cross-sex and same-sex friendships. The results have implications for designing interventions to help adults form new friendships.

### LET'S HAVE FUN: THE MEANING OF LEISURE FOR OLDER ADULTS LIVING WITH LOW VISION

S. Berger, *Boston University, Boston, Massachusetts*

Vision loss significantly impacts participation, defined broadly as engagement in life activities. Participation in life activities has been shown to facilitate health and well-being. Researchers have demonstrated the importance of social participation and engagement in meaningful activities to quality of life for persons with physical disabilities. Yet most of the research on participation about older adults with vision loss focuses only on activities of daily living (ADL) and/or instrumental activities of daily living (IADL). Fewer researchers have explored participation beyond ADL and IADL for persons with low vision. Yet leisure participation has been shown to be related to quality of life, successful aging, and depression for older adults. Therefore, the purpose of this research was to learn about the lived experience of older adults with acquired vision loss, specifically related to participation in leisure activities. Using the International Classification of Functioning, Disability and Health (WHO, 2001) as a framework to guide the research, this study focused on the outcome of leisure participation and the many factors that influence it. Through in-depth, repeated interviews and observations of participation in leisure activities of 26 older adults living with low vision, five themes emerged pointing to the meaning of leisure for these individuals. These themes include engaging in leisure to have fun, to be social, to stay current, to be generative, and to pass time. Understanding the meaning of leisure for these older adults has implications for practice (e.g., substituting one activity for another) and policy (e.g., transportation, universal design).

### PERCEIVED EMOTIONAL AND INSTRUMENTAL SOCIAL SUPPORT: MEASUREMENT ISSUES AND CORRELATES

K.J. Kimbler, L.A. Ferrante, S.A. Lacy, *Social & Behavioral Sciences, Florida Gulf Coast University, Fort Myers, Florida*

Prior studies demonstrate that perceived social support relates to a variety of positive outcomes in several domains (e.g., Avlund, Lund, Holstein, & Due 2003; Krause 1997; McCulloch 1995). This study examines the utility of a modified version of the Social Support Questionnaire (SSQ; Sarason, Levine, Basham, & Sarason, 1983) in a sample of 102 middle-aged and older adults with ages ranging from 50 to 92. This version of the SSQ was designed to measure emotional support (3 items) and instrumental support related to instrumental activities of daily living (7 items). To assess social support quantity, participants were asked to list people that they could depend on for each of the 10 items. Participants also indicated social support quality by rating their level of satisfaction with the available social support for each item. Exploratory factor analyses indicate that two factors (representing the instrumental and emotional support items) explain 69.21% of the variance in the social support quantity component of the SSQ. Only one factor was identified with an eigenvalue over 1.0 for the social support quality items, explaining 67.47% of the variance. The items loading high on this factor included a combination of instrumental and emotional support. Overall, results suggest that this modified SSQ is appropriate for measuring specific aspects of social support in middle-aged and older adults but distinct factors related to instrumental and emotional support were only found regarding social support quantity. Correlates (e.g., marital status and sex) of social support quality and quantity will also be discussed.

### SOCIAL INTERACTIONS AND SELF-RATED PHYSICAL HEALTH AMONG MIDLIFE AND OLDER AFRICAN AMERICANS

J. Warren-Findlow, J.N. Laditka, M.E. Thompson, S.B. Laditka, *Department of Public Health Sciences, The University of North Carolina at Charlotte, Charlotte, North Carolina*

Positive social connections may be associated with better physical health. Negative social interactions, such as discrimination, may be associated with poorer physical health. We examined associations between the type, contact frequency, and quality of social connections and self-rated physical health among middle age and older African Americans, and the analogous effect of discrimination. Data were from the 2005-2006 Milwaukee African American sample of the second Midlife Development in the United States (MIDUS II) study (n=568, ages 35-85). Social relationship measures included type (marital, family, friend), contact frequency, and quality (support-strain levels). Two-thirds of participants reported better (excellent, very good, or good) self-reported physical health (SRPH), the remainder poor or fair SRPH. Logistic regression controlled for demographic factors, types of perceived discrimination, neighborhood quality, and psychosocial characteristics. In adjusted results, each unit increase on a family support quality scale was associated with 50% higher odds of better SRPH (OR 1.50, CI 1.07-2.10, p=0.017). Each additional type of perceived daily discrimination was associated with 8% lower odds of reporting better SRPH (OR 0.92, CI 0.84-1.00, p=0.049). Participants reported an average of 2.2 types of daily discrimination; thus, on average, experiences of daily discrimination reduced the odds of better SRPH by 17.6%. Providers of health and social services should be aware of the possibility that discrimination may reduce physical health among middle age and older African Americans. Researchers should consider the importance of family social connections in studies examining the physical health of African Americans.

### EXAMINATION OF THE WILLINGNESS OF ELDERLY PERSONS IN RESIDENTIAL FACILITIES TO USE VOLUNTEERS WHO PROVIDE DIALOG

Y. Hoshina[1,2], H. Matsuda[2], *1. Saitama Prefectural University, Koshigaya, Japan, 2. University of Tsukuba, Tsukuba, Japan*

This study aims to discover the physical and psychological conditions under which elderly persons in residential facilities are willing to use volunteers who provide dialog and interaction. We surveyed 56 elderly persons living in five residential facilities for elderly persons in Japan. In 2008 and 2009 we asked the elderly persons questions about their willingness to use volunteers (on a 4-point scale), and at the same time we obtained an evaluation from the staff of the residential facilities of the ADL and dementia level of the elderly persons.We performed the U Test and the Kruskal-Wallis Test with the willingness to use volunteers as the dependent variable and membership of the ADL independent group or the assistance-required group, the psychological condition of the elderly persons divided into a normal group, a depressive-tendency group, and a depressed group, and the presence or absence of dementia as independent variables. The results showed that among elderly persons in residential facilities there was a greater willingness to use volunteers in the assistance-required group with poor physical functionality and in the depressive-tendency group. However, the willingness to use volunteers was lowest in the depressed group. Furthermore, there was no relationship observed between dementia and the willingness to use volunteers. It appears that as the physical functionality of elderly persons declines, the range of activities in which they can participate becomes narrower, reducing their opportunities to engage in dialog and interaction, and so their willingness to use volunteers who provide dialog and interaction increases.

## SESSION 1390 (SYMPOSIUM)

### SPOUSAL RELATIONSHIPS IN DEMENTIA: CONNECTIONS BETWEEN RELATIONSHIPS, CARE AND WELL-BEING

Chair: *J.R. Oyebode, School of Psychology, University of Birmingham, Birmingham, United Kingdom*
Co-Chair: *L. Clare, Bangor University, Bangor, United Kingdom*

For many people with dementia, the principal person who provides support and care is the spouse/partner. Thus care is provided against the backdrop of an intimate relationship that has often lasted for several decades. Dementia becomes a party in the relationship, disturbing its nature and quality and demanding considerable adjustment. This symposium draws together papers from two research groups in the UK which address aspects of the spousal relationship in dementia. The aim is to focus attention on the relationship and disseminate research about the connections between relationship and well-being of both caregiver and care-recipient. The first paper, by Clare and colleagues, establishes that there are significant differences between spouses' views of their relationship quality in couples where one has dementia in comparison to control couples, with links also between discrepancy between partners' views, mood and quality of life. In the second paper, Quinn, Clare and Woods consider how caregiver ratings of the marital relationship influence caregiver well-being, finding that good ratings of the pre- and post-dementia relationship are associated with better well-being. In the third paper, Fisher, Riley and Oyebode describe the development of a valid, reliable instrument to assess caregiver perceptions of relationship continuity in dementia and in the final paper (Singleton, Oyebode and Riley) this measure is applied to establish whether those with a greater perception of continuity also provide more person-centred care to their spouse. These recent research findings demonstrate the strong influence of relationship perceptions on both partners' well-being when one has dementia.

### PERCEPTIONS OF RELATIONSHIP QUALITY IN PEOPLE WITH DEMENTIA AND THEIR SPOUSE CAREGIVERS

L. Clare[1], S. Nevis[1], A. Martyr[1], I.S. Markova[2], I. Roth[3], R.T. Woods[1], R.G. Morris[4], *1. Bangor University, Bangor, United Kingdom, 2. Hull University, Hull, United Kingdom, 3. Open University, Milton Keynes, United Kingdom, 4. Institute of Psychiatry, Kings College London, London, United Kingdom*

We compared ratings of marital relationship quality made by people with dementia (PwD) and their spouse caregivers, explored how these differed from ratings made by control couples, and examined factors associated with discrepancies in ratings within dyads. Participants were 54 married couples including one partner with early-stage dementia. Each partner independently rated his/her perception of the quality of the relationship. PwD rated their own mood and quality of life. Spouses rated their partner's symptoms and their own mood, distress and stress. Ratings of relationship quality were also made by 54 control couples; their ratings were the most positive, with mean discrepancy close to zero. PwD rated relationship quality more positively than the carers, and this was reflected in higher discrepancy scores. A greater discrepancy was associated with higher levels of distress, stress and depression in carers, but with less anxiety and depression and better quality of life in PwD.

### THE IMPACT OF CAREGIVING ON THE SPOUSAL RELATIONSHIP

C. Quinn, L. Clare, R.T. Woods, *Bangor University, bangor, United Kingdom*

Background: Numerous theoretical models have been developed to explore how caregiving can impact on caregivers' wellbeing. However, less attention has been given to the caregivers relationship with the care-recipient. Objectives: The aim of this study was to explore how both the pre-caregiving and current relationship between the caregiver and care-recipient can influence the caregivers' wellbeing. Method: This was a large-scale cross-sectional postal questionnaire study. The questionnaires were completed by 304 spousal caregivers. Results: Ratings of pre-caregiving relationship quality were higher than current relationship quality. Both a good pre-caregiving and current relationship were associated with higher wellbeing. Conclusions: Based on these findings it is recommended that interventions aimed at reducing caregiving stress should take into account the impact of the quality of the relationship. More longitudinal research is needed to explore how relationship quality changes over the caregiving career.

### THE DEVELOPMENT OF A MEASURE OF CARERS' SENSE OF RELATIONSHIP CONTINUITY WITH THEIR SPOUSE WITH DEMENTIA

G.A. Riley, G. Fisher, J.R. Oyebode, *School of Psychology, University of Birmingham, Birmingham, United Kingdom*

Research shows that carers' perceptions of continuity in their relationship with a spouse with dementia may be central to their adaptation and impact upon quality of support provided for their spouse. Our aim was to develop a valid and reliable questionnaire of relationship continuity. The questionnaire was drafted using data from qualitative interviews with spouse caregivers; then discussed with a focus group of caregivers who commented on content, wording and layout. 50 spouse caregivers then completed a refined version to establish internal consistency. The subsequent shortened questionnaire was administered to a further sample along with other measures to assess construct validity, and a sub-sample completed it a second time to establish test-retest reliability. The resultant questionnaire provides a reliable, valid measure of relationship continuity in spouses caring for a relative with dementia and this is now being used in further research to explore links between continuity and care.

### DO SPOUSE CAREGIVERS' PERCEPTIONS OF RELATIONSHIP CONTINUITY LINK WITH THEIR DELIVERY OF PERSON-CENTRED CARE?

G.A. Riley, J. Singleton, J.R. Oyebode, *School of Psychology, University of Birmingham, Birmingham, United Kingdom*

Spouse caregivers vary in whether they perceive the relationship with their spouse to be a continuation of their former marital relationship. For some there is a sense ofcontinuity whereas others feel they now have a very different relationship. Person-centred care involves acting to retain a sense of personhood for the person with dementia. It therefore seems possible that a positive sense of relationship continuity might maintain empathic and person-centred care. The aim of this study is to understand whether this is the case. Spouse caregivers of people with dementia complete the scale of relationship continuity (Fisher et al, this symposium) and talk about how they respond to situations that are challenging to them. 1:1 interviews with the researcher allow generation and content analysis of caregivers' own responses as well as their ratings of a standardised set. Content analysis and preliminary statistical analyses will be provided.

## SESSION 1395 (SYMPOSIUM)

### THE STORIES THEY TOLD US: USING NARRATIVES IN GERONTOLOGICAL RESEARCH

Chair: *R.B. Meraz, Leadership and Counseling, Eastern Michigan University, Ypsilanti, Michigan*
Co-Chair: *J.R. Smith, Fordham University, New York, New York*
Discussant: *K. de Medeiros, The Copper Ridge Institute, Sykesville, Maryland*

The "narrative turn" which includes entering the perspective of our research subjects by listening to and analyzing their stories is becoming an increasingly vibrant part of the field of gerontology. A narrative or case-centered approach allows for discovery of human agency, as well as how larger social institutions frame how and why a particular event is storied and what a narrator accomplishes by developing the story in a particular way. The papers in this session include both thematic analyses which focus on what is "told" by the research subjects and structural analyses which focuses on the "telling" or how the story it told (Riessman, 2008). In this session, some of the researchers focus on the "bigger" institutional stories that are revealed in the individual's story, while others investigate how the person's life story is constructed to make sense of local spheres of meaning within their families and communities (Gubrium, 1997). The papers include: 1) Life histories of Vietnam veterans and their wives; 2) Grand-parenting an adult child with mental health problems; 3) Social and power relations influencing older men in Lebanon; 4) Residents' perceptions of living in a retirement community based on life-long learning; and the 5) Experiences of Latino family caregivers. This session will clarify the purpose and process of narrative inquiry and help participants see how incorporating narratives into their own research can provide powerful and thought provoking insights into the reality of the lived experiences of aging individuals.

## LIFE HISTORY NARRATIVES OF VIETNAM VETERANS AND THEIR WIVES

E. Covan*, Health and Applied Human Sciences, UNC Wilmington, Wilmington, North Carolina*

Life history narratives of Vietnam veterans and their wives are analyzed to preserve historical memories and to understand how aging individuals attach meaning to pivotal experiences in their lives. Veterans note that discussing combat experience with those who were not there is impossible, although combat experience in young adulthood influenced all subsequent events in their lives. Each spouse of a Vietnam veteran describes a marital history that required her to alternate between "tiptoeing around trauma," and "begging for information" as she attempted to understand how "Vietnam veteran" became a master status for her spouse. The narratives are analyzed in terms of four elements of the gerontological life course perspective: personal attributes, social stratification, period effects and cohort effects. The author argues that employing the life course perspective in the analysis of these narratives is critical to understanding the tension that accompanies the intersecting roles of spouses in military families, and also in illuminating gender differences in American society for the birth cohort that reached adulthood in the late 1960s.

## I DON'T KNOW WHAT TO DO WITH HER: PARENTING AN ADULT CHILD WITH MENTAL ILLNES

J.R. Smith*, Graduate School of Social Service, Fordham University, New York, New York*

This narrative analysis examines an African-American woman's struggle to make sense of the difficulties she experiences in parenting her adult granddaughter who has behavioral and mental health problems. The data is part of a project on elder abuse conducted in a suburb of New York City that included both focus groups with social service providers and interviews with women directly affected by abusive relationships with their adult children. My work builds on the work of researchers who use a narrative or life story approach to examine adult identity development (Josselson, 1996, Linde, 1993; Mishler, 1999). The interview includes Mrs. M describing her life story in chapters (McAdams, 1993) and how parenting has been central to her identity. She is now at a "turning point" (Mishler, 1999) in her life long career of parenting, as she feels "tired" and without the energy or resources to be the kind of parent she expects herself to be. Understanding the pressure women feel to protect their children and themselves from the public acknowledgement of abuse within their families is critical for the development of outreach programs to successfully address the growing incidence of elder abuse by impaired adult dependent children.

## CULTURE AND CONVOYS: SOCIAL RELATIONS AMONG OLDER MEN IN LEBANON

K.J. Ajrouch[1,2], T.C. Antonucci[2]*, 1. Eastern Michigan University, Ypsilanti, Michigan, 2. University of Michigan, Ann Arbor, Michigan*

Today social relations are widely recognized in multiple disciplines as a critical pathway to health and well-being among older adults. We conceptualize social relations as a convoy. Convoys constitute an important and ever-present concept in studies of the life course. To broaden and better specify theoretical understandings of social relations, it may be instructive to consider the social and cultural contexts that shape, influence, and condition their expression in a non-Western country. Our findings draw from ethnographic field notes over a six month period in Lebanon and cognitive interviews from 11 older men to provide narrative analysis about social relations. Our use of narrative inquiry allows for discovery of a framework that delineates how 1) power dynamics; and 2) sense of self informs convoys of social relations in distinctive ways. Such work informs larger quantiative work as well as future qualitative studies, thus enhancing our fundamental understanding of social relations.

## A REBIRTH OF DYNAMISM AND ENTHUSIASM': RESIDENTS' REFLECTIONS ON SELF AND BELONGING IN A UNIVERSITY-LINKED RETIREMENT COMMUNITY

R.B. Meraz*, Leadership and Counseling, Eastern Michigan University, Ypsilanti, Michigan*

Utilizing narrative inquiry and life course theory, this session explores the important role that University-Linked Retirement Communities can play in helping older adults negotiate their retirement transitions and develop post-retirement identities. University-linked retirement communities (ULRCs) are designed and built for retirees who want to live near or on college campus. There is a dearth of research on this phenomenon of ULRC living and, particularly absent, is an in-depth qualitative understanding of what this living experience means to the residents. This qualitative study utilized an interpretative ethnographic approach with site visit observations conducted at three distinct ULRCs located in the Midwest, Northeast, and Southern regions of the United States. Findings were synthesized through coding and thematic analyses of 47 in-depth individual and partner interviews. This presentation highlights findings from one ULRC where an overwhelming number of residents cited their desire for "intellectual community" as integral to their housing decision-making process. Personal narratives provide rich insight into how an individual's life course and previous identity shaped his/her desire to seek a retirement life that offered a variety educational and lifelong learning opportunities. Furthermore, the emergent themes provide insight into how the opportunity for intellectual pursuits and exchange of ideas with "likeminded others" helped residents cultivate a sense of home, self, and belonging.

## LATINO FAMILY CAREGIVERS OF PATIENTS WITH ALZHEIMER'S DISEASE: A NARRATIVE ANALYSIS OF THEIR EXPERIENCE

C.R. Gelman*, Hunter College School of Social Work, New York, New York*

Caregivers of patients with Alzheimer's disease (AD) experience increased depression and stress, poorer self-rated health, and even increased mortality. Latino caregivers face special challenges, yet relatively few studies explore their experiences qualitatively, which can provide important insights. We discuss a narrative analysis of extensive contacts with 24 Latinos caring for relatives with AD, and focus on an emerging theme less commonly noted in the literature: despite the cultural value of familismo, defined as an identification, attachment, loyalty and reciprocity of individuals with their families and typically ascribed to Latinos, these caregivers report experiencing insufficient support from their extended families. Reasons for this gap between cultural ideal and reality, the impact on Latino caregivers, and the implications for provision of supportive services for AD caregivers and their families, are discussed.

## SESSION 1400 (SYMPOSIUM)

### YEARS OF GERIATRIC NURSING RESEARCH THROUGH THE JOHN A. HARTFORD FOUNDATION BUILDING ACADEMIC GERIATRIC NURSING CAPACITY PROGRAM

Chair: *A. Perez, College of Nursing and Health Innovation, Arizona State University, Phoenix, Arizona*
Discussant: *A.L. Silva-Smith, University of Colorado, -Colorado Springs, Colorado*

The 2008 report from the Institute of Medicine, Retooling for an Aging America, has emphasized the need for nurses prepared to care for our growing aging population who will continue to test the capacity of our current U.S. healthcare system. The John A. Hartford Foundation/ Building Academic Geriatric Nursing Capacity (BAGNC) program has invested in the development and growth of expert researchers, academicians and practitioners who will lead the field of gerontological nursing and ultimately improve the care of the elderly. This symposium highlights 10 years of geriatric nursing research through the BAGNC program, which has awarded 172 predoctoral scholars and postdoctoral fellows. Alumni from the BAGNC program will describe their research focused on the diverse and unique needs of older adults. First, Dr. Hansen will share her research describing the family experience of rural elders dying from chronic illnesses. We will hear from Dr. Williams about multidisciplinary research strategies to improve nursing communication with older adults and Dr. Wagner Baycrest's program of research related to nursing home resident safety. She will discuss resident falls; adverse event reporting and disclosure; and resident safety culture. Dr. Yu will report on research contributions related to promoting aerobic capacity in persons with Alzheimer's disease and Dr. Enderlin will present her team's work examining the effectiveness of new objective measures of sleep in older women with breast cancer. Following the presentations, we will discuss key aspects of the BAGNC program in the development of these accomplished researchers and invite comments and questions from everyone.

### END-OF-LIFE CARE FOR RURAL-DWELLING OLDER ADULTS AND THEIR FAMILIES

L. Hansen, J. Cartwright, C. Craig, *Oregon Health & Science University, Portland, Oregon*

Older adults dying from chronic illness in rural areas are understudied and of concern because of their limited access to health services. This study's purpose was to explore the family perspective on the rural, end-of-life care experience for older adults dying with a chronic disease. Semi-structured interviews were conducted with 23 family members following the death of a relative. Qualitative description analysis was conducted using constant comparative analysis of the family member's experiences before, during, and after death. Findings include that decedents and family members generally realized when death was imminent yet varied in their preparedness for death. Family members had both positive and negative experiences with care resources and services provided during the last weeks of the older adult's life and after the death. These findings reflect some key concerns related to end-of-life care in rural settings. Capturing these concerns is essential for developing interventions to improve care.

### MULTIDISCIPLINARY RESEARCH STRATEGIES TO IMPROVE NURSING COMMUNICATION WITH OLDER ADULTS

K.N. Williams, *University of Kansas School of Nursing, Kansas City, Kansas*

Communication with older adults is central to Gerontological Nursing practice and is critical for improving the quality of nursing care for the growing population of older adults. A synthesis of interdisciplinary research strategies provide effective approaches for understanding the importance of communication as a basis for tailoring nursing communication to meet the needs of older adults in a variety of health care settings. This session will describe how research strategies including psycholinguistic analysis, qualitative and communication analyses, and sequential behavioral analyses have been integrated in a program of research to improve communication in dementia and long-term care settings. Steps in this process include research projects that describe communication practices, establish relationships between nursing communication styles and resident outcomes, and develop and test interventions to improve communication and outcomes for older adults in dementia and long-term care settings. Student participation in this research fosters a new generation of Gerontological nurse scholars.

### IMPROVING RESIDENT SAFETY IN NURSING HOMES

L. Wagner, *Baycrest Centre for Geriatric Care, Toronto, Ontario, Canada*

Since the 1999 release of the Institute of Medicine (IOM) Report "To Err is Human", there has been an explosion of research aimed at improving safety in health care settings. While this has focused primarily in the acute care setting, there is an emerging body of literature aimed at improving nursing home resident safety. Nursing home residents are highly vulnerable to errors due to multiple co-morbidities, age associated changes, and organizational conditions. This presentation will highlight a program of research focusing on: resident falls; adverse event reporting and disclosure; and resident safety culture in the nursing home setting. The presentation will emphasize how the John A. Hartford Foundation Building Academic Geriatric Nursing Capacity Fellowship provided the foundation for building this program of research. Future directions will be highlighted and both research priorities and suggestions for building academic geriatric nursing capacity in patient safety and quality will be explored.

### OBJECTIVE AND SUBJECTIVE SLEEP IN OLDER WOMEN WITH BREAST CANCER

C. Enderlin[1], E.A. Coleman[1,2], K. Richards[3,4], C. Cole[1], R.L. Kennedy[1], J.A. Goodwin[1], L.F. Hutchins[2], *1. University of Arkansas for Medical Sciences College of Nursing, Little Rock, Arkansas, 2. University of Arkansas for Medical Sciences College of Medicine, Little Rock, Arkansas, 3. Polisher Research Institute, Abramson Center for Jewish Life, North Wales, Pennsylvania, 4. University of Pennsylvania School of Nursing, Philadelphia, Pennsylvania*

This study described objective and subjective sleep of older women with and without breast cancer (BC), using Actigraphy (ATG) and the Pittsburgh Sleep Diary (PSD). Mean sleep onset latency was similar for methods (ATG 34.83 vs PSD 25.64 minutes BC group, $p=0.20$; ATG 15.64 vs PSD 20.37 minutes comparison group, $p=0.16$; expected <35 minutes). Nocturnal awakenings were significantly different between methods (ATG 9.2 vs PSD 6.23 BC group, $p<0.01$; ATG 7.3 vs PSD 2.49 comparison group, $p<0.01$; expected < 6/night). Wake after sleep onset was similar for methods (ATG 37 vs PSD 34.47 minutes BC group, $p=0.77$; ATG 33.46 vs PSD 20.21 minutes comparison group, $p=0.27$; expected < 30 minutes). Daytime sleep duration (naps) was significantly different between methods (ATG 128.63 vs 30.5 minutes BC group, $p=0.0006$; ATG 119.45 vs 38.33 PSD comparison group, $p=0.0004$; expected 14-31 minutes/day). These findings support adjunct ATG use to assess sleep in this population.

### AEROBIC CAPACITY IN OLDER ADULTS WITH ALZHEIMER'S DISEASE: CASE ANALYSES

F. Yu, J.F. Wyman, *University of Minnesota School of Nursing, Minneapolis, Minnesota*

Little is known about whether aerobic capacity plays a role in aerobic exercise-induced benefits in persons with Alzheimer's disease (AD). The purpose of this case study was to describe aerobic capacity pre- and post-2-month cycling training in four older men with AD (age 61-82 years, baseline Mini-Mental State Examination scores 2-12). Symptom-limited cycle ergometer testing was conducted using a graded protocol that increased power by 25 Watts every 3 minutes (9-15 minutes). Peak VO2 was estimated from achieved peak Watts. The results showed that peak relative VO2 (mL/kg/min) was increased in two subjects: 18.7→26.2 and 24.6→26.2, and decreased in two: 19.3→17.2 and 26.8→17.1. However, it was unclear whether the two subjects who had decreased VO2 gave peak effort. Further studies are needed to examine how to best assess aerobic capacity given cognitive challenges, and how to implement appropriate exercise training to assure adequate physiologic stimulus when testing cognitive benefits.

## SESSION 1405 (PAPER)

## END OF LIFE TRANSITIONS OF CARE

### PREDICTORS OF HOSPICE CARE UTILIZATION BY OLDER ADULTS HOSPITALIZED WITH HEART FAILURE

L.G. Jones[1], M.A. Feller[1], F. Bailey[1,2], D. Bearden[1], Y. Zhang[1], A. Ahmed[1,2], *1. Univ. of Alabama at Birmingham, Birmingham, Alabama, 2. Veterans Affairs Medical Center, Birmingham, Alabama*

Background: The prevalence of end-stage heart failure (HF) is expected to be high among older adults hospitalized with HF, many of whom may benefit from hospice care. However, selection of HF patients for hospice may be difficult. Methods: Of the 8555 Medicare beneficiaries discharged with a primary diagnosis of HF in 1998-2001 from 106 US hospitals, 8032 were discharged alive and had data on hospice care. Multivariable logistic regression models were used to estimate odds ratios (OR) and 95% confidence intervals (CI) for the post-discharge receipt of hospice care. Results: Patients (n=8032) had a mean (±SD) age of 76 (±11) years, 57% were women, 25% were African American, and 182 (2.3%) were discharged to hospice care. Predictors of hospice care utilization included age (OR, 1.03; 95% CI, 1.01–1.05; P<0.001), prevalent HF (OR, 1.72; 95% CI, 1.12–1.63; P=0.013), stroke (OR, 1.68; 95% CI, 1.21–2.33; P=0.002), dementia (OR, 1.58; 95% CI, 1.05–2.37; P=0.027), admission pulmonary edema (OR, 2.01; 95% CI, 1.39–2.90; P<0.001), pre-admission loop diuretic use (OR, 1.70; 95% CI, 1.15–2.50; P=0.007), and intensive care unit use (OR, 1.89; 95% CI, 1.05–3.40; P=0.033). Six-month post-discharge mortality occurred in 74% and 20% of hospice and non-hospice patients respectively (chi-square P<0.001). Conclusion: Several baseline demographic, clinical and care characteristics predicted hospice care use, which may help identify HF patients who may benefit from hospice care. The rather high rate of six-month mortality of hospice patients suggests that the vast majority of hospice patients had end-stage HF.

### BURDENSOME TRANSITIONS AMONG NH RESIDENTS WITH ADVANCED COGNITIVE IMPAIRMENT: A NATIONAL STUDY

J.M. Teno[1], P. Gozalo[1], J. Skinner[2], J. Bynum[2], S. Mitchell[3], D. Tyler[1], V. Mor[1], *1. Community Health, Brown Medical School, Providence, Rhode Island, 2. The Dartmouth Institute, Hanover, New Hampshire, 3. Harvard Medical School, Boston, Massachusetts*

Objective: Our goal was to create a burdensome transition (BT) index, describes change with over time, measure regional variation, and examine associations. Methods; Using the 2000-2007 MDS and Medicare Claims, we created an index of 4 events (1 point each, rage 0-4) based on expert advice that was a BT: 1) a transition in the last 3 days of life ; 2) lack of continuity of NH providers with before and after a hospitalizations in the last 90 days; and 3) three or more hospitalizations for a pneumonia, UTI, dehydration, and/ or sepsis in the last 180 days; and 4) three or more hospitalizations in the last 90 days of life . These events were described for NH residents with CPS >=5. Descriptive frequency of its variation, change with time, and ordinal multivariate model describing associations of BT index. Results: Between 2000 and 2007, 30.7% of the 534,490 NHR with advance cognitive impairment had two or more BT. The average number of BT increased with time from 0.76 (2000) to 0.85 (2007) with state variation in two or more BT varying from 14.2% (VT) to 66.3% (MS). Blacks (AOR 1.4 95% CI 1.39 to 1.52 ), Hispanics (AOR 1.5 95% CI 1.31 to 1.66) and those without an advance directive (AOR 1.26 95% CI 1.22 to 1.30 ) were at increase risk of BT. Conclusion: BTs are common, increased with time, and varies by geographic regions. Blacks, Hispanics, and those without advance directives are at increased risk of BT.

### TRANSFERS TO HOSPITAL NEAR THE END OF LIFE OF NURSING HOME RESIDENTS WITH ADVANCED DEMENTIA

B.S. Black[1,2], K.L. Hicks[1], P. Rabins[1,2], *1. Psychiatry & Behavioral Sciences, Johns Hopkins University, Baltimore, Maryland, 2. Berman Institute of Bioethics, Baltimore, Maryland*

Palliative care is recommended for individuals with end-stage dementia, yet these individuals often undergo aggressive interventions, including transfers to hospital. Data from the CareAD study conducted at three Maryland nursing homes were used to examine the frequency of, reasons for, and correlates of hospital transfers among residents with advanced dementia near the end of life. Nursing home (NH) residents (n=123) who met hospice criteria for dementia were prospectively followed over a 44-month period to identify when and why residents were transferred for evaluation in an emergency department (ED) or for hospitalization. Additionally, data analysis identified characteristics of residents transferred within 6 months of death. During follow-up, 45% of participants were transferred to hospital, including 16% who had multiple transfers. The most common reasons for ED evaluations (n=30) were falls, abrasions/lacerations, respiratory distress, and pain; hospitalizations (n=37) occurred most often for urinary tract infections, respiratory distress, pneumonia, and withdrawal, lethargy or delirium. Among the 92 participants who died during the study, 43% were transferred to hospital within 6 months of death and 25% were transferred within 1 month of death. Residents transferred within 6 months of death had significantly lower baseline quality of life (QOL) (t=2.63, p=.010) and fewer days from study enrollment to death (t=2.60, p=.012) than residents not transferred within 6 months of death. This study demonstrates that a large proportion of hospice-eligible NH residents with dementia experience potentially burdensome transfers to hospital during their final months of life. Alternative approaches that provide care without compromising QOL are needed.

### SYMPTOMS IN ADVANCED HEART FAILURE

L. Miller[1], N.A. Perrin[2], *1. Oregon Health & Science University, Portland, Oregon, 2. Kaiser Permanente Center for Health Research, Portland, Oregon*

Despite the broad consensus that end-of-life care should be focused on symptom relief, the burden of unrelieved symptoms in several chronic, eventually-fatal diseases is high and the complex relationships between and among symptoms have not been well described. We examined the relationship between symptoms and psychological and social functioning as measured by the Kansas City Cardiomyopathy Questionnaire in a sample of 90 persons with mild to severe heart failure. Hierarchical regression was used to test the relationship between symptoms and functioning after controlling for demographics, heart failure characteristics, and comorbidity. In the first step of the model age, gender, duration of heart failure, and ejection fraction were entered and accounted for 7.3% (p=.284) of the variance in social functioning and 5.7% (p=.433) of the variance in psychological functioning. Next, the Charleson comorbidity score was added to the model which explained an additional 6.1% (p=.038) and 0.5% (p=.565) of the variance in social and psychological functioning, respectively. The last step of the model included presence/absence of symptoms such as difficulty concentrating, lack of energy, constipation, and shortness of breath. Symptoms accounted for a significant proportion of variance in social functioning 38.5% (p=.002) and physical functioning 43.0% (p=.001) controlling for demographics, heart failure characteristics and comorbidity. No single symptom accounted for a significant amount of unique variance. These findings not only highlight the importance of symptoms in end-of-life care but that care may need to focus on clusters of symptoms rather than a single symptom to improve social and psychological functioning.

## SESSION 1410 (SYMPOSIUM)

### EVALUATING GERIATRICS TRAINING OF DIRECT CARE WORKERS IN LONG TERM CARE: TRANSITIONS IN OUTCOMES

Chair: *J.C. Morgan, UNC Institute on Aging, Chapel Hill, North Carolina*
Co-Chair: *M.H. Palmer, School of Nursing, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina*
Discussant: *M. Mezey, The John A. Hartford Institute for Geriatric Nursing, New York, New York*

Many education and training initiatives implicitly make a link between the initiative and improved quality of care. As a sector plagued by problems in quality and high staff turnover, long-term care (LTC) will need to increase the skills and competencies of direct care workers to meet the growing demand for highly competent geriatric care as the population ages. Geriatric education and training initiatives have emerged in recent years to address this gap. But, how do researchers establish the link between these initiatives and quality of care? Many initiatives have established the link between education and training with changes in knowledge, skills and competencies. However, serious problems emerge in designing and executing rigorous evaluation studies aimed at drawing the link between those improvements and quality of care. The purpose of this symposium is to stimulate discussion about the second generation outcomes, that is away from proximal changes in workers to distal changes in residents and/or clients at the individual or organizational level. Each speaker will describe a geriatric education initiative, describe the methodology and target outcomes used to evaluate the training and enumerate the experienced and perceived challenges in designing, implementing and completing evaluations aimed at linking increased knowledge and skills and quality of care in LTC. The discussant will frame the findings within the context of geriatric education and quality of care literature and lead a discussion to identify the most promising strategies to help researchers establish the evidence base needed to move the field forward.

### LINKING DIRECT CARE WORKER SKILL ACQUISITION AND RESIDENT CARE THROUGH OBSERVATION AND RESIDENT INTERVIEW METHODS

D.L. White, C. Lopez*, Portland State University Institute on Aging, Portland, Oregon*

Five assisted living facilities implemented a competency-based, 27-module work-based learning program for direct care workers (DCW) through the Jobs to Careers Program. Based on focus groups and DCW surveys, the program was successful (e.g., increased self-efficacy, improved staff relationships, increased organizational support to provide care). To determine whether the training program could be linked to quality of resident care, DCWs were observed as they worked with residents. Residents also were interviewed to discover their assessment of DCW competence and to identify areas of care and support that were most important to them. These data provide insight into areas of strength in DCW knowledge and practice as well as identify additional training needs. Implications for routine use of observation and resident interview data in LTC research will be discussed.

### IMPROVING THE CARE OF ACUTELY ILL ELDERS: USING CLINICAL SIMULATIONS IN EVALUATING NURSING ASSISTANT OUTCOMES

M.H. Palmer[2,1], V. Kowlowitz[2]*, 1. UNC Institute on Aging, Chapel Hill, North Carolina, 2. UNC at Chapel Hill School of Nursing, Chapel Hill, North Carolina*

Nursing assistants in nursing homes provide most of the direct care yet little evidence exists regarding the adequacy of their geriatric clinical competencies. Geriatric clinical simulations were developed and used in continuing education with nursing assistants alone and with licensed practical nurses. Increasing knowledge was only one expected outcome, improving communication skills relative to changes in patient condition was another desired outcome. We will discuss the challenges in developing clinical simulations and methodological issues to measure clinically relevant outcomes.

### EDUCATIONAL PROGRAMS ON GERIATRIC CARE FOR DIRECT CARE WORKERS: CHALLENGES IN DESIGN, IMPLEMENTATION AND EVALUATION OF OUTCOMES

B. Barba*, UNC at Greensboro School of Nursing, Greensboro, North Carolina*

The Geriatric Workforce Enhancement Project faculty developed face-to-face training programs for direct care workers that consist of seventeen modules of content in geriatric best practices based on national and state standards of care. We will describe the challenges to designing and implementing these educational programs and to evaluating the outcomes on the quality of geriatric care provided by the participants. We will discuss innovative and creative strategies used to overcome the challenges based on current research and personal experience. We will propose strategies to evaluate outcomes based on worker, patient and system characteristics.

### BETTER CARE THROUGH BETTER JOBS: CHALLENGES IN DESIGNING AND IMPLEMENTING EVALUATIONS TO ADDRESS QUALITY OF CARE

J.C. Morgan[1], J. Dill[2,1], T.R. Konrad[1,3]*, 1. UNC Institute on Aging, Chapel Hill, North Carolina, 2. Department of Sociology, UNC, Chapel Hill, North Carolina, 3. Cecil G. Sheps Center for Health Services Research, Chapel Hill, North Carolina*

The UNC Institute on Aging has developed a program of research in evaluating educational and training initiatives targeted at the frontline healthcare workforce. In evaluating such initiatives, we have used a variety of strategies including: 1) using propensity score matching to compare participants to controls based on supervisor ratings of nurse aide (NA) performance, measures of short-term retention, and NA ratings of perceived quality of care, 2) employing statewide longitudinal survey data to link program participation to organizational-level NA turnover rates, and 3) using longitudinal Nursing Home Compare (NHC) data to link program participation to quality outcomes. Further, we have employed a qualitative case study approach that uses interview data to explore changes in perceived quality of care from multiple perspectives. This presentation will overview these strategies and the strengths and weaknesses of the multiple approaches. Finally, we will address how these strategies might be improved or combined to reach toward quality of care metrics.

## SESSION 1415 (SYMPOSIUM)

### EXBELT: REDUCING BELTS FROM NURSING HOMES

Chair: *J. Hamers, School for Public Health and Primary Care (Caphri), Department of Health Care and Nursing Science, Maastricht University, Maastricht, Netherlands*
Discussant: *E. Capezuti, New York University, Hartford Institute for Geriatric Nursing, New York, New York*

The use of physical restraints still is common practice in nursing home care of older people with dementia. Physical restraints are defined as any limitation in an individual's freedom of movement. The use of restraints in Dutch nursing homes ranges from 41% to 64%; recent data show that 10% to 14% of nursing home residents are restrained with belts. Restraints have negative physical, psychological and social consequences for older persons. Their use is associated with pressure sores, loss of muscle, joint contractures, incontinence, demoralization, depression, aggression and impaired social functioning. Staff report that physical restraints are mainly used to prevent falls. However, there is accumulating evidence that restraint reduction does not lead to an increased number of falls or fall-related injuries and that restraint use can result in falls, balance and coordination problems. Since physical restraints have shown to be ineffective and sometimes even harmful, interventions are needed to reduce their usage. This symposium presents the rationale and effects of a recently developed tailored multi-component intervention program (EXBELT) on belt restraint reduction in Dutch psychogeriatric nursing homes. In three presentations the design, effect evaluation and process evaluation of this study will be discussed. The presenters will discuss outcomes of their research with respect to their attempt to reduce restraint use in clinical practice. The audience is invited to participate in a discussion about these outcomes and implications for future research and practice.

### BELT RESTRAINT REDUCTION IN NURSING HOMES: DESIGN OF AN INTERVENTION STUDY

E. van Rossum[1,2], M. Gulpers[1], M. Bleijlevens[1], E. Capezuti[3], J. Hamers[1], *1. School for Public Health and Primary Care (Caphri), Department of Health Care and Nursing Science, Maastricht University, Maastricht, the Netherlands, Maastricht, Netherlands, 2. Zuyd University of Applied Sciences, Research Centre on Autonomy and Participation, Heerlen, Netherlands, 3. New York University, Hartford Institute for Geriatric Nursing, New York, New York*

Several attempts have been made to reduce the use of physical restraints (especially belts) in nursing homes. Most studies used educational approaches and introduced a nurse specialist as a consultant. However, the success rate of these interventions has been inconsistent. We developed an innovative multi-component intervention (EXBELT) comprising of (1) an educational intervention for nursing home staff, (2) a policy change that discourages belt use, (3) support of a nurse specialist and nursing home director, and (4) availability of alternative interventions. The effects of EXBELT were tested in a quasi-experimental longitudinal study in 26 psychogeriatric nursing home wards from 13 Dutch nursing homes. In addition, experiences and feasibility were monitored among all stakeholders involved. This paper presents the background and design of the EXBELT study.

### EFFECTIVENESS OF AN INTERVENTION PROGRAM ON BELT RESTRAINT REDUCTION IN DUTCH NURSING HOMES

M. Gulpers[1], M. Bleijlevens[1], E. van Rossum[1,2], E. Capezuti[3], J. Hamers[1], *1. School for Public Health and Primary Care (Caphri), Department of Health Care and Nursing Science, Maastricht University, Maastricht, the Netherlands, Maastricht, Netherlands, 2. Zuyd University of Applied Sciences, Research Centre on Autonomy and Participation, Heerlen, Netherlands, 3. New York University, Hartford Institute for Geriatric Nursing, New York, New York*

A tailored multi-component intervention program (EXBELT) on belt restraint reduction in Dutch psychogeriatric nursing homes has been evaluated in a quasi-experimental study. Psychogeriatric nursing home wards with a belt use prevalence of at least 10% were eligible for the study. A total of 26 wards, including 714 residents, were assigned to the intervention (n=403) or control (n=311) group. The intervention included education, an institutional policy change, consultation by a nurse specialist, and availability of alternative interventions. The control group received usual care. Data were collected at baseline, and five and eight months after baseline. The primary outcome measure of the effect evaluation was the use of belts. Secondary outcome measures include other restraints, psychoactive drug use, and falls. Preliminary analyses demonstrate significant between group differences in the use of belts at eight months, in favor of the intervention group (odds ratio (OR)=0.44;P=.006).

### PROCESS EVALUATION OF AN INTERVENTION PROGRAM ON BELT RESTRAINT REDUCTION IN DUTCH NURSING HOMES

M. Bleijlevens[1], M. Gulpers[1], E. van Rossum[1,2], E. Capezuti[3], J. Hamers[1], *1. School for Public Health and Primary Care (Caphri), Department of Health Care and Nursing Science, Maastricht University, Maastricht, Netherlands, 2. Zuyd University of Applied Sciences, Research Centre on Autonomy and Participation, Heerlen, Netherlands, 3. New York University, Hartford Institute for Geriatric Nursing, New York, New York*

A tailored multi-component intervention program (EXBELT) on belt restraint reduction in Dutch psychogeriatric nursing homes has been evaluated in a quasi-experimental study. This paper presents the results of the process evaluation which aims to assess the feasibility of the intervention and possibilities to optimize the intervention in the future. Information about the implementation process of the intervention, nursing staff's attendance and adherence with the educational part, and the opinion of residents' relatives, nursing home staff, instructors, and nursing home management about the program was collected by means of registration forms, questionnaires, and interviews. Results show that the intervention program appears to be feasible. A total of 87% of the nursing home staff attended all three educational sessions. However, some improvements with regard to the educational sessions are recommended such as better staggering of the educational meetings, and applying the newly acquired knowledge in actual practice.

## SESSION 1420 (PAPER)

### MANAGEMENT OF DISEASE AND FUNCTIONAL HEALTH IN PRIMARY CARE

### CORRELATES OF MEDICATION ADHERENCE IN OLDER ADULTS WITH HYPERTENSION

T.M. Ruppar, *1. Sinclair School of Nursing, University of Missouri, Columbia, Missouri, 2. Katholieke Universiteit Leuven, Leuven, Belgium*

Problem: Much of the existing literature describing influences on medication adherence (MA) focuses on cognitive influences on behavior (e.g., beliefs, perceptions, knowledge). Evidence linking medication beliefs to MA is inconclusive. This study aimed to evaluate the relationship between medication beliefs and MA among older adults with hypertension. Methods: This prospective descriptive study enrolled adults who were age 60 years or older, self-administered at least one daily antihypertensive medication, and had no cognitive deficits. Data were collected on participants' age, medications, years with hypertension, education level, and beliefs about medications (Beliefs about Medicines Questionnaire [BMQ]). MA was measured by electronic monitoring for six weeks, using the percentage of doses taken within the prescribed intervals during the final two weeks of monitoring. Results: Of the 33 participants, (mean age: 74.60 [±7.59]), 17 were considered adherent (MA ≥ 85%). Non-adherent participants scored higher than adherent participants on the BMQ Specific-Concerns subscale (median: 14.5 vs. 12.0; U=81.00, p=.046). No difference was found between adherence groups on the Specific-Necessity subscale. African-American participants had lower adherence than Caucasians (p=.006). Participants with some college education were more adherent than those with less education (p=.005). Participants with once-daily regimens were more adherent than those with multiple daily doses (p=.032). Discussion: Concerns about medication safety and side effects were related to antihypertensive MA in this small sample of older adults. Further study is needed in larger samples to more fully explore the impact of potential influences on MA and on the effectiveness of MA interventions for older adults.

### TRANSITIONAL CARE AND PRIMARY CARE: ARE BOTH NEEDED TO DECREASE HOSPITAL READMISSIONS?

C. Blaum[1,2], K. Ward[1], B. Williams[1], S. Bernstein[1,2], *1. University of Michigan, Ann Arbor, Michigan, 2. Veterans Affairs Ann Arbor Health System, Ann Arbor, Michigan*

The Physician Group Practice (PGP) Medicare Demonstration tested whether large group practices could coordinate care to an attributed Medicare population. Our Faculty Group Practice (FGP), part of a large integrated academic health system, participates in the PGP Medicare Demonstration. Medicare patients are attributed to our FGP yet maintain fee-for service and can receive care anywhere (attributed patients have about 30% of hospitalizations elsewhere). For the Demonstration, the FGP implemented or enhanced several transitional care interventions: post hospital calls, rapid transitional appointments, coordination of these with home care and complex care management. We compared readmission rates after index hospitalizations of attributed Medicare beneficiaries at our University Hospital (UH) vs. index hospitalizations at other hospitals (OHs) using complete Medicare claims from 2004 (before Demonstration) to 2008 (third year of Demonstration). Results show: Patients with UH index admission had decreasing 15 day readmission rates (2004, 13.7 decreasing to 13.0 in 2008 vs. index admission OHs 12.8 in 2004, 15.4 in 2008). Trends were similar for patients with HF, COPD, and diabetes, and for 30 day readmissions. Readmissions varied by index admission hospital and whether the patient was established with FGP primary care (PC). For example, 14 day readmissions 2008: UH/PC, 12.1%; OHs/PC, 13.9%; UH/noPC, 14.3%; OHs/noPC 16.8%. The same pattern held for 30 day readmissions. Both a transitional care program with several interventions targeted at post-discharge patients, and primary care, may play a role in decreasing readmissions. Future research is needed to understand roles of illness burden and patient attribution.

### USE OF BIPHOSPHONATES AFTER OSTEOPOROTIC FRACTURES: THE BIPHOSPHONATES EFFICACY-SAFETY TRADEOFF (BEST) STUDY

M. Di Bari[1,2], F. Lapi[3,2], G. Corrao[4], M. Sturkenboom[5], F. Carle[6], N. Montanaro[7], A. Caputi[8], G. Mazzaglia[3], *1. Department of Critical Care Medicine & Surgery, Unit of Gerontology & Geriatrics, University of Florence, Florence, Italy, 2. Dept. of Preclinical & Clinical Pharmacology, and Center of Pharmacoutilization, Pharmacoepidemiology, & Pharmacoepidemiology, Univ. of Florence, Florence, Italy, 3. Regional Agency for the Healthcare Services of Tuscany, Florence, Italy, 4. Faculty of Statistical Sciences, University of Milan-Bicocca, Florence, Italy, 5. Departments of Epidemiology & Biostatistics and Medical Informatics, Pharmacoepidemiology Unit, Erasmus University Medical Center, Rotterdam, Netherlands, 6. Center of Epidemiology, Biostatistics, and Medical Information Technology, Polytechnic University of Marche, Ancona, Italy, 7. Regional Centre for Drug Evaluation and Information (CREVIF), Department of Pharmacology of Bologna, Bologna, Italy, 8. Department of Medicine and Pharmacology, University of Messina, Messina, Italy*

AIM. The Biphosphonates Efficacy-Safety Tradeoff (BEST) study was designed to evaluate efficacy and safety of oral BP in primary care. METHODS. Hospital discharges and pharmacy claims, collected over a population of 19 million enrolees in the Italian National Health System, were used to select records of subjects aged 55+ years, discharged from hospital with a primary diagnosis of fracture at osteoporotic sites. Exclusion criteria included cancer, Paget disease, and previous BP use. Post-discharge prescription of oral BP was recorded. Outcomes of the BEST study are: 1) occurrence of osteonecrosis of the jaw (ONJ), 2) gastro-intestinal bleeding, and 3) recurrent fracture. Data on BP utilization and ICD9CM-based diagnoses of ONJ are currently available. RESULTS. Out of 72,675 eligible subjects (mean age: 67 years; 71% females), 11% (females: 16%, males: 6%; p<0.001) received at least one BP prescription in the follow-up. Peak prescription rate (26% in females and 19% in males) was reached at age 70-74 years and declined sharply thereafter, being below 7% after the age of 85 in both sexes (age trend: p<0.001). Based upon selected ICD9CM codes, 135 cases of possible and 162 of probable ONJ were identified; the corresponding incidence densities were 0.15 and 0.22 per 10,000 person-years, respectively. Association with BF use will be evaluated after adjudication of final diagnoses by an expert panel. CONCLUSIONS. In this large sample of Italian population with such a compelling indication as an osteoporotic fracture, BP are substantially underprescribed, especially in oldest subjects.

### CARE MANAGEMENT PLUS: ASSESSING PRIMARY CARE'S READINESS FOR INTERDISCIPLINARY TEAMS AND SYSTEM REDESIGN

C.P. Brunker[1,2], D.A. Dorr[3], B.E. Gardner[1], L. Widmier[1], K.A. Radican[4], *1. Intermountain Healthcare, Salt Lake City, Utah, 2. University of Utah School of Medicine, Division of Geriatric Medicine, Dept of Medicine, Salt Lake City, Utah, 3. Oregon Health and Science University, Dept of Medical Informatics & Clinical Epidemiology and Dept of Internal Medicine, Portland, Oregon, 4. Oregon Health and Science University, Portland, Oregon*

Managing the health care needs of older adults with multiple chronic conditions is costly and complex. Care Management Plus (CM+) is an effective and efficient interdisciplinary team model for primary care practice redesign that fills core gaps through a proactive, flexible system, with an emphasis on care coordination and follow-up. Two main components are the introduction of a specially trained care manager(CM) at the clinic and addition of information technology(IT) tools to help organize and track the needs of their patients/caregivers. We describe the steps of assessing interested practices/groups in our dissemination efforts from 4/06-10/09 and enrollment. DESCRIPTION. Following initial contact and introduction, we asked interested healthcare sites (usually an administrative or physician lead) to complete a 25 item Readiness Assessment: practice description, identification of project lead/champion, committed resources and asked them to identify adoption goals/barriers, tools for Self-Management, information system functions, quality measures, etc. We requested information in response to every question, even if they felt their prior efforts in an area were ineffective or lacking. A consultation(usually phone) followed to: 1. present CM+ in context of their goals, for example use of CM+ database to track PHQ-2 results for screening for depression. 2. assess capabilities of the site's existing IT. 3. answer questions RESULTS. By using a streamlined process we were able to assess sites for readiness to participate, but also help them to recognize missing pieces. For example, sites that did not have a report of their insurance mix, patient populations were able to take first steps for redesigning care. The questions required communication with clinical and others promoting communication and team work. The process produced more efficient use of CM+ team resources in helping sites through the steps of implementation. 93 sites completed Assessment and subsequent implementation, increasing CM+ from 7 original sites to 100. We met our goal of reaching underserved populations and a variety of practices: large and mid-size and small non-affiliated rural primary care practices in 14 states. We've trained 178: 106

CMs, 11 (11%) from Social Work(2 RN-LCSW); 82 (77%) from Nursing: 69 RN, 7 MSN(or >), 6 LPN; 13 (12%) Other. In addition, 72 leaders: 42 (58%) Nursing, 15 (21%) MD. A carefully designed, systematic process has been crucial for this dissemination of interdisciplinary teams and IT in primary practice redesign, www.caremanagementplus.org

# SESSION 1425 (PAPER)

## MOBILITY AND FRACTURES: A FOCUS ON OUTCOMES

### HOW NURSES DECIDE TO GET OLDER PATIENTS MOVING: DEVELOPMENT OF A CONCEPTUAL MODEL

B.J. King, B.J. Bowers, *School of Nursing, University of Wisconsin-Madison, Madison, Wisconsin*

New walking dependence has been found to occur in 16.8% to 59% of older adults in hospital settings. For older adults, the incidence of walking dependence has been associated with limited mobility during their hospital stays. Nursing has been identified as the health care provider best positioned to increase mobility and decrease new walking dependence. Studies have shown that nurses infrequently mobilize patients. Unfortunately, results from research studies are lacking in insights as to how nurses assess mobility in hospitalized older adults, when nurses consider mobilizing patients, and what barriers nurses face. The purpose of this study was to explore how nurses think about mobilization of hospitalized older adults and what affect this has on the care they provide. Grounded theory methodology was used. In- depth interviews were conducted. Initial questions were open, becoming more focused as analysis proceeded. Constant comparative analysis was used to identify core categories, dimensions and influencing conditions. Twenty-five RNs were interviewed. A conceptual model has been constructed which identifies how nurses decide whether, how, and when to mobilize patients. Key categories in the model which affect the RNs actions include a Risk/Opportunity Assessment made by nurses, the influence of a Unit Expectation, and the Purpose for Mobilizing patients. The results of this study are the first to identify how nurses conceptualize mobility. Findings indicate that experience with moving and lifting patients, knowledge about mobility, placing mobility within the nurse's domain, and unit culture has a significant impact on whether or not nurses will mobilize patients.

### EFFECT OF MOBILITY DURING HOSPITALIZATION ON FUNCTIONAL RECOVERY OF OLDER ADULTS

A. Zisberg[1], E. Shadmi[1], G. Sinoff[2,4], H. Admi[3], N. Gur-Yaish[4], E. Srulovici[1], *1. The Cheryl Spencer Department of Nursing, Haifa University, Haifa, Israel, 2. Carmel Medical Center, Department of Geriatrics, Haifa, Israel, 3. Rambam Medical Center, Haifa, Israel, 4. Haifa University, Center for Research and Study of Aging, Haifa, Israel*

Objectives: to examine mobility levels of older hospitalized adults according to their pre-admission functional trajectories and to determine the degree to which mobility affects recovery to baseline function at discharge and at one month follow-up. Methods: Five hundred and ten older (age 70 or older) acute medical patients hospitalized for a non-disabling diagnosis in a large tertiary medical center in Israel. Mobility during hospitalization was assessed using a previously developed scale. Patients were categorized according to their pre-hospitalization functional trajectory (with or without pre-admission functional decline). Outcomes were: ability to recover to baseline functional status at discharge and at one month follow-up. Results: Fifty one percent experienced a decline in functional status during the 2-week pre-admission period. Overall, 54% of patients recovered to baseline functional status. Mobility during hospitalization was twice as high among patients with no pre-admission decline. Low or moderate mobility patients experienced worse outcomes than patients with high mobility. The high, compared to the low and moderate mobility groups, had an adjusted odds ratio (OR) of 5.47, (confidence interval (CI):3.07-9.68) for functional recovery at discharge, and (OR) 3.29 (CI) 1.8-6.01 for functional recovery at follow-up, controlling for the pre-admission functional trajectory, comorbidity, age, length of stay, and other risk-factors. Conclusion: Mobility during hospitalization is an important modifiable factor affecting both patients with and without pre-hospital functional decline. High mobility is associated with better proximal and distal functional outcomes in older patients.

### THE HIP FRACTURE INTERVENTION TRIAL (HIPFIT): EFFECTS ON MORTALITY, FUNCTIONAL STATUS AND CLINICAL OUTCOMES AT ONE YEAR

M.A. Fiatarone Singh[1,2,3], S. Quine[7], L.M. Clemson[6], B. Lloyd[1], D.A. Williamson[1], T.M. Stavrinos[4], N.A. Singh[6,4,5], *1. Exercise Health and Performance Research Group, The University of Sydney, Lidcombe, New South Wales, Australia, 2. Hebrew SeniorLife, Harvard Medical School, Boston, Massachusetts, 3. Jean Mayer USDA Human Nutrition Research Centre on Aging at Tufts University, Boston, Massachusetts, 4. Balmain Hospital, Sydney, New South Wales, Australia, 5. Royal Prince Alfred Hospital, Sydney, New South Wales, Australia, 6. Faculty of Health Sciences, The University of Sydney, Lidcombe, New South Wales, Australia, 7. School of Public Health, The University of Sydney, Sydney, New South Wales, Australia*

Aims We hypothesised that HIPFIT (a multi-modal intervention to improve outcomes after hip fracture by targeting clinical syndromes related to disability or fall risk) would reduce functional dependency, and that this would be mediated by improvements in body composition, strength, gait and balance, neuropsychological function, and medical management. Methods Community-dwelling older adults (n =124; mean age 79+10 yrs) with hip fracture were randomised to 12 months of HIPFIT or usual care/control group. The intervention group received up to 11 treatments targeted to baseline deficits. The blindly assessed primary outcome was functional dependency, assessed by residential status, mortality, and observed (FIM, ALSAR) and selfreported (NHANES, KATZ) disability. Results The groups were frail and similar with respect to baseline demographics (69% female), comorbidities (9+4 medications/d), body composition (81% sarcopenic/sarcopenic-obese), nutritional status (87% undernourished/at risk; 88% vitamin D insufficient), prior functional status and falls history (39%), physical performance, cognition (38% impaired), affect (45% depressed), physical activity level pre-fracture (41% low), and quality of life (all $p>0.05$) except for bodily pain, which was worse in controls ($p<0.04$). Age-adjusted risk of death was significantly reduced in the intervention group (n=4) compared to controls [n=8; OR=0.19 (0.04-0.91; p=0.038)], but functional dependency was not. There were significant improvements in muscle strength, gait speed, balance, depressive symptoms, cognition, vision, and nutritional status in the intervention group (all $p<0.05$). Conclusion The HIPFIT intervention significantly reduced death rate and improved many postulated mediators of frailty and mortality in this cohort. However, functional independence itself in survivors was not changed significantly.

### DIABETES, PERIPHERAL NERVE FUNCTION, AND PHYSICAL FUNCTION IN OLDER ADULTS

N. Chiles[1], C.L. Phillips[2], J. Guralnik[2], K. Patel[2], *1. University of Maryland Baltimore, Baltimore, Maryland, 2. Laboratory of Epidemiology, Demography, and Biometry, National Institute on Aging, Bethesda, Maryland*

Background: Diabetes causes many complications in older adults, including decreased lower extremity function and disability. One pathway through which diabetes might decrease physical function is peripheral nerve dysfunction. We sought to determine whether diabetes is associated with objective measures of physical performance in older adults and whether peripheral nerve function (PNF) tests mediate this relationship. Methods: Cross-sectional data on 983 participants of the InCHIANTI Study, ages 65 and older were analyzed. Diabetes was diagnosed using clinical criteria. Physical performance was assessed using the Short Physical Performance Battery (SPPB; scored 0-12 with 12 as best) and usual walking speed (m/s). PNF was assessed by standard surface electroneurographic study of the right peroneal nerve and by vibration and touch sensitivity. Clinical cut-points of PNF tests were used to create a neuropathy score ranging 0 to 5 (higher values, greater neuropathy). Multiple linear regression models were used to test associations. Results: 12.8%(n=126) of participants had diabetes. Adjusting for age, sex, education, and other confounders, diabetes was associated with a decreased SPPB (β= -0.99; p< 0.01), decreased walking speed (β= -0.1m/s; p< 0.01), decreased nerve conduction velocity (β= -1.7m/s; p< 0.01), and increased neuropathy (β= 0.25; p< 0.01) compared with non-diabetics. The effect of diabetes on SPPB decreased by 20% after adjusting for nerve conduction velocity and neuropathy score; however, the association of diabetes with walking speed was unchanged when adjusting for PNF tests. Conclusions: PNF partially mediates the effect of diabetes on lower extremity function in older adults; further longitudinal studies are needed.

## SESSION 1430 (POSTER)

## PHYSICAL ACTIVITY AND FUNCTIONAL OUTCOMES

### RISK FACTORS OF FUNCTIONAL DECLINE IN THE ELDERLY IN TAIWAN

T. Lan[1], C. Chen[1], H. Chiu[2], *1. National Health Research Institutes, Miaoli County, Taiwan, 2. Kaohsing Medical University, Kaohsiung, Taiwan*

Multiple factors contribute to the decline of physical function in older adults. Results from many studies have found several risk factors of this decline, but rare studies have been conducted in Taiwan. The aim of this five-year cohort study was to examine the association between functional decline and several risk factors identified in the previous studies. Data were from a three-wave cohort study of aging, the Functioning and Aging Study in Taipei. The cohort includes 907 older adults participating in the 2005 National Health Interview Survey in Taiwan. Two follow-up interviews were conducted in 2006 and 2008-9. Functional status was assessed using six items of the Activities of Daily Living and six items of the Instrumental Activities of Daily Living. The physical functioning was further classified as being independent, with mild disability, with moderate disability, with severe disability, and dependency. Risk factors considered in the study include several factors of sociodemography, depressive status, cognitive function, chronic diseases and conditions, and lifestyle behaviors. We used both the GEE and mixed linear regression models to identify factors in relation to the decline of physical function across different waves of data. In the final models, older adults with the characteristics of older age, women, depressive symptoms, cognitive impairments, stroke, diabetes, and being sedentary had higher risk of being disabled. The factors found in the study may help understand the causes responsible for the functional decline in the elderly, and be further used to identify older people at risk of developing physical disability.

### TIME TRENDS IN AND THE DETERMINANTS OF DISABILITY AMONG ELDERLY TAIWANESE, 1994-2004

C. Chen[1], J. Mullan[2], D. Griffiths[2], I. Kreis[2], H. Chiu[3], T. Lan[1], *1. Division of Geriatric Research, National Health Research Institutes, Miaoli County, Taiwan, 2. University of Wollongong, Wollongong, New South Wales, Australia, 3. Kaohsiung Medical University, Kaohsiung, Taiwan*

This longitudinal study was conducted between 1994 and 2004 in a cohort of southern Taiwan community-living elderly residents. This study aims to investigate the longitudinal change in disability, by using a ten-year longitudinal data set with six set cross-sectional data to examine the trends of disability and the determinants. Disability was assessed using the Physical Activities of Daily Living (7PADLs) and Instrumental Activities of Daily Living (7IADLs) scales. Socio-demographic factors; socioeconomic factors; living arrangements; lifestyle behaviours and health status were chosen as the predictors of each specific disability. Generalized estimating equation (GEE) regression models were used to analyse longitudinal data on variation in disability change over time and its determinants across the same cohort. The study showed great increase in the development of disability. Especially, the PADL disabilities increased even more than IADL disabilities. The study highlighted that respondents who were older female from low SES, being single, divorced or widowed, did not exercise regularly and poor health status, especially due to hypertension, diabetes, gastrointestinal problems and depression, were at a higher risk of being disabled. It was interesting to note the moderate/severe disability (PADL) increased even more persistent than mild disability (IADL). It seems likely that chronic diseases are of central significance of most disabilities, while depression is observed as the most significant risk factor for IADL disability only. Effort to lower the trends of disability in the elderly should target the risk factors that identified in this study, and have better management of the persistent disability.

### CONCURRENT VALIDITY OF THE GAIT STABILITY RATIO DURING THE 5-METER WALK AND 6-MINUTE WALK TESTS

R.L. Cromwell[1], R.A. Newton[2], R. Buccello-Stout[1], P. Meyers[3], *1. Universities Space Research Association, Houston, Texas, 2. Temple University, Philadelphia, Pennsylvania, 3. University of Houston Clear Lake, Houston, Texas*

Age-related changes in older adults produce walking patterns that are less dynamic, demonstrate increased stability and are less efficient at moving the body forward. The Gait Stability Ratio (GSR) is an indicator of walking stability. The GSR is calculated as the ratio of cadence to walking velocity and is expressed as steps/meter. GSR can be measured during a 5-meter walk test or as part of the 6-minute walk test. The purpose of this study was to determine the concurrent validity of the GSR as measured during these two tests. Ten healthy, community dwelling older adults participated in a 5-meter walk and a 6-minute walk test. Cadence and walking velocity were measured for 3 passes of the 5-meter walk and all laps of the 6-minute walk. GSR was calculated. Analysis of variance was used to compare the mean GSR of the 5-minute walk against the mean GSR of the first 3 laps, middle 3 laps, final 3 laps and total laps of the 6-minute walk. No significant difference (p = 0.723) was found among the GSR values. Results indicate that GSR can be effectively measured in healthy older adults during both the 5-meter walk and 6-minute walk tests.

### FUNCTIONAL MOBILITY PERFORMANCE AND BALANCE CONFIDENCE IN OLDER ADULTS AFTER SENSORIMOTOR ADAPTATION TRAINING

R.R. Buccello-Stout[1], R.L. Cromwell[1], J. Bloomberg[2], G.D. Weaver[3], *1. Universities Space Research Association, Houston, Texas, 2. NASA, Houston, Texas, 3. University of Texas Medical Branch, Galveston, Texas*

Research indicates a main contributor of injury in older adults is from falling. The decline in sensory systems limits information needed to successfully maneuver through the environment. The objective of this study was to determine if prolonged exposure to the realignment of perceptual-motor systems increases adaptability of balance, and if balance confidence improves after training. A total of 16 older adults between ages 65-85 were randomized to a control group (walking on a treadmill while viewing a static visual scene) and an experimental group (walking on a treadmill while viewing a rotating visual scene). Prior to visual exposure, participants completed six trials of walking through a soft foamed obstacle course. Participants came in twice a week for 4 weeks to complete training of walking on a treadmill and viewing the visual scene for 20 minutes each session. Participants completed the obstacle course after training and four weeks later. Average time, penalty, and Activity Balance Confidence Scale scores were computed for both groups across testing times. The older adults who trained, significantly improved their time through the obstacle course $F(2, 28) = 9.41$, $p < 0.05$, as well as reduced their penalty scores $F(2, 28) = 21.03$, $p < 0.05$, compared to those who did not train. There was no difference in balance confidence scores between groups across testing times $F(2, 28) = 0.503$, $p > 0.05$. Although the training group improved mobility through the obstacle course, there were no differences between the groups in balance confidence.

### MEASUREMENT ERROR AND MINIMAL DETECTABLE CHANGE IN TIMED UP AND GO IN OLDER ADULTS

A. Goldberg[1,2,3], S. Schepens[4,1,2], *1. Dept. Healthcare Sciences, Mobility Research Laboratory, Program in Physical Therapy, Wayne State University, Detroit, Michigan, 2. Institute of Gerontology, Wayne State University, Detroit, Michigan, 3. Dept. Internal Medicine, Wayne State University, Detroit, Michigan, 4. Dept. of Physical Medicine and Rehabilitation, University of Michigan, Ann Arbor, Michigan*

Introduction: Timed Up and Go (TUG) score is a measure of functional mobility and falls risk in older adults. Minimal detectable change (MDC) represents a value for real change in TUG exceeding that of chance variation in measurement, and can be used to interpret whether changes in TUG over time represent real change in mobility, or are within the boundaries of measurement error. The purpose of this study was to quantify measurement error and MDC in TUG in community-dwelling older adults. Methods and Materials: Thirty-nine community-dwelling older adults (mean age 72.7 yrs) were included. TUG was assessed as mean time to get up out of a chair, walk 3m and return to the chair over three trials. The intraclass correlation coefficient (ICC 3,1) was computed to assess test-retest reliability of TUG. Standard error of measurement (SEM), which quantifies measurement error in absolute values, was calculated as the standard deviation of TUG score x square root (1-ICC). MDC at a 95% confidence level (MDC95) was calculated as z*SEM*÷2, where z=1.96. Results: Mean TUG was 11.94 seconds. Test-retest reliability was 0.97. SEM was 0.53s and MDC95 was 1.47s. Measurement error and MDC95 expressed as a percentage of mean TUG were 4.4% and 12.3% respectively. Discussion/conclusions: TUG has excellent test-retest reliability, low measurement error, and low minimal change in community-dwelling older adults. Real change in TUG is >1.47s in community-dwelling older adults. These results will assist clinicians and researchers in interpreting whether real change has occurred when comparing repeated TUG assessments.

### THE BURDEN OF FALLING ON QUALITY OF LIFE AMONG OLDER ADULTS WITH MEDICARE SUPPLEMENT INSURANCE

K. Hawkins[1], S. Musich[1], R.J. Ozminkowski[3], M. Bai[1], C. Yeh[2], R.J. Migliori[3], *1. Ingenix, Ann Arbor, Michigan, 2. AARP Services, Inc., Washington, District of Columbia, 3. UnitedHealth Group Alliances, Ann Arbor, Michigan*

Research Objective: To estimate the burden of falling on quality of life (QoL) among older adults with AARP® Medicare Supplement (i.e., Medigap) Insurance underwritten by UnitedHealthcare (or UnitedHealthcare of New York for insureds residing there). Study Design: A mail survey was sent to a random sample of 1,500 Medigap insureds in each of 10 states in 2008. The Medicare Health Outcomes Survey was used, but renamed the Health Update Survey (HUS) for use with a Medigap sample. Population Studied: 5,875 (39%) of the sample members responded to the study. About 21% (1,212) fell sometime in the last year; 17% (1,000) did not fall but reported balance or walking problems so were at high risk of falling; and 62% (3,663) were in the low-risk, no-fall comparison group. Principle Findings: Multiple regression analyses showed the strongest predictors of falling or being at high risk of falling to be advancing age, obesity, heart conditions, stroke, respiratory issues, inflammatory bowel disease, arthritis, sciatica, diabetes, and hearing problems. Having more of these problems increased the likelihood of falling or being at risk of falling. Average physical (PCS) and mental component scores (MCS) were about 5.6 and 3.1 points lower, respectively ($p < 0.001$ in both cases) for those who fell, than among the comparison group. Likewise, those at risk of falling averaged significantly lower PCS (-9.11, $p<0.0001$) and MCS (-2.85, $p<0.0001$) scores. Conclusions: Falling or being at risk of falling had a stronger negative influence on QoL than most of the comorbidities measured.

### THE EFFECTIVENESS OF TAILORING MULTIMEDIA-BASED FALLS PREVENTION EDUCATION FOR OLDER ADULTS

S. Schepens[1], A. Goldberg[2], V. Panzer[3], *1. University of Michigan, Ann Arbor, Michigan, 2. Department of Healthcare Sciences, Physical Therapy Program, Mobility Research Laboratory, Institute of Gerontology, Department of Internal Medicine, Wayne State University, Detroit, Michigan, 3. University of Connecticut Health Center, Farmington, Connecticut*

Objective: To determine if tailoring multimedia falls prevention education by employing evidence-based instructional strategies increases knowledge of fall threats and fall prevention behaviors in older adults. Design: Randomized control trial including two educational groups employing instructional strategies focused on Authenticity or Motivation, and compared to Controls. Participants: 53 community-dwelling older adults (ages 65+). Intervention: Multimedia-based educational interventions were designed to improve knowledge of situations representing personal fall threats and encourage fall prevention behaviors. The Authenticity group received education tailored to enhance authenticity with realistic content reflecting participants' living situations and independence levels. The Motivation group received education tailored using three motivational strategies: statement of program goals, emphasis on program benefits, and participant selection of program content. Measurements: Knowledge was measured by ability to recognize fall threats presented in ten standardized multimedia clips at baseline and ten novel clips at one-month follow-up. Participants recorded fall prevention behaviors daily for one month. Results: Unlike Controls, each intervention group showed improvements in fall threats knowledge from baseline to follow-up ($p<0.01$). Additionally, participants recognized more fall threats at follow-up than Controls ($p<0.05$). The Motivation group engaged in more fall prevention behaviors over one month compared to both the Authenticity and Control groups ($p\leq0.05$). Conclusion: Tailoring multimedia falls prevention education by utilizing evidence-based strategies addressing educational authenticity and learner motivation was equally successful in improving older adults' knowledge of fall threats. Combining motivational strategies with falls education was more effective than addressing content authenticity, however, in encouraging older adults to engage in fall prevention behaviors.

### DANCE AND OLDER ADULTS: A SYSTEMATIC REVIEW

D. Klima, E. Kuhn, K. Fiackos, D. Ethier, R. Patel, M. Treuth, *UMES, Princess Anne, Maryland*

Purpose: Recent interest in the therapeutic benefits of dance in the elderly has prompted research initiatives. Studies have used a wide variety of dance methods to improve different areas of health in older individuals. While multiple studies have been performed, there exists no single analysis of the benefits of dance with both physical and psychosocial variables. The purpose of this systematic review was to examine both the physical(balance and gait) and psychosocial (balance confidence and mood) benefits of dance among older adults. Methods: The initial literature search was completed through the Medline, CINAHL, and PsycINFO search engines. Searches were performed in each search engine with pair combinations of key words related to "dance" and "elderly." The searches were limited by the years 1996-2009, the English language, and dance as a primary intervention in an experimental or quasi-experimental study. The PEDro and APTA data bases were further reviewed for pertinent studies, along with a final hand search. Studies were categorized and rated according to levels of evidence and methodologic quality established by Sackett, the Dept. of US Health Policy and Research(USHPR), and Downs and Black. Results: Of the initial 224 studies retrieved, 20 met the designated inclusion criteria. These studies were categorized according to the following USHPR levels of evidence: 2-Level IA, 8-Level IB, 1-Level IIA, and 9-Level IIB. Within the physical performance domain, 12 studies cited significant improvement in balance ability following a dance intervention. Balance assessment occurred through both salient clinical tests and forceplate posturography. Six studies demonstrated significant improvement in gait parameters following a dance intervention, either in velocity or specific kinematic parameters. Only one study examined the fear of falling variable; however, findings demonstrated significant improvement in balance confidence using the Activities-specific Balance Confidence Scale. Of the four studies which assessed mood, there was no improvement noted in depression ratings following the dance intervention. Methodological limitations among the included studies were small sample size, limited follow-up of participants, and lack of randomization. Conclusions: Findings from this systematic review suggest areas where dance may prove particularly beneficial when targeting interventions for older adults. Older adults may benefit from dance interventions to improve overall gait and balance performance.

### THE SMILING PROJECT: DEVELOPMENT OF A NEW PROGRAM FOR GAIT AND BALANCE TRAINING

S. Rochat[1], C. Hoskovec[1], K. Aminian[2], B. Mariani[2], C.J. Bula[1], *1. Service of Geriatric Medicine, CHUV, Lausanne, Switzerland, 2. LMAM, EPFL, Lausanne, Switzerland*

Introduction: The SMILING project, a multicentric project funded by the European Union, aims to develop a new gait and balance training program to prevent falls in older persons. The program includes the "SMILING shoe", an innovative device that generates mechanical perturbation while walking by changing the soles' inclination. Induced perturbations challenge subjects' balance and force them to react to avoid falls. By training specifically the complex motor reactions used to maintain balance when walking on irregular ground, the program will improve subjects' ability to react in situation of unsteadiness and reduce their risk of falling. Methods: The program will be evaluated in a multicentric, cross-over randomized controlled trial. Overall, 112 subjects (aged ≥65 years, ≥1 falls, POMA score 22-26/28) will be enrolled. Subjects will be randomised in 2 groups: group A begin the training with active "SMILING shoes", group B with inactive dummy shoes. After 4 weeks of training, group A and B will exchange the shoes. Supervised training sessions (30 minutes twice a week for 8 weeks) include walking tasks of progressive difficulties.To avoid a learning effect, "SMILING shoes" perturbations will be generated in a non-linear and chaotic way. Gait performance, fear of falling, and acceptability of the program will be assessed. Conclusion: The SMILING program is an innovative intervention for falls prevention in older persons based on gait and balance training using chaotic perturbations. Because of the easy use of the "SMILING shoes", this program could be used in various settings, such as geriatric clinics or at home.

### CALORIC EXPENDITURE IN WII BOWLING OLDER ADULTS

E. Orsega-Smith, C. Kukich, *Department of Health, Nutrition & Exercise Science, University of Delaware, Newark, Delaware*

With the advancement of technology, new channels for individuals to become physically active have been developed. There have not been any studies which have investigated the energy expenditure of this game technology with older adults. Given that 40% of older adult females and 30% of males ages 70 and older do not participate in any physical activity, the United State faces growing health problems in this aging population. The purpose of this study was to investigate the caloric expenditure of independent older adults playing the Nintendo Wii bowling game. Fifty-one participants from local senior centers (82.4 % females, 17.6 % males) ranging in age from 59-91 years (79.37 + 7.68 years) played Wii bowling on a regular basis once per week. These were independent community dwelling overweight adults (BMI= 31.54 kg/m2). We measured energy expenditure using ACTICAL accelerometers which were placed on the participant's dominant wrist. Caloric expenditure for Wii bowling for 30 minutes ranged from 10.91- 86.09 kcals ( 46.48 + 15.73 kcals). We also compared the accelerometer data to the Wii bowling scores. Bowling scores ranged from 97-226. There was a significant correlation between Wii bowling scores (164.29 + 25.79) and kcals expended during the bowling (r =.350, p <0.05). The results of this study suggests that for some older adults, Wii bowling may be a vehicle for participating in low to moderate level physical activity. Future studies may investigate ways in which older adults maintain participation in such game technology over time.

### FEMORAL BONE DENSITY AND PHYSICAL ACTIVITY LEVEL IN OLDER ADULTS: NHANES 2004-2006

Y. Lee[1], J. Baek[1], K. Yang[2], *1. San Diego State University, San Diego, California, 2. University of Pittsburgh, Pittsburgh, Pennsylvania*

BACKGROUND: Osteoporosis is a silent but debilitating disease that can threat older adults' daily life. Regular physical activity (PA) can promote bone health. PURPOSE: To examine the status of femoral bone mineral density (BMD) and the awareness of one's own bone health condition and to determine the association of PA levels and bone conditions among older adults residing in the community. METHODS: In the National Health and Nutritional Examination Survey (NHANES) 2005-2006 data, femoral neck BMD, intensity and step counts by accelerometers, body mass index, history of fracture, and survey questions were used for the study purposes. FINDINGS: Of the total 1488 adults aged 60 years and older, 1108 were examined the BMD test; 67% and 37% of women and men represented lower than normal in bone density on the femur neck and 18% of them (n=103) were told about their low bone status; women and those with increasing age and normal body mass index had lower BMD. In PA measured by accelerometers (ACC), inactive (low) intensity activities yielded 85% of daily counts; total ACC counts, light activity counts, and step counts in light activities were higher in those with normal BMD than those with low BMD, but moderate or vigorous activities were not different between two groups. CONCLUSIONS: Low bone mineral density indicates a common health problem among older adults, but most of them are not aware their bone health condition and conduct inactive lifestyles. Public awareness about bone health is necessary to maintain older adults' physical function.

### WALKING SPEED: THE 6TH VITAL SIGN

K.K. Chui[1], M. Lusardi[1], S. Fritz[2], P.W. Duncan[3], *1. Physical Therapy and Human Movement Science, Sacred Heart University, Fairfield, Connecticut, 2. University of South Carolina, Columbia, South Carolina, 3. Duke University, Durham, North Carolina*

Background: Walking speed has been described as a nearly perfect clinical measure. Normative self-selected walking speed (SSWS) data is available for interpretation of patient data. Minimal detectable change and minimal clinically important difference for walking speed are approximately 0.1 m/sec, for meaningful improvement as well as loss of function. Consistent findings support the usefulness of walking speed as an indicator of overall health status, functional decline, morbidity and mortality. Methods: Integrative review of the literature on use of SSWS as a key indicator of functional and health status, and development of a risk "classification". Results: We present evidence supporting inclusion of SSWS speed as a "vital sign" indicator of health and functional status in the physical therapy examination. Optimal SSWS appears to be 1.2 m/s or faster. Minimum "safe" walking speed as an indicator of fair to good health and community function appears to be 1.0 m/s. Walking speeds between 0.6 and 1.0 m/s are indicative of need for further examination of potential remediable contributors to risk of functional decline and morbidity. Individuals walking at < 0.6 m/s are most at risk of dependence, institutionalization, falls and death within the next 5 years. Clinical Relevance: SSWS is a meaningful and important indicator of health and functional status. Walking speed can be used as a screening tool to identify those aging adults most in need of exercise intervention to improve endurance, muscle performance, and functional status. We, therefore, advocate that all physical therapists measure SSWS for all patients in all settings.

### THE DIAGNOSTIC ACCURACY OF THE FOUR SQUARE STEP TEST UNDER SINGLE- AND DUAL-TASK CONDITIONS FOR HEALTHY OLDER ADULTS WITH A HISTORY OF FALLS

S. Bastos, M. Lusardi, K.K. Chui, *Physical Therapy and Human Movement Science, Sacred Heart University, Fairfield, Connecticut*

Objectives: This descriptive study examined the diagnostic accuracy of the Four Square Step Test (FSST) under single- and dual-task conditions. The clinometric properties calculated include: sensitivity (SN), specificity (SP), and positive (+) and negative (-) likelihood ratios (LR). Participants: Fifty-nine healthy community-dwelling older adults (mean age = 84.97±11.38 years) participated in a functional assessment clinic at their continuing care retirement community. Subjects were dichotomized as fallers (n = 18) or non-fallers (n = 41) based on a self-reported history of falls in the previous six months. Measures: The FSST was performed as a single-task and under two dual-task conditions (manual = holding a glass of water and cognitive = counting back from 100 by serial 3s). ROC analyses were used to determine cutoff scores. Results: The optimal cutoff score for discriminating between fallers and non-fallers for the FSST as a single-task was 12 seconds (SN = .61, SP = .68, +LR = 1.91, -LR= .57). The addition of a manual or cognitive task did not improve the diagnostic accuracy of the FSST. Optimal cutoff scores for the FSST-manual was 12 seconds (SN= .61, SP= .56, +LR= 1.39, -LR=.70) and for the FSST-cognitive was 15 seconds (SN= .50, SP= .59, +LR= 1.22, -LR= .85). Conclusions: The FSST demonstrated acceptable SN and SP and the addition of a manual or cognitive task did not improve its diagnostic accuracy. Given a pre-test probability of 44% for falling, a positive FSST increased the post-test probability to 60% and a negative FSST decreased the post-test probability to 31%.

## SESSION 1435 (SYMPOSIUM)

### UNCONVENTIONAL TARGETS FOR THE STUDY OF AGING PROCESSES FROM THE NIA INTRAMURAL RESEARCH PROGRAM

Chair: *E.M. Simonsick, National Institute on Aging, Baltimore, Maryland*

Discussant: *L. Ferrucci, National Institute on Aging, Baltimore, Maryland*

The Laboratory of Epidemiology, Demography and Biometry and the Longitudinal Studies Section of the Clinical Research Branch of the Intramural Research Program of NIA have a long tradition of initiating and supporting longitudinal observational studies of aging processes. These studies and datasets serve as somewhat "timeless" resources for investigation of new and emerging research questions. In this symposium we present findings from three of these studies, InCHIANTI, the Health, Aging and Body Composition (Health ABC) study and the Age Gene/Environment Susceptibility-Reykjavik Study (AGES) with the aim to provide both an overview of these rich data resources and highlight specific and novel findings related to multiple aspects of the aging process. Data from InCHIANTI, a cohort study of older adults residing in the Tuscany region of Italy, was used to examine the relationship between olive oil consumption and longevity over 10 years, the association between vitamin D deficiency and risk of depressive symptomatology over 6 years and the genetic variation in soluble advanced glycation end product receptor concentrations which regulate inflammatory response. Data from Health ABC, comprising a biracial sample of initially well-functioning men and women aged 70-79, was used to understand how personality relates to maintenance and decline in walking speed. Lastly, data from AGES, a cohort of Iceland residents aged 66-98 was used to evaluate the relationship between red blood cell characteristics and MRI-acquired brain parameters and cognitive function. These findings add to the wealth of insightful research generated by these cohort studies and provide impetus for future work.

### OLIVE OIL INTAKE AND LONGEVITY IN OLDER ITALIANS

S. Bandinelli[1], A. Corsi[2], F. Lauretani[2], R. Vazzana[4], A. Kisialiou[2], Y. Milaneschi[3], J. Guralnik[5], L. Ferrucci[3], *1. Azienda Sanitaria Firenze, Florence, Italy, 2. Tuscany Health Regional Agency, Florence, Italy, 3. National Institute on Aging, Baltimore, Maryland, 4. University "G. D'Annunzio" of Chieti, Chieti, Italy, 5. National Institute on Aging, Bethesda, Maryland*

Adherence to a Mediterranean diet has been consistently associated with lower mortality. Olive oil, a key component of this diet, may contribute to the protective effects through high levels of monounsaturated fatty acids and other components ($\alpha$-tocopherol, carotenoids, phenols) having anti-inflammatory and antioxidant properties. We examined the association between olive oil intake and mortality over 10 years in 1139 elderly individuals (mean age 75.9) participating in InCHIANTI. Nutrient intake was estimated from the EPIC food frequency questionnaire. Using Cox regression models, higher olive oil intake was associated with lower mortality risk (1.046, 95% CI: 1.002-1.92, p=0.041) independent of BMI, caloric intake, physical activity and inflammatory markers. Persons in the third quartile of olive oil intake (22.5 - 31.1 g/day) had the best survival independent of covariates. The association between olive oil intake and reduced mortality particularly in a Mediterranean population strongly supports olive oil as a healthy diet component.

### VITAMIN D AND AND RISK OF ELEVATED DEPRESSIVE SYMPTOMS IN OLDER PERSONS: THE INCHIANTI STUDY

Y. Milaneschi[1], M. Shardell[2], A. Corsi[3], R. Vazzana[4], S. Bandinelli[5], J. Guralnik[6], L. Ferrucci[1], *1. National Institute on Aging, Baltimore, Maryland, 2. University of Maryland School of Medicine, Baltimore, Maryland, 3. Tuscany Health Regional Agency, Florence, Italy, 4. University "G. D'Annunzio" of Chieti, Chieti, Italy, 5. Azienda Sanitaria Firenze, Florence, Italy, 6. National Institute on Aging, Bethesda, Maryland*

Recently, it has been hypothesized that hypovitaminosis D may contribute to late life depression. The few studies investigating the association between Vitamin D and depression have been cross-sectional with conflicting findings. We examined the relationship between 25-hydroxyvitamin D [25(OH)D] and depressive symptoms over time in 954 participants aged ≥65 years from the InCHIANTI Study. Serum 25(OH)D was measured at baseline. Depressive symptoms were assessed at baseline and at the 3- and 6-year follow-ups using the Center for Epidemiological Studies-Depression Scale (CES-D). Women with 25(OH)D<50nmol/L compared to those with higher levels, had significantly higher risk of developing depressed mood (CES-D≥16) over 6 years (HR=1.97, 95%CI=1.13-3.43, p=0.02). A trend was evident in men (HR=1.7, 95%CI=0.9-3.3, p=0.1). Hypovitaminosis D is a risk factor for the development of depressive symptoms in older persons. Normalization of Vitamin D levels may positively contribute to the successful treatment of depression in older persons.

### GENETICS OF OXIDATIVE STRESS: AGER GENE VARIANTS AND ADVANCED GLYCATION END PRODUCT RECEPTOR

T. Tanaka[1], R. Semba[2], J.D. Walston[2], A. Singleton[1], D. Hernandez[1], S. Bandinelli[3], L. Ferrucci[1], *1. National Institute on Aging, Baltimore, Maryland, 2. Johns Hopkins University, Baltimore, Maryland, 3. Azienda Sanitaria Firenze, Florence, Italy*

Advanced glycation end products (AGE), indicators of oxidative stress, are elevated in diabetes, cardiovascular disease and advanced age and can affect inflammation through interaction with specific receptors. Soluble AGE receptor (sRAGE) is thought to have anti-inflammatory effects by inhibiting the interaction of AGE with cell receptors. As such sRAGE have been associated with chronic inflammatory conditions. It is unknown if there are genetic variants that affect circulating levels of sRAGE, although preliminary data suggest a possible role of the AGE receptor gene (AGER) G82S polymorphism. To determine whether there are other genetic loci associated with sRAGE concentration, we conducted a genome-wide association study in the InCHIANTI study. The variant with the strongest evidence of association was located the AGER gene on chromosome 6. We replicated this finding in the Women's Health and Aging Study. This polymorphism may be used to investigate the role of AGE in pathogenesis of inflammatory diseases.

### PERSONALITY AND WALKING SPEED DECLINE: FINDINGS FROM THE HEALTH, AGING AND BODY COMPOSITION STUDY

M. Tolea[1], P.T. Costa[1], A. Terracciano[1], L. Ferrucci[1], K. Faulkner[2], M. Coday[3], H.N. Ayonayon[4], E. Simonsick[1], *1. National Institute on Aging, Baltimore, Maryland, 2. National Institute for Occupational Safety and Health, National Personal Protective Technology Laboratory/OD, Atlanta, Georgia, 3. The University of Tennessee, Health Science Center, Memphis, Tennessee, 4. University of California San Francisco, Department of Epidemiology and Biostatistics, San Francisco, California*

The relationship between personality and lifestyle behaviors and risk of specific health conditions suggests that personality may also impact mobility loss in old age. This study examines the association between openness to experience and conscientiousness and initial gait speed and decline over 3 years in 907 older adults from the Health ABC study, 740 of whom had walking speed assessed three years later. Gait speed averaged 1.2 m/s at baseline and 1/3 experienced meaningful decline. Higher conscientiousness was associated with faster initial walking speed and less decline, independent of socio-demographics, co-morbidity and depressive symptoms. Lifestyle factors mediated the baseline but not the longitudinal association. Openness was not associated with either initial gait speed or decline. Findings extend the evidence of a protective effect of conscientiousness on physical function to objective assessment of gait speed. Future studies should focus on identifying mechanisms underlying the conscientiousness mobility connection in aging adults.

### RED CELL DISTRIBUTION WIDTH AND BRAIN TISSUE VOLUMES, CEREBRAL INFARCTS, AND COGNITIVE FUNCTION

K. Patel[1], J. Vidal[1], M. Garcia[1], G. Eiriksdottir[2], V. Gudnason[2,3], T.B. Harrris[1], L.J. Launer[1], *1. National Institute on Aging, Bethesda, Maryland, 2. Icelandic Heart Association, Kopavogur, Iceland, 3. University of Iceland, Reykjavik, Iceland*

This study determined whether greater variation in red blood cell (RBC) volume in the circulation, as measured by red cell distribution width (RDW), is associated with magnetic resonance imaging (MRI) markers of brain pathology and measures of cognitive performance. Blood count, brain MRI, and cognitive function data from 4,664 participants of the Age Gene/Environment Susceptibility-Reykjavik Study (AGES) were analyzed. Participants had a mean age of 76 years and 58% were women. After adjusting for demographic and biomedical risk factors, higher RDW values were associated with significantly decreased white matter, gray matter, and total brain tissue volumes as well as increased white matter hyperintensity volume ($p=0.001$) and more cerebral infarcts ($p<0.001$) and microbleeds ($p=0.02$). Additionally, higher RDW was associated with decreased speed of processing ($p=0.003$) and executive function ($p=0.001$), but not memory performance ($p=0.49$). Greater variability in RBC volume is associated with vascular brain injury and cognitive impairment in older adults.

## SESSION 1440 (SYMPOSIUM)

### VA GRECC SYMPOSIUM: EDUCATING RURAL PRIMARY CARE PROVIDERS ON CARE OF OLDER VETERANS

Chair: *B. Kramer, VA Greater Los Angeles Healthcare System, Los Angeles, California*

Discussant: *K. Shay, VA Office of Geriatrics and Extended Care, Washington, DC, District of Columbia*

Forty per cent of Veterans live in rural areas and these Veterans are often older and in poorer health than their urban counterpart. At the VA rural Community Based Outpatient Clinics (CBOCs) there is a severe shortage of VA physicians who have had training and/or certification in geriatric medicine to serve this population. The Geriatric Scholars Program (GSP) was developed to fill this gap by providing highly focused and on-going education in geriatrics. GSP is delivered as collaboration among eight Geriatric Research Education and Clinical Centers (GRECCs). GSP is an innovative national VA in-service educational program that uses multiple educational modalities for individualized, tailored education. The program includes mandatory components (didactic education in geriatric medicine and quality improvement) and elective options (clinical practicum, distant education, mentoring). The individualized needs assessment directs each learner's program and indicates need to develop new educational activities. A web-based learning community provides ongoing support and interactions. The evaluation approach was based on Kirkpatrick's chain of impact. Key educational outcomes include enhanced knowledge and skills, greater self-perceived confidence in skills related to care of older patients, and application of new knowledge through changes in personal practices and in a quality improvement projects that would systematically impact the CBOCs. Presenters will provide an overview of the development and implementation of GSP and results from the outcome and process evaluations.

### GERIATRIC SCHOLARS PROGRAM: AN ANALYSIS OF THE LEARNING COMMUNITY

L.I. Jones, *Veterans Administration, North Hills, California*

In this paper, the experience of creating a Learning Community (LC) for the Geriatric Scholars Program (GSP) will be discussed. Both live and website components of the LC were designed to supplement the Program's mandatory in-person courses. Live online education is offered as elective educational experiences to the Scholars. As a supplement to this live online education, a web-based site was created to offer a space in which the Scholars' learning may continue to occur individually and collectively. Preliminary results indicate that Scholars utilize a wide array of LC components, with an average Scholar utilizing at least 40% of components. In a national program in which the participants are often isolated geographically and confront barriers in accessing technology, constructing an engaging and flexible LC is arguably a necessary and valuable tool to support the GSP's goal of improving care for older Veterans who live in rural areas.

### ASSESSING AND ADDRESSING GERIATRIC CARE COMPETENCY NEEDS OF RURAL PROVIDERS

N. Tumosa[1], J.L. Howe[2], J. Huh[3], *1. GRECC, Saint Louis VAMC, St Louis, Missouri, 2. Bronx VAMC, New York City, New York, 3. Palo Alto VAMC, Palo Alto, California*

The educators for the VA Geriatric Scholars Program sought to provide instruction in geriatric healthcare to physicians, nurse practitioners, and physician assistants (Scholars) who practice in rural Community Based Outpatient Clinics (CBOCs) using multi-modal educational techniques. They developed a self-evaluation assessment tool to identify Scholars' needs and learning priorities in order to develop individualized learning experiences to address those needs and priorities. A total of 63 competencies derived from the ACGME, the American Association of Colleges of Nursing, and the American Geriatrics Society were evaluated and cross-walked for a comprehensive set of interprofessional competencies. Thirty-three Scholars indicated that their greatest priorities for further geriatric education fell within the areas of Patient Care and Medical Knowledge. Six specific competencies within those two areas were identified as critical areas for additional learning. Scholars participated in a commitment to practice and systems change exercise and optional practicum experiences to address learning needs.

### THE GERIATRIC SCHOLARS PROGRAM: AN OVERVIEW

B. Kramer, *1. VA Greater Los Angeles Healthcare System, Los Angeles, California, 2. David Geffen School of Medicine at UCLA, Los Angeles, California*

The Geriatric Scholars Program (GSP) is a national in-service education program for VA primary care providers (PCP) who work in rural community-based outpatient clinics (CBOCs) that serve 40% of the nation's Veterans. The GSP is an innovative concept in VA in-service education based on individualized, tailored education through mandatory and elective options to increase knowledge and skills in geriatrics for PCP. GSP has enrolled 103 VA practitioners, representing 87 CBOCs, in 34 states, 90% of VA regional management units (VISNs); 66% of participants are physicians, 28 % are nurse practitioners, and 6% are physician assistants. Each of the current class of GSP has initiated personal practice changes to improve care for older Veterans (e.g., screening for dementia, using a standardized assessment instrument, screening for fall risk) and is leading a local quality improvement project (e.g., screening for osteoporosis risk among male Veterans, reducing polypharmacy, improving recognition of dementia).

### CLINICAL PRACTICA: AN EDUCATIONAL ENHANCEMENT OF THE GERIATRIC SCHOLARS PROGRAM

R. Chernoff[1], C. Alessi[2], B. Kramer[2], M.J. Saunders[3], N. Tumosa[4], *1. Central Arkansas Veterans Healthcare System GRECC, Little Rock, Arkansas, 2. VA Greater Los Angeles GRECC, Los Angeles, California, 3. South Texas Veterans Healthcare System GRECC, San Antonio, Texas, 4. St. Louis VAMC GRECC, St. Louis, Missouri*

In order to expand opportunities for Geriatric Scholars to gain skills in geriatric assessment, GRECCs collaborating in this program provide a variety of mentored clinical experiences. One strength of the GRECC network is that each center has unique research, clinical and educational foci. Building on each Centers' expertise, we developed a variety of practical clinical experiences to support the intensive didactic education in geriatrics the Scholars receive, and to address additional educational needs self-identified by the Scholars. The Clinical Practicum educational strategies include: 1) observational clinical experiences in various care settings such as Geriatric Evaluation Units, Geriatric Rehabilitation Units, Adult Day Health Care, Home Based Primary Care, Medical Foster Homes, ACE Unit Delirium Rooms, and Geriatric Emergency Rooms, 2) practical experiences performing geriatric assessments with volunteer or standardized patients, and 3) self-study materials. These clinical practica enhance the Scholars' clinical experience with geriatric patients.

## SESSION 1445 (SYMPOSIUM)

### DEVELOPING NEW OR ADAPTING INTERVENTIONS: SETTING SPECIFIC CONSIDERATIONS IN LONG-TERM CARE

Chair: *S. Zimmerman, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina*
Discussant: *K. Pillemer, Cornell University, Ithaca, New York*

Researchers appreciate the importance of efficacy and effectiveness research, but they are not as familiar with how to adapt efficacious/effective interventions for use in settings other than those for which they were developed (which limits their utility); further, little has been written about setting-specific issues to consider when developing interventions that are intended to be adopted into practice. This symposium will present issues, challenges, and proven strategies to develop and/or adapt efficacious/effective setting-specific interventions in four areas. The first presentation will address how an efficacious falls prevention program developed for nursing homes was adapted for assisted living; it will present matters related to the program's development as well as implementation and outcome data indicating marginal success despite limited implementation. The second presentation will address how and why an efficacious intervention on staff-family "conflict" in nursing homes was modified into one focused on family involvement to improve resident quality of life in assisted living and nursing homes, and the activities families chose to increase their involvement. The third presentation will address the development of a new intervention to reduce antibiotic prescribing in nursing homes and assisted living; it will discuss how information was obtained to guide the program's development and differences in implementation across settings. The last presentation will discuss why and how prior work to use lighting to reduce behavioral symptoms of dementia in long-term care settings was adapted for use in home-based settings, as well as considerations related to assessing fidelity while minimizing caregiver burden.

### IMPLEMENTATION OF A FALLS PREVENTION PROGRAM IN ASSISTED LIVING SETTINGS

C. Mitchell[1], S. Zimmerman[1], C. Giuliani[1], P. Sloane[1], A.M. Greene[2], K. Nyrop[1], E. Walsh[3], *1. University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, 2. RTI International, RTP, North Carolina, 3. RTI International, Waltham, Massachusetts*

Falls have a significant impact on resident quality of life in residential care/assisted living (RC/AL) settings. Each year, over half of residents in these settings experience a fall, many of which result in fractures or other serious injuries. Staff in RC/AL often have little or no training in how to assess or manage resident falls risk. In this presentation, we will describe the adaptation to RC/AL of an efficacious falls reduction program for nursing homes to the RC/AL setting. Facilitators and barriers to implementation encountered in this preliminary study will be discussed. Additionally, we will describe the residents who participated in the evaluation (n=227) and present resident-level outcome data. Pre-post resident falls risk scores as measured by the Morse Falls Scale were marginally better (p=.07) between intervention and control sites. These results suggest that it is possible with modest changes in facility procedures and staff training to improve resident outcomes.

### DEVELOPING AN INTERVENTION TO PROVIDE FAMILIES A ROLE IN LONG-TERM CARE

S. Zimmerman, L.W. Cohen, J. Cagle, T. Washington, L. Penny, *University of North Carolina at Chapel Hill, Chapel Hill, North Carolina*

Families Matter in Long-Term Care is an intervention based on an efficacious communication program originally developed to reduce staff-family conflict in nursing homes. Use of the original program and translational testing in assisted living indicated cause to focus staff-family communication on strategies to better involve family in promoting resident quality of life. To date, over 150 families have participated in Families Matter and created personalized activity plans (comprised of 274 distinct activity ideas; average 1.8 activities/family). This presentation will overview the development and implementation of Families Matter in the context of the larger randomized controlled trial in which it occurs, and also will discuss facilitators, barriers, and solutions for implementing a collaborative intervention in long-term care. Finally, it will present data about the specific activities (coded into 6 macro and 30 micro codes) in which families desire greater involvement, and the family, resident, facility, and activity characteristics associated with success.

### DEVELOPING A FEASIBLE INTERVENTION TO REDUCE INAPPROPRIATE ANTIBIOTIC PRESCRIBING IN LONG-TERM CARE

P. Sloane, S. Zimmerman, *University of North Carolina at Chapel Hill, Chapel Hill, North Carolina*

Inappropriate overprescribing of antibiotics is believed to be a significant factor contributing to drug resistance. Using experiences from an ongoing project, this presentation will discuss issues involved in developing an intervention aimed at reducing inappropriate antibiotic prescribing in nursing homes and assisted living. Steps in intervention development included identifying key conditions where inappropriate prescribing is most likely, conducting an evidence-based literature review, selecting study sites, and using community-based participatory approaches to fashion the study intervention. Issues that will be discussed include: (a) how to manage the fact that the decision-making process involves a nurse/offsite physician dyad; (b) accommodating differing points of view in protocol design (e.g., between specialists in infectious disease and geriatricians); (c) selection of facilities and practices (randomization versus purposive strategies); (d) how to most effectively present recommendations to physicians; and (e) from a research perspective, how to study instances when antibiotics are not prescribed.

### DEVELOPING A HOME-BASED INTERVENTION TO TEST THE EFFECTS OF LIGHT THERAPY ON SENIORS WITH DEMENTIA

L.W. Cohen[1], P. Sloane[1], M. Figueiro[2], S. Zimmerman[1], *1. University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, 2. Rensselaer Polytechnic Institute, Troy, New York*

For older adults with dementia who live at home, abnormal sleep patterns disrupt the entire household. Medications are only modestly effective and have prominent adverse effects; so a safe, effective alternative could help persons with dementia remain at home. Light therapy can effectively treat many sleep disorders by entraining the body's circadian system, and has shown some success in institutional settings. Based on prior studies and new laboratory findings regarding the impact of various light spectra on circadian systems, we designed a randomized, controlled clinical trial to examine the effect of two lighting interventions, (two intensities and light spectra) on sleep, mood, and retinal health of older adults with dementia who live with a family caregiver. This presentation will present the rationale and approaches used to implement an individualized, technically–sophisticated lighting intervention in the home setting, including innovative ophthalmologic screening procedures, and promising new tools to establish treatment fidelity.

## SESSION 1450 (PAPER)

## HOUSING, NURSING HOMES, AND RESIDENTIAL CARE I

### IMPACTS OF A "RESIDENT FOR A DAY" EXPERIENCE ON INFLUENCING CULTURE CHANGE AND PERSON-CENTERED CARE

J. Johs-Artisensi, P. Lentz, J. McKee, *Health Care Administration, University of Wisconsin - Eau Claire, Eau Claire, Wisconsin*

Many nursing homes today are still providing resident care based on an institutional medical model. Although there has been a grassroots effort over the past decade to shift to a more social-model that delivers person-centered care in a homelike environment and better supports the social well being of older adults living in long term care settings, finding ways to influence leaders to take on the challenge of undergoing such a transformation has been difficult. We conducted a content analysis of the discourse in reflective narratives of a 24 hour simulation experience where future administrators live as a resident for 24 hours – pushing a call light when they need to toilet, eating pureed food, being transferred using a Hoyer lift, and a variety of other activities, to evaluate the impact of the experience on future leaders to implement Culture Change. This qualitative study reviewed 55 narratives from participants in 42 different long-term care settings. Our analysis revealed perspective changes in participants, both in terms of a more empathetic view of the resident experience, as well as organizational practices necessary to support resident-centered care. Major themes emerged from the discourse that suggest a deeper understanding of and appreciation for the resident experience and the value of resident-centered care. In addition, participants indicated they experienced significant perspective changes and indicated a desire to lead their future organizations with a resident centered care philosophy.

### CHOICES OF CONSUMERS IN PURCHASING HIGH-QUALITY NURSING HOME CARE

N.J. Zhang, *Department of Health Management and Informatics, University of Central Florida, Orlando, Florida*

Objective: Consumer-directed care has been designed to produce incentives for consumers to utilize low cost and high quality healthcare services. This study aims to understand the consumers' choices and behaviors of purchasing high-quality nursing home care. Data and Measures: Residents admitted in nursing homes in 2008 and long-term stay nursing home residents in 2008 in U.S. are the target study populations. 2008 Minimum Data Set, Online Survey Certification and Reporting data, CMS QM and ARF data are main data sources. High-quality nursing homes are hypothesized to attract not only local residences but also consumers who live in remote areas. Results: The study results show that about 25% nursing home residents live in the same zip code as their prior primary residence. About 70% of them chose a nursing home that is within 10 miles distance from their prior primary residence. There is a weak but statistically significant association between the quality of nursing home care and the average distance customers travel to seek care in a facility after controlling for resident characteristics including severity, family, organizational and market characteristics. Conclusions: It suggests that consumer choices of purchasing nursing home care are not completely quality driven and closeness to prior home and family are still the primary factors in their decision making in choosing nursing homes. How to encourage consumers to utilize high-quality nursing homes within acceptable distances using financial leverage and education strategies is a challenge to improve wellbeing of resident outcomes and reduce the cost of Medicare and Medicaid.

### NURSING HOME CULTURE CHANGE: ASSESSING CORE ELEMENTS OF IMPLEMENTATION OVER TIME

M. Lepore, S. Miller, R.R. Shield, *Brown University Center for Gerontology & Health Care Research, Providence, Rhode Island*

Nursing homes (NHs) are striving to transform from medical-like institutions to homelike environments offering personalized care. Core elements of NH "culture change" include resident-centeredness, staff empowerment, and homelikeness. Planetree—an emergent culture change initiative—drives change in NHs through a multistage process of continued assessment, including focus groups with stakeholders, guidelines for change, and annual evaluation of organizational progress following implementation. To identify barriers and facilitators of culture change, we examined transcripts from focus groups with residents and non-supervisory staff in two NHs during the preliminary stages of Planetree implementation (n=162) and after one year of implementation (n=173). Analysis of focus group data reveals numerous themes associated with the core elements of culture change and shows successes and shortcomings associated with Planetree implementation. Several factors regarding resident-centeredness are identified as beneficial, including resident involvement in committees. Identified barriers to resident-centeredness include the lack of staff response to residents' concerns. Rude treatment by leadership and lack of involvement in decision-making are commonly noted hindrances to staff empowerment, whereas strong orientation programs and flexible scheduling are identified as empowering. Space for guests to gather and accessible outdoor areas are identified as important environmental features, but small rooms and lack of amenities, such as adequate storage spaces, are characterized as deterrents to homelikeness. Overall, findings highlight feasible strategies for, and common hindrances to changing NH cultures. Focus groups aid the assessment of NH culture change initiatives and suggest that integrated community-wide efforts be employed. Research to explore variations among stakeholders' priorities is encouraged.

### PERCEPTIONS OF ADVERSE EVENT DISCLOSURE AMONG NURSES IN NURSING HOME SETTINGS

L. Wagner, K. Hodgson, K.C. Reid, *Baycrest Centre for Geriatric Care, Toronto, ON, Canada*

There is increasing attention being paid to disclosing harmful events to nursing home (NH) residents and their families; however, there is a significant gap between these expectations and current practice. The purpose of this study is to identify and list the factors influencing nursing error disclosure among nursing staff working in NH settings. Self-administered mailed surveys were sent to a randomly selected sample of 3000 registered nurses and registered practical nurses employed by Ontario NHs. From the 1180 nurse respondents, differences were found between groups assigned to two clinical scenarios, whereby participants responding to the serious error scenario were more likely to provide full disclosure than those participants responding to the minor error scenario. Only 18.7% of respondents had received education on disclosing errors to residents; 95.4% of respondents indicated that they are somewhat (32.5%) or very (62.9%) interested in receiving this type of education. The data obtained in this study aids to quantify and prioritize the necessary areas of disclosure education needed for nurses, and will be used in future studies to assist in the development of intervention strategies and policies aimed at improving nursing error disclosure.

## SESSION 1555 (SYMPOSIUM)

### OLLIE RANDALL AWARD SYMPOSIUM: LONG-TERM CARE AND THE ROLE OF THE NON-PROFIT AGING NETWORK

Chair: *L. Polivka, The Claude Pepper Foundation, Inc., Tallahassee, Florida*

Long-term care policy has not been a major priority at the national level for several years and only a handful of state legislatures have treated the issue as a priority. Over the next 20 years, however, LTC is likely to become a top domestic policy issue at the state and federal levels as the 80plus population grows and costs of care escalate. This panel will explore the implications of the latest research for the future of LTC policy, focusing on the relative roles of the public and private sectors, including families and individuals in the financing and administration of LTC services. Two of the panelists (Applebaum and Polivka) will use findings from the analysis of state level costs and outcome data to assess the effectiveness of current publicly funded LTC systems and the implications of these findings for state and federal LTC policy. The other 2 panelists (Richard Browdie and James Firman) will make presentations on the capacity of the private, non-profit aging network to provide a comprehensive array of LTC services efficiently and effectively, the implications of the health reform debate and outcomes for LTC policy at the state and federal levels. These 2 presentations will also address the potential for enhancing the aging network's LTC capacities through changes to the Older Americans ACT.

### IF OHIO CAN DO IT, SO CAN YOUR STATE: REFORMING LONG-TERM CARE, A STATE EXAMPLE

R. Applebaum, *Miami University, Oxford, Ohio*

By most indicators Ohio has trailed the nation in creating a balanced system of long-term services and supports. The state has a large supply of nursing home beds per capita, has ranked in the top ten in reimbursement, and has spent a larger portion of its Medicaid funds on nursing homes than most other states. On the other hand, Ohio has changed the ratio of Medicaid long-term care users from 91% nursing home in 1993, to 60% nursing home in 2008. Ohio's home care waiver program for older people is one of the largest in the U.S., serving more than 30,000 participants in 2008. Ohio has now established a Unified Budget Workgroup,created to restructure the state's approach to financing and delivering long-term services and supports. Using 16 years of longitudinal data this presentation describes changes in Ohio's system that have occurred and the barriers to develop a more balanced system.

### USING THE AGING NETWORK TO CREATE AN EFFICENT AND COMPASSIONATE LONG-TERM CARE SYSTEM

L. Polivka, *The Claude Pepper Foundation, Inc., Tallahassee, Florida*

In many states most publicly supported LTC services offered in the community are administered through the private, non-profit aging networks, which include Area Agencies on Aging and service providers. This LTC system stands in contrast to the U.S. health care system which is dominated by for-profit insurance and managed care companies. Some of these companies have moved into LTC services in several states in recent years and are now emerging as a competitive alternative to the aging network. This presentation will review results from several studies conducted in Florida since 2003 which consistently show aging network managed LTC programs are more cost-effective than for-profit HMO managed programs. These findings plus those from other states will then be integrated into a broader perspective (efficiency and ethics) to make the case for making the aging network the administrative centerpiece for all publicly supported LTC services.

### THE OPTIMAL ROLE OF THE AGING NETWORK

R. Browdie, *Benjamin Rose Institute, Cleveland, Ohio*

Long term services and supports is distinguished from health care by the extended time frame over which services are provided, the prepndernce of paraprofessional roles involved, and the intimacy and repetitive nature of those services. As a result, the role of personal discretion and preferences and the assurance of autonomy and personal dignity are significantly more important in the making of decisions. In addition, the service systems themselves are widely different from place to place. A locally based and state supervised approach to suporting decision-making of people needing LTSS and their families, as well as to manage the outflow of public resources has proven flexible and effective.

The Aging Network is best suited to the necesssary mission of optimizing the match between conumer needs and preferences and the effective use of scarce public resources.

### NATIONAL LONG-TERM CARE POLICY AND THE ROLE OF THE AGING NETWORK

J. Firman, *National Council on Aging, Washington, District of Columbia*

Against all odds, several major long-term services and supports provisions were included in final health care reform bill including the CLASS Act, the Elder Justice Act, and key elements of Community First Choice Act and the Empowered At Home Act. Jim Firman will discuss the political dynamics that led to these succesful outcomes as well as the important implications of these provisions for the aging services network.

# SESSION 1560 (PAPER)

## NATIONAL POLICY ISSUES AND AGING II

### THE BRIGHT SIDE OF AGING: REFRAMING THE DEBATE

M.K. Gusmano[1], K. Okma[2], *1. The Hastings Center, Garrison, New York, 2. New York University, New York, New York*

In last three decades of 20th century public debates about population aging has often been framed in alarmist terms, with little attention to underlying assumptions of the claims in the debate or to developments in other countries. A nested set of assumptions about long term developments and future expectations - regarding the level and direction of public spending and inter- and intra-generational transfers – shape this debate. In this paper, we seek to unravel these arguments, clarify empirical evidence and critically assess the underlying assumptions in the debates about the aging of our society. We argue that the framing of the debate is based on a fundamental shift in the image of older persons from an image of older persons as the source of wisdom and advise, to objects of government policies and, finally, to older persons as a burden to society. To address the consequences of aging, we need to reframe the debate in more realistic terms, based on empirical evidence and realistic assessments of the changing needs and demands of older persons, rather than on imagery. Furthermore, we must provide more opportunities for older persons to participate actively in debates about pension and health policy.

### WELFARE REFORM AND OLDER IMMIGRANTS' LABOR MARKET OUTCOMES:THE IMPACTS OF MEDICAID ELIGIBILITY RESTRICTIONS ON EMPLOYMENT AND WORK HOURS

Y. Nam, *1. Washington University, Saint Louis, Missouri, 2. SUNY, Buffalo, Buffalo, New York*

Background: The welfare reform bill of 1996 limited noncitizen's access to Medicaid and other public benefits by imposing restrictive eligibility rules. The bill prohibits states from providing federally-funded Medicaid benefits to recent immigrants who came to the U.S. less than 5 years ago. As a result, only 10 generous states provide Medicaid to recent immigrants through state-funding program. This study investigates whether and how Medicaid eligibility affected older immigrants' labor market outcomes after welfare reform, focusing on state eligibility rules. Method: This study conducts secondary data analyses using individual level data from the Current Population Survey and state-level Medicaid policy data. Individual-level data cover both pre- and post-reform periods (1994 to 1996 and 2003 to 2008). State-level data were collected by the author, using various sources (e.g., state Medicaid manuals and interviews with Medicaid directs). The dependent variables in this study are labor market status (active or retired), current employment status, and work hours. This study employs a differences-in-differences analysis that compares changes in labor market outcomes among older immigrants who live in generous states to those who live in non-generous states. Results: Multivariate analyses show that older immigrants' labor market status and current employment do not differ between pre- and post-reform periods and between generous and non-generous states. Older immigrants' work hours significantly increased after welfare reform but did not differ between generous and non-generous states. Conclusions: The results suggest that generous Medicaid eligibility rules did not have negative impacts on older immigrants' work efforts.

### NEWSPAPER PORTRAYALS OF NURSING HOMES IN THE U.S.: EPISODIC TREATMENT OF TOPIC AND TONE, 1998-2008

E.A. Miller[1], J. Rozanova[2], V. Mor[2], *1. Gerontology, University of Massachusetts Boston, Boston, Massachusetts, 2. Brown University, Providence, Rhode Island*

Policy theory reserves a prominent role for the mass media in the agenda setting process, both by shaping political messages and defining problems for the general public and government officials. Although observers have long highlighted media depictions of nursing home (NH) scandals, no study has systematically examined the way in which NHs have been portrayed in the national media. This study examines how NHs were depicted in four widely read national newspapers—The New York Times, Washington Post, Chicago Tribune, and Los Angeles Times. Keyword searches of the Lexus Nexus database were used to identify 1,464 articles about NHs during 1998-2008. The content of each article was analyzed and general tone and themes assessed. Fifty percent were published from 1999 to 2001; a comparatively high percentage (10.5%) was published in 2005 as well. Most articles were negative (45.2%) or neutral (44.7%) in tone; very few were positive (10.2%). General tone varied over time, however. Broad themes included quality/quality improvement (42.3%), financing (30.9%), rebalancing (6.5%), and negligence/fraud (24.6%). These too varied over time. Articles about rebalancing were least frequently negative (31.6%), followed by quality and financing (~45.0% each), and negligence/fraud (76.7%). Findings highlight the episodic framing of NH coverage among four national newspapers, not only with respect to tone but also with respect to shifts in media attention from one aspect of this complex issue to another. Future research should examine the relationship between media framing and changes in the policy agenda related to NHs, both across jurisdictions and over time.

### THE DEMISE OF SOCIAL HMOS: THE RISE AND DECLINE OF INTEGRATION IN ACUTE AND LONG-TERM CARE POLICY IN THE U.S

W. Leutz, *Heller School, Brandeis University, Waltham, Massachusetts*

After 25 years of coordinating acute care and long-term care (LTC) in a managed care model, Social HMOs will end operations in December 2010. This presentation provides (1) a brief history of the Social HMO and what was learned, (2) 25 years of data on benefits, populations, utilization, and costs, (3) Medicare policy changes that ended the project, and (4) reflections on service integration in the U.S. Pursuant to 2003 reforms of Medicare insurance for acute care, in 2007 the federal government informed Social HMOs that two key supports would be phased out: disability-adjusted Medicare payments, and the ability to transfer savings on acute care costs to LTC. These two supports for integrated services were maintained only for two special programs serving low-income persons who are also eligible for Medicaid insurance for low-income persons: the PACE program (in 30 states serving about 18,000 persons) and dual-eligible demonstrations (limited to three states serving about 50,000 persons). By ending Social HMOs, Medicare withdrew its support for integrating acute and LTC for non-poor persons. Concurrently, Medicaid attention turned to integrating LTC services under the banner of consumer choice. Integration with acute care services is not a goal of these initiatives. Serious efforts to coordinate acute and LTC in the US will require a return of a willingness to acknowledge the problems of fragmented acute and LTC services, a readiness to develop strong policy initiatives to compel public programs and private providers to participate, and willingness to continue initiatives until results are achieved.

## SESSION 1565 (SYMPOSIUM)

### SOCIAL INEQUALITIES IN HEALTH AMONG OLDER POPULATIONS IN DEVELOPING WORLD SOCIETIES: COMPARATIVE PERSPECTIVES

Chair: *I. Aboderin, Oxford Institute of Ageing, University of Oxford, Oxford, United Kingdom*

Discussant: *A. Chan, Department of Sociology, National University of Singapore, Singapore, Singapore*

A growing body of research examines social inequalities in health in old age within and between nations. Most studies have focused on Europe and North America showing clear disparities in health - with higher social position related to better outcomes. The gradient is thought to reflect differential levels of socio-economic resources, environmental or occupational exposures and stress-related effects of relative social position over the life course. Much less is known about health disparities among older populations in the developing world. Patternings observed in the industrialized world cannot simply be generalized to developing regions, given their very different historical, economic, social, cultural and policy contexts. Yet, only few Asian and Latin American studies have emerged in recent years, while research in Africa has barely begun. A greater understanding of old age health inequalities in developing world societies is urgently needed: not only to promote apposite policies for their ageing populations, but also to advance the scientific debate on health and ageing globally. The symposium illuminates social disparities in health among older populations in Africa, Asia and Latin America from a unique comparative perspective. Three speakers will present new evidence on SEP-health gradients, underlying determinants and policy implications from Nigeria, Thailand and Chile. A subsequent discussion will reflect on major cross-regional (dis)similarities and themes and distil key queries for further debate and research.

### ASSOCIATIONS BETWEEN SOCIOECONOMIC STATUS INDICATORS AND HEALTH OUTCOMES AMONG OLDER ADULTS IN THAILAND: RESULTS OF A LARGE SAMPLE SURVEY

Z. Zimmer[1], V. Prachuabmoh[2], *1. University of Utah, Salt Lake City, Utah, 2. Chulalongkorn University, Bangkok, Thailand*

While socioeconomic status (SES) has long been recognized as an important correlate of health in developed countries associations in developing societies are less apparent. Thailand is an interesting example, being characterized by both rapid aging and socio-economic development. This combination generates questions regarding how SES functions to influence health and what associations might mean for health inequalities in a developing and aging society. This study uses survey data collected by Thailand's National Statistical Office in 2007 from over 50,000 Thais aged 50+. Analysis test the hypothesis of a relationship between a set of SES indicators (education, income, wealth) and health outcomes (functioning and self-assessed health). Results are contrasted with a previous study using 1994 data. Since social and economic development over the thirteen years has been dramatic, the comparison can serve to highlight changes in the way in which the social environment is acting upon the health of older adults.

### SOCIAL FACTORS AND HEALTH: RESULTS FROM THE IBADAN STUDY OF AGEING

O. Gureje, L. Kola, *University of Ibadan, Ibadan, Oyo State, Nigeria*

Social factors bear important relationships to health outcomes as well as to access to health care in old age. The rapid changes taking place in developing countries may deepen social inequalities in health among the elderly in those countries. This presentation will focus on data derived from the Ibadan Study of Ageing, a longitudinal cohort study of community-dwelling elderly persons aged 65 years and over, being conducted in the Yoruba-speaking parts of Nigeria with a population of over 25 million people. Results from the baseline and follow-up assessments have shown that health outcomes, both mental and physical, are related to social factors such residence, economic status, and availability of social support and network. These factors also often affect the availability of informal caregiving to elderly persons in need as well as the burden experienced by persons providing such care to elderly persons.

### SOCIAL AND ECONOMIC FACTORS SHAPING OLDER PEOPLE HEALTH DISPARITIES IN LATIN-AMERICA. THE CASE OF CHILE

C. Albala, *Public Health Nutrition, INTA, University of Chile, Santiago de Chile, Chile*

This paper examines older people disparities in a cross sectional population based representative sample of people residing in Chile done in 2009. Inequalities in the social security, access to education and income as the main social determinants of health disparities will be presented. We will be able also to show the effects of the demographic origin, the income and the education in gender and social differentials in health status based in the follow up of 3 cohorts of different socioeconomic status and demographic origin. The results of the cross sectional study evince important differentials in chronic diseases, functional limitations, disability, cognitive impairment and depression with higher rates in women than in men and higher in the low socio economic status (SES) than in the high SES. Low levels of education arise as one of the main determinants of gender and SES health inequalities in Chile.

## SESSION 1570 (POSTER)

### SUCCESSFUL AGING - SRPP POSTER SESSION

### THE KEY POINT OF SUCCESSFUL AGING—EFFECTS OF SOCIAL PARTICIPATION AND RECREATIONAL ACTIVITIES OF ELDERS

S. Tseng, M. Lu, *Chia-Nan University, Kaohsiung City, Taiwan*

Aging societies have been focusing on the issue of successful aging globally, and paying more attention to the level of elders' physical function for a long time. In fact, there are not enough data indicated that how the elderly who have chronic diseases adjust the aged life successfully. This study aims to find out the styles of elders' daily activities from two perspectives: social participation and recreational activities and to analyze the effects of elders' daily activities on their life. The subjects were the elderly living at home in Taiwan. The data were collected by the semi-structural questionnaires with face to face interviews. Elders' 7-day activities were recorded by the open recording method. There were 995 subjects that excluded the unqualified cases and the ones with incomplete data. The responding rate was 90.4%. The results showed that the most popular social participation activity is neighborhood exchange visits (89.6%) and the second is aged group organizations (61.2%). The mainly recreational activities were raising pets and traveling (were 84.6% and 70.1%). In a word, the elderly had more interests to join the recreational activities than to participate in the social/community activities. The results also revealed the elders' physical function, social support and life satisfaction all have positive effects. Meanwhile, their social /community participation status, and the physical function, mental health and family relationship were significantly influenced by elders' recreational activities when other variables were controlled in the regression analysis. The researcher suggested that the policies of the elders' social welfare should be more stressing on their social activities from diverse viewpoints.

## VARIANCE IN ACTIVITY MEASURES ACROSS PUBLIC USE AGING SURVEY INSTRUMENTS: CONTENT ANALYSIS FINDINGS

M. Putnam[1], N. Morrow-Howell[3], M. Inoue[2], J.C. Greenfield[3], *1. School of Social Work, Simmons College, Boston, Massachusetts, 2. Boston College, Boston, Massachusetts, 3. Washington University in St. Louis, St. Louis, Missouri*

This poster presents findings of a study investigating the variance in activity measures across five public use data sets: National Health Interview Survey, Panel Study on Income Dynamics, Midlife in the United States, Health and Retirement Study, and Americans Changing Lives. Aims were: 1) To determine the amount and type of activity-related variables, 2) To determine if discrete activities can be grouped into conceptual domains to facilitate parsimonious empirical analysis of activity engagement among older adults. Data collection/analysis was completed using the qualitative method of content analysis. Methodology and means of establishing reliability and ensuring scientific rigor are discussed. Results indicate existence of 10 distinct conceptual activity measurement domains with all data sets containing at least 6 domains. Number of variables ranged from 41 in HRS 2007 to 165 in MIDUS Wave 2. Activity measures were divided into primary and descriptive. Dominant measurement type varied by data set with binary, ordinal and interval represented most often. Similarity of measures between data sets and within waves of a single data set is reported. Three primary findings - variation in the number and type of activity measures, predominant types of activity measures, and variance in content covered within a domain are discussed in terms of their relevance to empirically consolidating activity measures into composite variables to assess antecedents and outcomes of participation in multiple activities by older adults.

## THE CHANGE OF SELF-RATED HEALTH AND ECONOMIC STATUS OVER TIME AMONG KOREAN WIDOWED AND MARRIED ELDERS

Y. Lim[1], H. Yoon[1,2], *1. Hallym University Institute of Aging, Chuncheon, Republic of Korea, 2. Hallym University, Department of social welfare, Chuncheon, Republic of Korea*

Cross sectional studies about the quality of life among elderly suggests that widowed elders are unhealthier and poorer than married elders. Using longitudinal data of Korean elders, this paper examines: (1) the difference of the self-rated health status changes over time between widowed and married elders, (2) the difference of the self-rated economic status changes over time between widowed and married elder. Analyses are based on data from Hallym Aging Panel Data that is the Survey on the Quality of Life of the Elderly, a stratified multi-stage probability sample of older adults living in the cities of Seoul and Chuncheon in Korea. The first wave of data collection occurred in 2003 followed by additional surveys in 2005, 2007, 2009. Analytic sample consists of 232 widowed and 355 married individuals who are 60 and over. We applied the latent growth model and multiple group analysis using Amos. The results were as follows (1) both groups evaluated their economic status getting better over time, (2) widowed persons rated their economic status lower than married older adults, (3) widowed elders evaluated their health status same as married elders and the changes over time were not different, (4) through additional analysis, widowed age was an important variables to influence the economic status. Findings suggest that (1) social service for widowed elders may be focused more financial supports and (2) the widowed persons in later life is much more vulnerable in their finance, so the social consideration is needed for older-older persons.

## PRODUCTIVE ENGAGEMENT IN LATER LIFE AMONG RETIREES IN FIVE MAJOR CITIES IN CHINA

A. Mui, H. Chen, *Columbia University School of Social Work, New York, New York*

This study examines perception of later life satisfaction and productive engagement activities among Chinese aged 60 and older in Beijing, Shanghai, Guangzhou, Changchun, and Urumchi (n = 409) in 2004. Findings show that about 90% of the study participants reported excellent to good health when compared to their peers. Almost 70% of respondents were socially active and had been involved in different kinds of social activities in the community. Forty-five percent expressed interest in lifelong learning and education programs. However, 35% had not been informed about late-life educational opportunities. With regard to volunteering, 65% of the respondents did not know about the concept of volunteering but 47% expressed interest in participating in volunteering activities if given the opportunity. When asked about their perception in life, respondents expressed that they would be happy and satisfied if they had support from spouses and relatives; had the ability to do self-care and to adapt when they became ill; had opportunities to participate in social activities; had regular contact with adult children and grandchildren; and had opportunities to be with older acquaintances and to make new friends. Findings point to the need to design different productive-aging programs in these major Chinese cities.

## THE RELATIONSHIP BETWEEN FUTURE TIME PERSPECTIVE, INTRINSIC REWARDS OF WORK AND RETIREMENT PLANNING

T. Yang, S. DeVaney, *Purdue University, West Lafayette, Indiana*

The purpose was to examine how future time perspective and intrinsic rewards of work influence retirement planning. Data from the first wave of the Health and Retirement Study were used. It was hypothesized that future time perspective would increase retirement planning, while intrinsic rewards of work would have a negative relationship with retirement planning. Future time perspective was measured by: the remaining work life expectancy, chance of working full-time after 62, and chance of working full-time after 65. Intrinsic rewards of work was measured by: the importance of work compared to money and whether a person would work if no pay was available. Retirement planning was measured by whether the participant: had thought about retirement, discussed retirement with friends, attended meetings on retirement, and had a plan for retirement. Structural equation modeling were used with 5 covariates: education, gender, race, marital status, and pension eligibility. The results showed that each construct had a significant positive relationship with their indicators. The indices of overall model fit were acceptable (GFI=.97; AGFI=.95; RMSEA=.06). As hypothesized, future time perspective positively influenced retirement planning ($\gamma$=-.04, p=.001) and intrinsic rewards of work negatively influenced retirement planning ($\gamma$=.04, p<.001). This is the first study using a national sample to explore the relationship between future time perspective and retirement planning. The results suggest that those who thought they were closer to retirement and those who didn't perceived intrinsic rewards of work would plan for their retirement.

## THE RELATIONSHIPS BETWEEN RETIREMENT, SOCIAL CAPITAL, AND SELF-PERCEIVED HEALTH

J. Wang[1], W. Lin[1], L. Chang[2], *1. Department of Health Care Management, Chang Jung Christian University, Kway Jen, Tainan, Taiwan, 2. National Cheng Kung University, Tainan, Taiwan*

Previous studies on the relationships between retirement and health were rarely conducted in Asian countries. There also has been no study that examined how retirement affects social capital. This longitudinal cohort study examined how retirement affected social capital and self-perceived health of elderly Taiwanese. 3538 elderly who participated in the 1999 and 2003 wave of the "Survey of Health and Living Status of the Elderly in Taiwan" constituted the study sample. Social capital was measured by levels of participation in various social groups and associations as well as levels of social support received and provided. Health was measured by a question on self-perceived health. Control variables included socio-economic factors, comorbidity scores, pain, and functional limitations. Logistic regression models and multivariate regression models were used for analyses. Results indicated that retirement is associated with better self-perceived health. Retirement is also associated with higher levels of social participation. However, social support is not significantly different between retirees and non-retirees.

### ELDER SATISFACTION AND OUTCOMES OF ARTS WORKSHOP PARTICIPATION

J.A. Krout, *Gerontology Institute, Ithaca College, Ithaca, New York*

Researchers have found that participation in arts activities has many social, psychological and health benefits for older adults. This presentation reports findings on such impacts from 35 older adults living in a small city and its rural environs who participated in a variety of arts activities, including choral singing, printmaking, memoir writing, mural painting, acting and drawing. Activities were led by professional artists and typically involved five to six sessions` and 10 to 15 hours of group instruction. Participants were overwhelmingly female (80%) with a mean age of 68. Gaining personal satisfaction (82%) was the most frequently noted reason for participation followed by learning a new skill (74%), gaining arts knowledge (76%), social contact (50%) and making new friends (45%). A post activity survey found that 75% were completely satisfied with the activity (25% satisfied) and that most respondent's pre activity goals were met. Two-thirds of the participants indicated they saw themselves as more creative (one-third saw no change). No change was found in participant self perception of overall health or life satisfaction. No differences on these measures were found based on the nature of the activity but females and older participants were more likely to report increases in social contacts, making friends and learning a new skill. Participant comments also reveal a high degree of activity satisfaction and a variety of explanations as to the importance of creativity for elders. The implications of the findings are limited to the small N, short duration of activities and geographic area.

### A TALE OF THREE WOMEN: SURVIVORSHIP THROUGH CREATIVE EXPRESSION

C. Corley, *Human and Organizational Development, Fielding Graduate University, San Gabriel, California*

Gene Cohen notes the power of creativity in managing adversity (2000), stating it can "lift the emotional darkness of adversity, and even contribute to physical healing." A model inspired by three Hungarian women artists who survived the Holocaust is illustrated through their experience of the Holocaust, their creative expression, and the impact of their work on engagement of self and others. Through their work, the healing power of art is demonstrated, while comprehension of the intersection of each personal story with history is enhanced. The artistry of these three women provides a visual narrative that contributes to scholarship on incorporating images in understanding life story. Additionally, theories of gerontology which to date have largely overlooked creativity and its enhancement of well-being of self and others can be expanded through examining the role of art. Managing adversity through creativity via the specific example of the art of Holocaust survivors has implications for incorporating creative modalities in working with survivors of trauma at large. The experience/expression/engagement model is discussed in light of the power of art to heal, to inform, and to address negative stereotypes about older adults. It reinforces the groundbreaking work of Cohen (2006) by addressing the "conceptual sea change in aging" and exemplifying the later life developmental stage Cohen posited as "Encore". Selected illustrations from their recent work are included to highlight the power of story, lifelong resilience, and creative expression. Their collective works contribute toward understanding survivorship and promoting global awareness of the long-term impact of genocide.

### WHO BENEFITS MORE FROM VOLUNTEERING AND WHY?

N. Fatimah, *National University of Singapore, Singapore, Singapore*

There are rising number of organizations that have volunteer programs specialized for older adults in response to an increase in aging population and their interest in active aging in Singapore. Due to the lack of previous studies on the differences in perceived benefits of older volunteers by program characteristics which facilitate older adults' needs, this study examines differences in benefits and experiences between specialized and non-specialized volunteer programs for older adults. Of 461 agencies contacted, 72 participated in this study, but those volunteering in multiple agencies (53) were dropped. A total of 357 senior volunteers were included in this study. The survey was conducted via mailing. A wide range of benefits (generativity, productivity, socialization, personal growth, and health), volunteers' perception of organizational facilitation (role flexibility, recognition, compensation, training, and physical accommodation), and satisfaction with the program were measured in this study. The perceived benefits of volunteering for productivity, socialization benefits, personal growth and health status are higher for participants in specialized senior volunteer programs. In contrast, volunteers in non-specialized programs perceived higher generativity benefits. In addition, those in specialized volunteer programs reported higher levels of role flexibility and recognition, compensations and physical accommodation, but lower values for training and satisfaction with the volunteer program. The findings suggest that volunteer programs put more efforts to facilitate older adults' need for their satisfaction with their volunteering and to meet their specific expectations for maximization of perceived benefits from volunteering.

## SESSION 1575 (PAPER)

## TRANSPORTATION AND DRIVING ISSUES IN LATER LIFE

### IMPACT OF DRIVING STATUS ON TRANSPORTATION SUPPORT THAT OLDER ADULTS RECEIVE FROM THEIR PEERS

M. Choi[1], E. Kahana[2], *1. Epidemiology and Community Health, Virginia Commonwealth University, Richmond, Virginia, 2. Case Western Reserve University, Cleveland, Ohio*

This study examined the impact of driving status on transportation support that older adults receive from their peers in retirement communities. Data were obtained from the first wave of the Florida Disability Study (1990; N=983). The study population consists of generally healthy community-dwelling old-old persons residing in Florida retirement communities. Respondents had a mean age of 79.2, and 51.8% of respondents lived alone. A multinomial logistic regression model was employed. The outcome variable has three levels indicating degree of transportation support from their peers: none, little/some, and much/very much. Driving status consists of four attributes: (1) kept driving; (2) ceased driving within five years; (3) ceased driving more than five years ago; and (4) never drove. Other informal transportation support as well as sociodemographic and health factors were controlled in this analysis. The results showed that driving status was the most influential factor for respondents to receive much/very much transportation support from their peers while no impact was found on receiving little/some transportation support. The likelihood of receiving much/very much transportation support from peers increased by years of non-driving (reference group=current drivers): those who ceased driving within five years (OR = 5.76, $p < .001$), those who ceased driving more than five years ago (OR=8.45, $p < .01$), and those who never drove (OR=11.93, $p < .01$). These results imply that the adaptation to marshal support from peers for transportation becomes greater over time among retirement community residents who are not able to drive.

### POLICIES FOR RESTRICTING MEDICALLY AT-RISK OLDER DRIVERS: PROFILE OF CANADIAN JURISDICTIONS

A.M. Myers[1], B. Vrkljan[2], S. Marshall[3], R.A. Blanchard[1], *1. Health Studies and Gerontology, University of Waterloo, Waterloo, Ontario, Canada, 2. McMaster University, Hamilton, Ontario, Canada, 3. Ottawa Hospital Research Institute, Ottawa, Ontario, Canada*

Not surprisingly, surveys show that seniors would rather have their license restricted than removed, although some restrictions (e.g., daytime) are more acceptable than others (e.g., distance). Licensing authorities are being pressured to move away from controversial age-based renewal policies, and in some provinces, to expand conditional licensing (CL). Two Canadian studies (Marshall et al., 2002; Nasvadi and Wister, 2009) have shown that licensing restrictions may be effective in reducing crashes. However, these studies were conducted in two provinces with distinctly different policies. One aim of this project was to document and compare policies and procedures pertaining to medically at-risk drivers across Canada. At the time, policies for several jurisdictions were unknown as prior surveys of ministry personnel had poor response rates (54% to 62%). Through a more targeted approach we achieved a 100% response rate. Using this data, the 13 provincial and territorial jurisdictions will be profiled and compared with respect to: renewal requirements, reporting procedures, criteria for assessment centres, CL options, mechanisms for enforcement and appeals. For instance, several jurisdictions have some (albeit different) age-based renewal requirements. Physicians are required to report medically at-risk drivers in 10 jurisdictions, optometrists in 8, and others (e.g., nurses) in 3 provinces. Apart from corrective lenses and adaptive equipment, 12 provinces issue CLs (the most being time of day, distance and roadways). A clear understanding of the linkages between policies (e.g., renewal and CL), together with evaluation evidence, will assist policy advisors in making informed decisions.

### COGNITIVELY IMPAIRED DRIVERS AND THEIR FAMILY MEMBERS: PERCEPTIONS OF DRIVING ABILITY AND BEHAVIORS

N.M. Silverstein[1], A. Gottlieb[1], N. Kwan[1], L.J. Molnar[2], D.W. Eby[2], T. Materdey[3], E. Van Ranst[1], *1. Gerontology, University of Massachusetts Boston, Boston, Massachusetts, 2. University of Michigan Transportation Research Institute, Ann Arbor, Michigan, 3. University of Massachusetts Boston-Engineering, Boston, Massachusetts*

Drivers with dementia are among those considered at greatest risk for unsafe driving performance. It is estimated that about one-third of drivers with dementia continue to drive for 3 to 5 years post diagnosis. Most drivers are early in the disease process when cognitive deficits are generally mild and changes to driving performance are minimal. Yet, decisions to enforce driving cessation are not straightforward and pose a difficult challenge to family members, licensing authorities, and health care professionals. Telephone interviews were conducted with 22 dyads of drivers and family members to assess areas of convergence of perceptions related to driving ability, history, and behaviors. As part of the eligibility for study inclusion drivers needed to pass a specialized clinical and on-road driving assessment by an occupational therapist/driving rehab specialist. Several significant findings were revealed. Drivers tended to underrate driving difficulties, while family members assumed greater levels of self-regulation among the drivers. Stronger agreement was found in reporting general physical fitness such as upper body strength and ability to climb stairs; identifying chronic conditions and medications taken; and the likelihood of utilizing alternative transportation. The findings illustrate that self-screening and family reports may not be sufficient or reliable indicators for determining fitness to drive in persons with dementia.

### IMPACT OF AN AUTOMOBILE-BASED TRANSPORTATION ALTERNATIVE TO DRIVING ON REPORTED COMMUNITY MOBILITY SELF-EFFICACY

R. Fortinsky[1], J. Vine[2], K. Freund[2], L. Hennig[3], *1. Center on Aging, University of Connecticut Health Center, Farmington, Connecticut, 2. ITNAmerica, Westbrook, Maine, 3. MaineHealth, Portland, Maine*

Background: Very little is known about the impact of using personal transportation alternatives after driving reduction or cessation. Accordingly, we studied a cohort of community-dwelling older adults and adults with visual impairment who joined Independent Transportation Network® (ITN), a demand-response transportation service designed to replicate the comfort and convenience of private automobile ownership, to determine whether their reported community mobility self-efficacy (CMSE) changed over 6 months after joining one of five ITN affiliate community programs. Methods: Subjects were interviewed by telephone soon after joining an ITN affiliate (T1), and again 6 months later (T2). To measure CMSE, we asked subjects 12 questions about degree of confidence in arranging rides for purposes commonly associated with independent living, including grocery shopping, medical appointments, and social engagement; confidence was reported on a 1-10 scale. Paired t-tests were used to determine whether scores for each CMSE item, and for an 8-item CMSE scale with demonstrated reliability and validity, changed significantly from T1 to T2. Results: 136 subjects (80.1% female; mean age=77.2+11.4years; 96% White) completed T1 and T2 interviews. Cohort mean scores increased from T1 to T2 for each CMSE item (all $p<0.05$), and the 8-item scale increased from 55.2 to 67.8 ($p<.001$). While at T1 non-drivers had lower CMSE scale scores than still-driving subjects, these group differences disappeared at T2, with non-drivers increasing to driver levels of CMSE. Conclusions: Availability and use of the ITN model of automobile-based transportation increased reported confidence in arranging rides to sustain community mobility after driving reduction or cessation.

## SESSION 1580 (SYMPOSIUM)

### EVOLUTION, EDUCATION, AND HEALTH

Chair: *S.N. Austad, Cellular & Structural Biology, University of Texas Health Science Center, San Antonio, Texas*

In 2008, the Louisiana State Legislature passed a law which allows local school boards to approve supplemental classroom materials specifically for the critique of scientific theories – read "Evolution." In response, this symposium will outline the educational consequences of this new law and explain why a foundation in evolutionary science is important for making more informed decisions about one's own health and about societal issues with scientific content. The symposium will feature three speakers: 1. Barbara Forrest, philosophy professor at Southeast Louisiana University and a Board member of the National Center for Science Education. Dr. Forrest was an expert witness for the plaintiffs in Dover School Board Case (2005) and is co-author of Creationism's Trojan Horse: The Wedge of Intelligent Design (2004). Dr. Forrest's talk will explain the consequences to science education of the Louisiana law. 2. Carl Zimmer, a multiple award-winning science journalist – contributing regularly to the New York Times, National Geographic, and Discover magazine on topics related to biological evolution. His most recent book is The Tangled Bank: An Introduction to Evolution (2009). Mr. Zimmer will discuss how understanding evolution allows Americans citizens to formulate more informed decisions about societally important matters. 3. Dr. Stephen C. Stearns is Edward P. Bass Professor of Ecology and Evolutionary Biology at Yale University with a special interest in evolutionary biology, medicine, and health. He has edited two editions of Evolution in Health & Disease (1998, 2009). Dr. Stearns will discuss how an understanding of evolution can affect your personal health decisions and interpretation of current medical research.

## SESSION 1585 (SYMPOSIUM)

### THE RELATIONSHIP OF METABOLITES AND CYTOKINES WITH FUNCTION AND PHYSICAL PERFORMANCE: RESULTS FROM THE DUKE PEPPER CENTER

Chair: *C.F. Pieper, Duke University Medical Center, Durham, North Carolina*

Co-Chair: *L.R. Landerman, Duke University Medical Center, Durham, North Carolina*

Discussant: *M.C. Morey, Duke University Medical Center, Durham, North Carolina*

Numerous studies have linked individual cytokines with a variety of functional and performance outcomes, and a growing literature is relating metabolites (acylcarnitines, fatty acids, and amino acids) to these outcomes. Assessing the relationship between biologic markers and function presents several analytic issues. First, in most data sets, the number of subjects is small relative to the number of predictors, leading to the potential for Type-I error in the assessment the marker to function relationships. Second, individual markers are often highly correlated. Finally, validation and replication of results across studies is often not possible. In this symposium, we will (1) list the analytic solutions we have developed to these analytic/methodologic issues and (2) present results of our analyses. Using a common battery of biomarkers (45 acylcarnitines, 15 amino acids, 7 fatty acids) assayed under a standard protocol, we analyzed 5 intervention studies (total n=346) designed to assess the impact of physical activity and diet on the markers as well as physical performance and function. Using Principal Components Analysis, the dimensionality of the problem was reduced from 67 markers to 7 factors. Consistency of these results across studies will be shown. In addition, the impact of the cytokine and metabolites factors on subsequent function and performance and the change in the markers over time in several of the individual studies is explored. Finally, results from a meta-analysis, exploring the consistency of the relationships between and within studies is shown.

### METHODS FOR DATA REDUCTION OF BIOMARKERS ACROSS STUDIES

C.F. Pieper, R. Sloane, L.R. Landerman, K.M. Huffman, W.E. Kraus, *biometry and bioinformatics, duke university medical center, Durham, North Carolina*

Biomarkers were measured under a standard protocol in 5 interventional studies assessing the impact of diet and exercise on function. Separately for each study, Principal Components Analysis extracted 3 factors from the 45 acylcarnitine markers, 3 from the 15 Amino Acids, and a single Fatty Acid factor. Factor loading segregated as expected allowing aggregation of theoretically similar biomarkers. Across studies, the loadings were remarkably consistent for the initial factors (reliability coefficient=0.92 for the acylcarnitine factor, 0.88 for the first Amino Acid factor, and 0.98 for the single FA factor), but were less consistent for subsequent factors.. From the individual study analysis, we developed summary loadings and normalizing equations available for use in longitudinal analysis of these studies as well as for use in future studies. An example of longitudinal change in the biomarkers will be shown in the CALERIE study.

### THE RELATIONSHIP BETWEEN ACYLCARNATINES AND PHYSICAL PERFORMANCE IN OSTEOARTHRITIS

R. Sloane, V.B. Kraus, D. Thompson, *biometry and bioinformatics, duke university medical center, Durham, North Carolina*

POP2 was analyzed as a cross-sectional study of 138 subjects with osteoarthritis (OA) in the knee. Physical function was assessed with the Short Physical Performance Battery (SPPB) based on timed short distance walk, repeated chair stands, and a set of balance tests. Each test was scored as a 0-4 ordinal categorical measure. In addition, the battery of 45 acylcarnitines (ACs) were measured. Principal Components Analysis was employed to estimate the 1-factor solution for the ACs for each subject. Spearman correlation analysis was used to measure the association between the AC 1-factor estimate with the individual and summed SPPB scores. Unadjusted correlation analyses showed that AC 1-factor estimates were significantly negatively associated with SPPB balance and chair stand scores. The association was sustained with serial adjustment for BMI, comorbidity burden, and radiographic measures of knee and ankle OA. However, age appears to be acting as a mediating factor in the AC-function relationship.

### THE RELATIONSHIP OF CYTOKINES WITH PHYSICAL PERFORMANCE: THE POP STUDY

D. Thompson, V.B. Kraus, R. Sloane, *biometry and bioinformatics, duke university medical center, Durham, North Carolina*

The Duke University Pepper Center seeks to identify metabolites and signaling molecules as potential biomarkers of physical function during aging. The present study explored a wide array (n=20) of cytokines selected for their involvement in a broad range of physiologic processes (inflammation, coagulation, oxidation, etc.) Serum was collected from subjects in the POP Study (Predicting Osteoarthritis Progression, n = 138, 73% female, all with knee osteoarthritis, mean age 66, age range 37-86). Physical performance was assessed by the Short Physical Performance Battery (SPPB), evaluating three domains of lower-extremity function: rising from a chair 5 times, standing balance, and an 8 foot walk. Statistically significant associations were found between lower extremity function and serum D-dimer, soluble VCAM-1, TNF receptors, and Hyaluronan. This comprehensive multi-marker approach has the potential to identify individual biomarkers of functional decline during aging, and also pathways in systems required for maintenance of physical performance.

### CALORIC RESTRICTION AND IMPROVEMENTS IN METABOLIC FLEXIBILITY

K.M. Huffman[1], L.M. Redman[2], L.R. Landerman[1], C.F. Pieper[1], J.B. Bain[1], V.B. Kraus[1], C.B. Newgard[1], E. Ravussin[2], *1. biometry and bioinformatics, duke university medical center, Durham, North Carolina, 2. Pennington Biomedical Research Center, Louisiana State University, Baton Rouge, Louisiana*

Metabolic flexibility has been defined as the efficient transition between different energy substrates depending on energy substrate availability and demand. We wished to determine if caloric restriction (CR) would enhance metabolic flexibility by reducing plasma concentrations of fatty acid oxidation byproducts from the fasted to the fed condition. Fasting and postprandial plasma samples were obtained at baseline and at months three and six in 36 volunteers randomized a weight maintenance diet (Control), 25% CR, or 12.5% CR plus 12.5% energy deficit from structured aerobic exercise (CR+EX). Over three and six months, there was a significantly greater decline in fasting-to-postprandial difference (FPPD) in medium and long chain acylcarnitine concentrations in the CR and CR+EX groups. Time-varying FPPD in acylcarnitines and amino acids were independently related to time-varying insulin sensitivity. CR imparted improvements in SI and metabolic flexibility, as defined by a greater reduction in fatty acid oxidation following a food challenge.

### ASSESSMENT OF THE RELATIONSHIP OF CYTOKINES WITH AGE, BMI, GENDER AND RACE: A META-ANALYSIS OF THE DUKE PEPPER STUDIES

L.R. Landerman, C.F. Pieper, K.M. Huffman, M.C. Morey, W.E. Kraus, H. Cohen, V.B. Kraus, *biometry and bioinformatics, duke university medical center, Durham, North Carolina*

Data on 20 cytokines were collected using a standard protocol as part of four studies assessing the impact of a diet/exercise intervention on physical performance. With multiple independent studies, meta-analysis can be used to obtain more precise estimates, estimate overall (average) effects, and determine whether significant between study differences are present, and detect effects which may be obscured in small samples. We used it to examine the associations between each cytokine and within-study measures of age, ethnicity (white vs. other), gender, and bmi. We first estimated study-specific effect sizes (standardized mean differences and z-transformed correlations) and their variances . SAS PROC MIXED was then used to weight these effect sizes by their variances and estimate overall effect sizes and their standard errors. Twenty two significant overall associations were present between ethnicity, gender, age, and bmi on the one hand, and cytokines on the other. Differences in effects across different individual studies were also observed.

## SESSION 1590 (PAPER)

## ADVERSITY AND TRAUMA

### THE PERSISTENCE OF ADVERSE CHILDHOOD EVENTS: THE CASE OF OLDER OFFENDERS

T.L. Young, B. Stanback, *School of Aging Studies, University of South Florida, Tampa, Florida*

Adverse childhood events (ACEs) are negative experiences or stressors that an individual may encounter before the age of 18. The current research on ACEs is only now extending into late life. This is an extremely important issue as it speaks to the persistence of early negative events throughout the life course. The goal of this study was to explore demographic and offense predictors in offenders age 50 or older (n= 548) who reported 4 or more ACEs in the 2004 wave of the Survey of Inmates in State and Federal Prisons (National Department of Justice, 2004). ACEs, demographic, and controlling offenses were examined using descriptive, Chi square, and logistic regression analyses. Chi square tests indicated that age, gender, mental health, education, violent offense, race, and marital status were significantly associated with individuals experiencing 4 or more ACEs. A logistic regression analysis significantly predicted individuals with 4 or more ACEs to be more likely to be women, between the ages of 50-59, have a violent controlling offense, and a history of mental illness, and less likely to have a high school diploma/GED, be married, and Caucasian. Findings from this study are framed in the life course perceptive and implications for future research are discussed.

### CUMULATIVE TRAUMA: A MODEL FOR UNDERSTANDING AGING ACROSS THE LIFE COURSE

M.E. Davis, *Social Work, George Mason University, Fairfax, Virginia*

The concept of trauma has increasingly been utilized to identify reactions linked to physical and psychological injury. This paper/poster describes a model of cumulative trauma as it impacts individuals throughout the life course. Cumulative trauma is typically defined as a condition when a physical body has been injured repeatedly causing trauma to that body part. When it occurs over a period of time, trauma results in damage. The concept of cumulative trauma can also be applied to conditions that impact the individual psychologically resulting in a buildup of traumatic injury. This model is based on the life course perspective as developed by Glen Elder. The life course perspective suggests the importance of time, context, process and meaning on human development and family life ( Bengston and Allen, 1993). The experience of aging for the individual is impacted, shaped and develops meaning from the context of the person's life, historical events and life events. (Bengton, Burgess and Parrot,1997). Cumulative trauma has implications in several areas. First, Elder's concept of linked lives suggests that trauma has the ability to impact those who experience it, but also those connected to the person.(Elder et al 2002). Secondly, trauma can be linked to many conditions. Trauma causing events are disasters, violence, abuse, torture,effects of war and others. Other conditions also cause trauma such as unemployment and even racism. Emotional and psychological trauma can result from stressful events that trigger a feeling of helplessness, threaten safety and security and increase vulnerability. The subjective experience is critical in defining trauma. Working with older adults to assess cumulative trauma is an important strategy for assessment.Important information about the life course experience of the individual helps to increase our understanding of behavior and thought that may be directly linked to long term effects of cumulative trauma. This workshop will describe the cumulative trauma model and the literature that supports its core concepts. It will then share with participants specific strategies to incorporate the model into the assessment process and work with older adults in service delivery settings. The model has special utility in working with cultural groups of older adults, as they often experience racism, discrimination and oppression as trauma. Bengston, V. L., & Allen, K. R. (1993). The life course perspective applied to families over time. In P. G. Boss, W. J. Doherty, R. LaRossa, W. R. Scham, & S. K. Steinmetz (Eds.), Sourcebook of families, theories and methods: A contextual approach (pp. 469-499). New York, NY: Plenum.

### CHARACTERISTICS OF AGING HOMELESS VETERANS

J.A. Schinka, R. Casey, *VA National Center on Homelessness, Tampa, Florida*

In this study we examined the characteristics of 14,742 homeless veterans who received supportive transitional housing services in the VA Grant Per Diem (GPD) program. The GPD program provides transitional housing for up to two years, access to health care services, substance abuse and mental health supports, education and employment assistance, and access to legal aid. Veterans age 55 and older were found to represent 21.5% of the sample. They were almost exclusively male (98.4%) and the majority (55.7%) were nonwhite. Chi-square analyses showed that, in comparison to younger veterans, the older veterans were more likely to be male, nonwhite, to need medical treatment, and to be mentally ill (55.2% of older veterans, 51.8% of younger veterans). This difference, however, was largely explained by the fact that 17.4% of the older veterans, as opposed to 5.7% of the younger veterans were believed to have PTSD. A greater percentage of older veterans successfully completed the program (56.3% versus 48.8% of younger veterans). This was possibly due to the greater frequency of alcohol and substance abuse in younger veterans and the higher frequency of service-connected, non-service-connected, and nonVA disability payments to older veterans. Logistic regression analyses revealed that any use of illegal substances, but not alcohol abuse, and age were the most highly associated with failure to complete the GPD program. In contrast, alcohol use, but not illegal substance abuse, and age were most highly associated with subsequent re-admission to the GPD program. The results of these analyses suggest that older homeless veterans differ significantly from younger homeless veterans on key factors that may relate to long-term health and mental health outcomes.

### TARNISHED GOLDEN YEARS: LATE LIFE FIRST TIME OFFENDERS IN U.S. JAILS

B. Stanback, *School of Aging Studies, University of South Florida, Tampa, Florida*

This study focuses on late life first time offenders, arrested for their first criminal offense at 50 years of age or older, in national samples of U.S. jail data. Participants 50 years or older in the 1996 and 2002 Waves of the Survey of Inmates in Local Jails were grouped as late life first time offenders (n=62) and offenders with previous arrests (n=357). Childhood, adolescent and adult variables and sociodemographic items were used in descriptive and comparative analysis to determine if life course differences were present by group. Late life first time offenders were older than offenders with previous arrests, t (419) = 214.53, $p<.001$. Fewer men were late life first time offenders ($\chi 2$ (1) = 7.26, $p <.01$), and more late life first time offenders were married (χ2 (1) = 16.13, p<.001). Late life first time offenders were significantly more likely to have lived with their father only or some other relative, although less likely to have extended family that served time, to receive public assistance as a child, and to have parents that used drugs or alcohol. Late life first time offenders were less likely to have delinquent friends (χ2 (1) = 19.23, p<.001) and to use alcohol (χ2 (1) = 32.13, p<.001) as adolescents. As adults, offenders with previous arrests were more statistically likely to be homeless (χ2 (1) = 4.76, p<.05). This preliminary inquiry suggests that differences exist between late life first time offenders and offenders with previous arrests, which future studies should explore.

## SESSION 1595 (SYMPOSIUM)

### BENEFITS OF SENSE OF MASTERY AND POTENTIAL FOR ITS ENHANCEMENT

Chair: *D.J. Deeg, LASA, VU University Medical Centre, Amsterdam, Netherlands*
Co-Chair: *J.P. Ziegelmann, Freie Universitaet, Berlin, Germany*
Discussant: *M.K. Diehl, Center on Aging, Colorado State University, Colorado*

Sense of mastery (SoM) is defined as the extent to which individuals views their life as within their own control rather than ruled by chance or other persons. With aging, SoM is considered an important psychosocial resource, because when confronted with e.g. physical decline, a high SoM may lead older persons to appraise their new situation as challenging, rather than feeling helpless, and this may have a beneficial influence on their success of adaptation. Vice versa, older persons with a low SoM may adapt to physical decline less successfully, e.g., because they will be less likely to engage in health promoting behaviors, and to indicate their care needs to the right people. A high SoM has been shown to have a beneficial effect on physical and mental health. However, to take it one step further, no studies have addressed the effect of SoM on maintenance of independence and the quality of care received. Furthermore, insight is growing that SoM is not a fixed trait but changes with changing circumstances. This suggests that SoM can be enhanced by appropriate intervention. This symposium presents findings from both observational research and from intervention studies. The general aim of the symposium is to contribute new insights on the beneficial effects of sense of mastery, in particular on maintenance of independence and satisfaction with care, and to show that sense of mastery can be enhanced even in groups of frail older persons. Results are based on studies in England, Germany and The Netherlands.

### MASTERY, PHYSICAL PERFORMANCE AND MAINTENANCE OF INDEPENDENCE: FINDINGS FROM LASA

R. Cooper[1], M. Huisman[2], D. Kuh[1], D.J. Deeg[2], *1. Epidemiology and Public Health, MRC Unit for Lifelong Health and Ageing, London, United Kingdom, 2. VU University Medical Center, Amsterdam, Netherlands*

Higher mastery may explain why some older people are better able to maintain their independence than other people with similar levels of physical performance. We tested this hypothesis using data from the Longitudinal Aging Study Amsterdam. We found that poorer physical performance was associated with greater odds of subsequent functional decline and institutionalisation, after adjustment for a range of covariates. There was no evidence that mastery modified the association between physical performance and subsequent functional decline. The association between physical performance and subsequent institutionalisation was weaker in those people with higher levels of mastery however this modifying effect was no longer evident after adjustment for health status. This suggests that mastery at baseline does not play an important modifying role in associations between physical performance and subsequent functional decline. Mastery may not be a stable trait but decline with declining health.

### MASTERY, CARE TRANSITIONS, AND PERCEIVED SUFFICIENCY OF CARE

D.J. Deeg[1], M. Broese Van Groenou[2], *1. LASA, VU University Medical Centre, Amsterdam, Netherlands, 2. VU University / Sociology, Amsterdam, Netherlands*

Older people with a low sense of mastery may not be able to articulate their care needs well enough to obtain sufficient care. Using data from two recent waves of the Longitudinal Aging Study Amsterdam (n=1876, ages 64-94), we examined if a lower sense of mastery was associated with less satisfaction with the amount of care received after experiencing a transition in home-based care. Perceived insufficiency of care was lowest among first users of informal or professional care (both 7%). Among those who had informal care at baseline and experienced a transition to professional care, 15% perceived their care as insufficient. Controlling for socio-demographic and health variables, lower mastery was associated with less perceived sufficiency of care. However, this was the case only among those receiving care paid for out-of-the-pocket, i.e. when their additional care needed to be obtained from sources other than informal or state-subsidized care.

### CHRONIC DISEASE SELF MANAGEMENT INTERVENTION AND MASTERY

A. Jonker, H.C. Comijs, K. Knipscheer, D.J. Deeg, *VUmc EMGO+, Amsterdam, Netherlands*

Objectives: We conducted a randomized controlled trial on Lorig's Chronic Disease Self-Management Program (CDSMP) in frail older persons using day care, with expected outcomes improved coping resources and well-being. We also investigated which subgroups of older persons benefited most from the CDSMP. Methods: Sample sizes were 63 (intervention group) and 69 (contorols). Outcome measures were mastery and self-efficacy (coping resources) and depression and valuation of life (well-being), which were assessed post-treatment and at 6-month follow-up. Results: We found that intervention participants improved their mastery and had better valuation of life than controls, but showed no differences in self-efficacy. Those with lower education and those with higher cognitive functioning benefited most. The attendance rate remained high. All participants scored positively on the content and style of the program. Discussion: Both the observed beneficial effects and the positive evaluation are indicative for the applicability of the CDSMP for this specific target group.

### STRATEGY USE AND MASTERY ENHANCEMENT: A SELF-REGULATION INTERVENTION FOR OLDER ADULTS

J.P. Ziegelmann, P. Gellert, *Freie Universitaet Berlin, Berlin, Germany*

Objectives: Strategy use is central for self-regulation of health behaviors. This study aims to develop an intervention fostering strategy use and investigates whether the increase in strategy use explains intervention success and leads to the experience of mastery in the domain of physical activity. Methods: Individuals aged 60 to 85 completed an intervention with the goal to foster physical activity and were randomly assigned to a standard treatment or to a treatment with a focus on strategy use. Questionnaires assessed strategy use, mastery experience and physical activity. Results: Compared to the standard group there was a significant increase in strategy use, mastery experience, and physical activity. Strategy use emerged as mediator of intervention success in terms of physical activity. Conclusions: This study shows that strategy use and mastery can be enhanced in interventions focusing on older adults and that strategy use is an important component in interventions fostering physical activity.

# SESSION 1600 (POSTER)

## COGNITION II

### US PHYSICIANS' PERCEPTIONS, KNOWLEDGE, AND PRACTICES OF COGNITION IN OLDER ADULTS: A REVIEW

K. Day[1], P. Buckmaster[1,7], L. Anderson[1], L.L. Bryant[6], A.J. Caprio[3], D.B. Friedman[2], A. Hochhalter[4], B. Wu[5], *1. Healthy Aging Program, Centers for Disease Control and Prevention, Atlanta, Georgia, 2. University of South Carolina, Columbia, South Carolina, 3. University of North Carolina, Chapel Hill, Chapel Hill, North Carolina, 4. Texas A&M Health Science Center, Temple, Texas, 5. University of North Carolina at Greensboro, Greensboro, North Carolina, 6. University of Colorado Denver, Aurora, Colorado, 7. Georgia State University, Atlanta, Georgia*

The need to examine the current literature was driven in part by the release of The Healthy Brain Initiative: A National Public Health Road Map to Maintaining Cognitive Health as well as formative research conducted by the Centers for Disease Control and Prevention's Healthy Aging Research Network. Interest in how healthcare practitioners think about cognitive health and cognitive impairment have escalated in recent years. The purpose of this review is to broadly identify and describe research on U.S. physicians' perceptions, knowledge, and practices related to cognitive health and cognitive impairment in older adults. A two-wave search process identified eligible articles; a multi-step screening process followed to assess whether articles met the inclusion criteria (e.g. examined knowledge, perceptions and practices of U.S. physicians, examined specific conditions including Alzheimer's disease, dementia, cognitive health). Fifty eligible articles were identified and independently abstracted by at least one reviewer. The articles appeared in over 28 journals published between 1984 and 2008. Research outcomes most commonly reported were in the domain of physicians' perceptions, followed by physicians' practices and knowledge. Efforts to better address gaps in U.S. physicians' perceptions, knowledge and practices can be enhanced by systematically describing the current state of the published literature. This presentation will describe the systematic review methods, and provide summary findings on studies identified which include study designs, journals where published, and major findings of the study. It will also identify gaps in the literature and propose areas to guide future research efforts to promote and protect cognitive health.

### AGE-DEPENDANT CHANGES IN MOTOR LEARNING CAPABILITIES: A CONTEXTUAL INTERFERENCE STUDY

M.J. Cohen[1], S.L. Schandler[2], D.E. Young[1], G. Meir[1], R. Ho[1], J. Perez[1], W. Wu[1], *1. Kinesiology, California State University, Long Beach, Long Beach, California, 2. Chapman University, Orange, California*

INTRODUCTION: Learning to perform a skilled motor behavior has been found to be affected by the structure of the practice session1,4 and the schedule of augmented-feedback6. With young adults, moderately increased cognitive demands produce by practice variations (the contextual interference effect [CI] produces a seemingly paradoxically finding of poorer target acquisition, but superior retention and transfer of the learned skills. We sought to discover if the CI effect is robust across the adult lifespan. METHODS: A 4 (age groups) x 2 (practice schedules) x 2 (feedback schedules) randomized factorial design was used to evaluate the effect of practice context and schedule of feedback on the acquisition and retention of a ballistic, bi-directional lever movement pattern to four different target locations. The four age groups were young adults 21-30 years), middle-aged adults (41-50) young-old (61-70) and old-old (75 +). The practice and feedback conditions: low CI (targets presented in block order) or high CI (random order) and either augmented feedback after every trial or faded (feedback systematically reduced during practice), were fully crossed with the age groups. RESULTS: We found main effects of age for accuracy and response speed during acquisition and main effects of practice schedule (the CI effect), but no age interactions with practice of feedback schedules. CONCLUSIONS: As expected, young adults showed superior performance compared to older participants; yet all age groups performed better in the conditions with higher cognitive demand. We discuss the results implications for the rehabilitation of motor skills. ACKNOWLEDGEMENTS: This research is supported by a grant from the National Institute on Aging.

### REMINISCENCE BUMP OBSERVED FOR THE FREQUENCY BUT NOT THE LOCATION OF LIFE EVENTS IN THE LIFE LINES OF OLDER ADULTS

T.W. Pierce[1], J. Schroots[2], *1. Psychology, Radford University, Radford, Virginia, 2. ERGO | European Research Institute on Health and Aging, Amsterdam, Netherlands*

Twenty-nine adults (56 – 84 years, mean age = 67.3, SD = 7.9) drew life-lines documenting the course of their lives from birth to their current age using the Life-line Interview Method (LIM) (Schroots et al., 2003). Participants labeled significant life events on the life-line and provided (a) their age at the time of each event and (b) their rating of the degree to which the event was perceived as positive or negative. We also identified the location across the life-line at which the event was placed. Consistent with previous research, a reminiscence bump was observed, with the frequency distribution of ages for life events showing a sharp peak between the ages of 10 and 30. However, the frequency distribution of locations across the LIM graph for life events was significantly more flat than the distribution of chronological ages for life events, Chi-Square (7, N = 153) = 18.58, p = .010. This pattern is hypothesized to indicate that, for older adults, events from the teens and 20s are not merely reported more frequently; they occupy a disproportionately large proportion of the retrospective autobiographical landscape of the self. This same pattern was observed in analyses using positively, but not negatively rated life events. The non-significant effect for negative life events can be traced to the presence of a reminiscence bump for positive, but not negative life events. Flat distributions for the physical locations of life events across LIM life-lines were observed for both positive and negative life events.

### INTENSIVE INDIVIDUAL COGNITIVE TRAINING IN ALZHEIMERS DISEASE: EVIDENCE FOR LIMITED EFFECTS

J. McDowd, S. Kanaan, P. Pohl, *KU Medical Center, Kansas City, Kansas*

Research exploring cognitive interventions in Alzheimer's disease (AD) suggests that cognitive training holds "promise" (Sitzer et al., 2002) for improving mental function in AD. Sitzer's (2002) meta-analysis indicated that cognitive training effects were larger when delivered one-on-one, when the training approach emphasized restoration rather than compensation, and when the "dose" or intensity of the training was relatively high. These findings are also in line with recent work applying Constraint Induced Therapy to the cognitive domain (Lillie & Mateer, 2006), Based on these principles, we developed an intervention that required individuals to participate in cognitive activities six hours per day, five days per week, for two weeks. Cognitive activities included word games, memory tasks, mazes, puzzles, computerized attention tasks, working memory tasks, and reasoning tasks. Outcome measures included a battery of neuropsychological tests including Digit Span, Trail-Making, word fluency, letter fluency, Logical Memory, and quality of life. The outcome battery was administered before the intervention, on the final day of the intervention, and two months after completing the intervention. Sixteen adults with very mild or mild AD (CDR scores of 0.5 or 1.0; mean age 73.3 years, mean MMSE 24.7) participated in the study. Each completed the 60 hours of training with perfect attendance. Tasks that were practiced during training showed improved performance across the two weeks, but tasks in the outcome battery generally showed little improvement, indicating little generalized benefit of training. These findings indicate that cognitive performance can be improved in people with AD, but requires task-specific, intensive training.

## MEMORY STABILITY AND CHANGE AMONG SEXAGENARIANS, OCTOGENARIANS, AND CENTENARIANS

J. Margrett[1], G.D. Da Rosa[1], P. Martin[1], L. Poon[2], *1. Iowa State University, Dept. of Human Development and Family Studies & Gerontology, Ames, Iowa, 2. University of Georgia, Institute of Gerontology, Athens, Georgia*

Little research has addressed cognitive change among very long-lived individuals and how the pattern may differ from young old adults. Thus, the aim of the current study was to investigate longitudinal change in memory performance in community-dwelling sexagenarians (N = 70; M = 64.84), octogenarians (N = 63; M = 82.73), and centenarians (N = 68; M = 100.76) from Phases 1 and 2 of the Georgia Centenarian Study. The overall sample was 70% female, and 31% of participants were African American and 69% were White. The test-retest period was approximately 20 months for centenarians and 60 months for sexagenarians and octogenarians. Participants completed the Expanded Paired Associate Test (EPAT; Trahan, et al., 1989) and two summary scores were created to reflect task difficulty (i.e., easy and hard recall items). Examination of Time 2 – Time 1 change scores revealed inter-individual variation in the degree of cognitive performance change. Using individuals' standard error of measurement as an index to assess each person's degree of reliable change, the majority of the longitudinal sample, including centenarians, was remarkably stable. However, differences were observed in the degree of intra-individual change in EPAT performance (i.e., stable, increase, and decline) between age groups and across test difficulty.

## OVERWEIGHT IN MIDDLE AGE IS RELATED TO COGNITIVE FUNCTION 30-YEARS LATER

L.B. Hassing[1], A. Dahl[2], N. Pedersen[3,4], B. Johansson[1], *1. Department of Psychology, University of Gothenburg, Gothenburg, Sweden, 2. Institute of Gerontology, School of Health Sciences, Jönköping University, Jönköping, Sweden, 3. Department of Medical Epidemiology, The Karolinska Institute, Stockholm, Sweden, 4. Department of Psychology, University of Southern California, Los Angeles, California*

Background: The evidence is growing strong that overweight in middle age is related to increased dementia risk in old age. Few studies have, however, addressed the question if overweight affects cognitive abilities among those who do not develop dementia. Aim: To examine if Body Mass Index (BMI) in middle age is related to cognitive function 30-years later in a dementia free sample. Methods: BMI was reported in 1963 at age 50 to 60 years, and cognitive abilities were examined 30-years later on five measurement occasions at 2-year intervals (N = 417). The cognitive abilities examined included tests of long-term memory, short-term memory, speed, verbal and spatial ability. Results: Multilevel modeling adjusting for demographic- and lifestyle factors, and relevant diseases, showed that higher BMI in midlife predicted lower test performance 30 years later. Significant associations between BMI and level of performance were found in all cognitive abilities, however, a higher midlife BMI was not associated with steeper cognitive decline. Conclusion: Our results indicate that midlife overweight is related to lower overall cognitive function in old age. The fact that BMI-related effects were noted in mean level cognitive performance, whereas only one ability showed differences in slopes, suggests that the negative effect of overweight has an onset before the entry into very old age.

## USE OF SIGNAL DETECTION METHODS IN THE IDENTIFICATION OF RESPONDERS TO COGNITIVE TRAINING PROGRAM

J. Fairchild[1], L. Friedman[2], J. Yesavage[1,2], *1. VA Palo Alto Health Care System / MIRECC, Palo Alto, California, 2. Stanford University, Stanford, California*

The literature supporting the use of cognitive training as a means of improving memory in older adults is extensive. Unfortunately there is significantly less published regarding those who respond to treatment. The identification of such characteristics is important as providers can then tailor cognitive interventions to the person. While analyses such as logistic regression can provide some information about these characteristics, an alternative approach is the use of signal detection methods. The goal of the current study was to identify characteristics of responders to a trial of acetylolinesterase (AChE) inhibitor in combination with cognitive training in older adults. Participants included 168 non-demented community-dwelling older adults who participated in a randomized controlled trial during which they received either donepezil or placebo in addition to cognitive training. Outcome variables of interest included performance on a delayed word recall task and a names and faces memory task. For the model including a delayed word recall task, participants' baseline performance on measures of story recall, associative learning, and attention predicted response. For the model including the names and faces task, baseline performance on measures of attention and associative learning predicted response. These findings suggest that older adults draw from multiple areas when approaching a cognitive training intervention and that future researchers should take this into consideration when designing cognitive training activities for older adults.

## THE EFFECTS OF ILLNESS-RELATED STRESS ON INFORMATION SEARCH AND RATINGS IN TREATMENT DECISION MAKING

J.M. Jacobs-Lawson[1], M. Schumacher[2], C.L. Ortz[1], E. Waddell[1], S.M. Arnold[2], *1. Gerontology, University of Kentucky, Lexington, Kentucky, 2. University of Kentucky College of Medicine, Lexington, Kentucky*

Understanding how older cancer patients and non-patients search and use information provides insight into the role that stress plays in treatment decision making. The purpose of the current study was to compare how older lung cancer patients and older cancer-free adults searched and rated cancer treatment-related information. Participants, 58 lung cancer patients (Mage= 59.4) and 29 older adults (Mage= 60.3) were asked to make a hypothetical cancer treatment decision. Participants were presented with a computerized information display table such that columns represented six treatment options (e.g. surgery, chemotherapy and radiation) and rows described the treatments on six dimensions (e.g.; side effects, survival rates). Participants were able to view one piece of information at a time and were asked to rate each piece as positive, neutral, or negative. Results indicated that cancer patients were more likely than older adults to focus on positive information such as survival rates and least likely to consider information related to palliative care. Furthermore, cancer patients tended to display a positivity effect in that they tended to rate information more positively than older adults. An examination of the relationship between the average information rating for each treatment and the final treatment decision revealed that cancer patients were more likely to select a treatment consistent with how they rated the information whereas the older adults tended to select the treatment they had rated more negatively. Implications are discussed in terms of how the stress associated with cancer and positivity may have influenced information processing.

## STRESSFUL EVENTS IN LATE-LIFE: EFFECTS ON COGNITIVE DECLINE. THE CACHE COUNTY STUDY

J. Tschanz[1,4], R. Pfister[1], D.C. Steffens[2], C. Corcoran[1,6], K. Smith[3], T. Ostbye[2], K. Welsh-Bohmer[2], M.C. Norton[1,5,4], *1. Center for Epidemiologic Studies, Utah State University, Logan, Utah, 2. Duke University, Raleigh, North Carolina, 3. University of Utah, Salt Lake City, Utah, 4. Utah State University Department of Psychology, Logan, Utah, 5. Utah State University Family Consumer and Human Development, Logan, Utah, 6. Utah State University Department of Mathematics and Statistics, Logan, Utah*

Stressful life experiences can have detrimental neurophysiological effects that in turn may increase the risk for cognitive decline and dementia in late-life. We examined the role of late-life stressful events on rate of cognitive decline among elderly individuals in Cache County, Utah. At baseline (1998) a total of 2789 participants (42% males) completed a life-events questionnaire querying about potential stressful life events (stressors) over the preceding three years: changes in residence, finances, marital and occupational status, and illnesses and deaths of relatives and close friends. Each reported stressor was rated according to its importance, expectedness, and impact (positive, negative, neutral). The questionnaire was re-administered three and seven years post-baseline. Mean (SD) age and educational attainment were 76.9 (6.2) and 13.5 (2.8), respectively. Cognition was assessed with the Modified Mini-Mental State Exam at baseline and each follow-up. Using linear mixed models, we examined the effects of time-varying cumulative stressors (grouped as 0, 1, 2 or more) and subjective ratings in predicting cognitive decline. Covariates were: age, gender, ApoE genotype, and education, as well as their interactions with stressors. Greater number of stressors predicted faster cognitive decline among those with fewer years of education (p interaction $< 0.04$). The effects did not differ by gender ($p > 0.05$). Subjective ratings of stressors did not predict cognitive decline (all $p > 0.05$). Our results suggest that the effects of stressful life events may be mitigated by education. Mechanisms may include greater cognitive reserve or other resources associated with or underlying higher levels of education.

## COGNITIVE STATUS AND EXECUTIVE FUNCTIONS IN OLDER ADULTS: THE MODULATING EFFECTS OF ACTIVE LIVING

C. de Frias[1], R. Dixon[2], *1. Stockholm University, Stockholm, Sweden, 2. University of Alberta, Edmonton, Alberta, Canada*

In a recent report from the Victoria Longitudinal Study (VLS), we observed a multidimensional (3-factor) structure for six executive function (EF) tests in cognitively elite (CE) older adults, a unidimensional structure for cognitively impaired (CI) older adults, and mixed structure for the cognitively normal (CN) older adults (de Frias, Dixon, & Strauss, 2009). The three EF constructs were "Shifting" (Color Trails, Brixton), "Inhibition" (Stroop, Hayling), and "Updating" (Reading and Computational Span). In this study, we examine whether (a) there are cognitive status (CE, CN, CI) differences in the kind and degree of everyday lifestyle activities, and (b) an engaged lifestyle moderates or mediates the effects of cognitive status on EF and verbal speed (lexical decision, semantic verification). Level of cognitive, social, and physical engagement was assessed using the VLS-Activity Lifestyle Questionnaire (VLS-ALQ: Hultsch et al., 1999). Participants (N=501, 53 to 90 years) were from the VLS (Sample 3, Wave 1). MANOVAs showed that higher cognitive status was associated with better inhibition, updating, and shifting, more active cognitive engagement, and faster verbal speed. Mediator/moderator analyses (hierarchical regressions) showed that passive cognitive engagement was associated with poorer inhibition for CI, but not for CN and CE groups. Greater active cognitive engagement (novel/integrative information seeking) was associated with slower lexical decision-making speed in CI, but faster speed for CN. A cognitively engaged lifestyle partially mediated the effects of cognitive status on EF and speed. Studies of executive function and aging will benefit from considering concurrent cognitive status and everyday lifestyle engagement.

## RELATIONSHIP BETWEEN COGNITION AND GAIT IN STROKE SURVIVORS

S. Foster[1], M.C. Dux[1], G.F. Wittenberg[2], R.L. Kane[1], A.N. Cernich[1], *1. VA Maryland Health Care System, Baltimore, Maryland, 2. University of Maryland School of Medicine, Baltimore, Maryland*

Individuals with hemiparetic stroke generally experience gait and cognitive changes that interfere with their functional independence. To better understand the relationship between aspects of cognition and gait performance in individuals who have experienced a stroke, baseline data from a rehabilitation trial were analyzed. Individuals (N = 35) ranged in age from 43-81 years (M = 60.17, SD = 7.77) and education from 8-20 years (M = 13.66, SD = 2.41). Most participants were men (65.7%) and either African American (51.4%) or Caucasian (42.9%). The relationships between two measures of cognition [i.e., TrailsA, attention; TrailsB, executive functioning (EF); higher scores on both reflect poorer performance] and measures of gait speed and efficiency [i.e., self-selected walking speed (SSWS), higher scores reflect better performance; timed 6-meter walk (6MW), higher scores reflect poorer performance] were explored using Pearson product-moment correlations. Significant relationships ($p < .05$) were identified between the cognitive variables and 6MW (TrailA = -.43, TrailsB = -.60), as well as SSWS (TrailsA = .39, TrailsB = .40). Specifically, better attention and EF were related to faster gait speed and increased efficiency. These findings highlight the importance of assessing cognition in stroke survivors, especially those who have gait disturbances. Further, they suggest that interventions designed to simultaneously improve gait and aspects of attention and EF (e.g., aerobic exercise programs) are likely to likely to confer greater benefit with respect to functional independence in stroke survivors.

## INDICATORS OF CHILDHOOD QUALITY OF EDUCATION IN RELATION TO COGNITIVE FUNCTION IN OLDER ADULTHOOD

M. Crowe[1], O.J. Clay[1], V. Howard[2], V.G. Wadley[3], P. Sawyer[3], R.M. Allman[4,3], *1. Department of Psychology, University of Alabama at Birmingham, Birmingham, Alabama, 2. Department of Epidemiology, University of Alabama at Birmingham, Birmingham, Alabama, 3. Division of Gerontology, Geriatrics, & Palliative Care, University of Alabama at Birmingham, Birmingham, Alabama, 4. Birmingham/Atlanta VA GRECC, Birmingham, Alabama*

We examined indicators of childhood educational quality as predictors of cognitive function in later life. We also investigated whether reading ability accounted for any observed associations. The sample consisted of 434 older adult participants who reported living in Alabama during childhood and completed in-home assessments of cognitive function and reading ability at four-year follow-up of the UAB Study of Aging. Participant reports of residence during school years were matched to county-level data from the 1935 Alabama Department of Education report for school funding (per student), student-teacher ratio, and length of school year. A composite measure of cognitive function was created by summing z-scores for performance on a spontaneous clock drawing task (CLOX1) and a 30-point mental status examination. The Wide Range Achievement Test-3 was used to assess reading ability. Mean age of participants at cognitive testing was 77 years (SD=5.4), 52% were African American, and 55% were female. We examined separate multiple regression models for each of the three educational quality indices. In analyses controlling for age, race, sex, and rural residence (current), both student-teacher ratio and school days per year were significant predictors of cognitive function. However, after controlling for years of education, only school days per year was a significant predictor of cognitive function ($p=.02$). The association between greater number of school days and better cognitive performance remained statistically significant after additionally controlling for reading ability ($p=.03$). Our findings support the idea that educational factors other than years of schooling may influence cognitive performance in later life.

### DIABETES AND COGNITIVE CHANGE IN MIDLIFE AND OLDER ADULTHOOD

L.A. Wray[1], D.F. Alwin[1], S.M. Hofer[2], K. Zeiser[1], C. Chiu[1], *1. Biobehavioral Health, Penn State University, University Park, Pennsylvania, 2. University of Victoria, Victoria, British Columbia, Canada*

Diabetes is a serious but largely modifiable chronic condition that affects 1 in 5 middle-aged and older Americans and is associated with other diseases, complications, and disability, including cognitive decline. To the extent that population aging is likely to result in an increasing prevalence of both diabetes and cognitive decline, understanding more about that link—and the modifiable and non-modifiable factors that may reduce both—is an important public health issue. Using 8 years of data from the nationally representative Health and Retirement Study of middle-aged and older adults in the U.S., we explored two key issues: (1) if levels of and changes in cognitive functioning in middle-aged and older adults differed by the timing of diabetes diagnosis; and (2) if documented social and health correlates of diabetes and cognitive functioning explained those potential differences. We found strong significant effects of diabetes diagnosis and longer diabetes duration on both levels and change in three measures of cognitive functioning—delayed word recall, immediate word recall, and serial subtraction—net of the effects of increasing age. Further, the significant effects of diabetes were partly explained by selected social, health, and behavioral risk factors; however, the link between diabetes and cognitive functioning remained strong, and particularly for levels of cognitive functioning. Our findings that diabetes—a disease largely associated with behavioral health risks—and other modifiable factors emerged as predictors of both levels of and change in three separate measures of cognitive performance, may inform both research and practice in future years.

### SPATIAL NAVIGATION ABILITIES IN OLDER PILOTS AND NON-PILOTS

M.M. Adamson[1], H. Weinstein[1], M. Cherrier[2], H. Diep[1], J. Taylor[1], *1. VA Palo Alto Health Care System, Palo Alto, California, 2. VA Puget Sound Health Care System, Seattle, Washington*

Assessing navigation ability can serve as an important marker for cognitive and associated neural deficits as reported in Alzheimer's Disease and Mild Cognitive Impairment by DeIpolyi and colleagues (2007). The Stanford/VA Aviation Safety Laboratory has reported several studies that attest to the advantage of aviation expertise on flight simulator performance despite the existence of age-related decline in flight simulator performance and other cognitive domains (Taylor et al., 2007). Identifying individual differences in performance between pilots and non-pilots can provide insight into how specialized expertise may influence general domains such as navigation. Therefore, spatial navigation skills were assessed in 20 aviators and 20 non-aviators (n=40) using a virtual reality Taxi task. This task is comprised of a computer generated town that requires the subject to deliver passengers to target stores as a taxi driver. Precise time measurements are recorded throughout the task as drivers drop off the passengers to target locations and serve as the main outcome measure for this study. This task has been shown to activate hippocampus place cells robustly in pre-surgical procedures on patients (Ekstrom et al., 2005). The difference in performance of older pilots and non-pilots will be analyzed. Finally, this behavioral study will be used as pilot work to design an fMRI experiment with the Taxi task which will help elucidate the differences in the neural network that underlies navigation in pilots and non-pilots.

### PREDICTORS OF MEMORY PERFORMANCE AMONG ASIAN OLDER ADULTS

W.N. Liu, T. Kuo, *Central Taiwan University of Technology and Science, Taicung, Taiwan*

Background: The symptom of memory decline is one of the most frequently encountered complaints in the elderly. However, cognitive aging, specifically memory function is less systematically investigated in Taiwan than in Western countries. The purpose of this research was to study factors that predict memory performance in elderly Taiwanese. Methods: A cross-sectional design was used in this study. A total of 130 participants recruited from senior activity centers from central Taiwan were included in the data analysis. Besides demographics, well established instruments included Self-Rated Health Scale (SRHS), subjective memory attitudes and knowledge (Metamemory in Adulthood), memory self-efficacy (Memory Efficacy), and objective memory performance (RBMT). Results: The average age for the sample was 71.76 (SD = 5.53), and the mean years of education was 10.74 (SD = 3.76). Males outnumbered females. A hierarchical regression analysis was employed. Certain assumptions of the regression analysis were examined in order to adequately interpret the results. Age and education collectively explained 45% of variance. After adding the health factor, 56% of the variance was accounted for. With the addition of metamemory and memory self-efficacy, the variance accounted for was increased from 56% to 65%. Implications: Age, education, health and memory self-efficacy contribute to memory performance in elderly Taiwanese adults. Therefore, initiating a cognitively stimulating and healthy lifestyle may preserve the successful memory function of older adults. Given the fact that older adults who have higher memory efficacy have better memory performance, they are encouraged to undertake activities that could enhance their confidence about their memory.

## SESSION 1605 (SYMPOSIUM)

### ESPO/BSS SYMPOSIUM: CORRELATES OF FUNCTIONAL DISABILITY IN OLDER ADULTS: IMPLICATIONS FOR MINORITY POPULATIONS

Chair: *A. Aiken Morgan, Rush University Medical Center, Chicago, Illinois*

Discussant: *R.N. Rooks, University of Colorado Denver, Denver, Colorado*

While functional disability and underlying physical, cognitive, and sensory limitations are not a normal part of aging, disability is a major health concern among adults aged 65 years and older and places a burden on the health care system, as well as individuals and their families. Further, prevalent health disparities put minorities and individuals of lower socioeconomic status at higher risk, relative to majority groups, of functional disability in late life. The purpose of this symposium is to discuss salient factors regarding functional disability among minority older adults. Specifically, symposium participants will examine psychosocial, health, and community influences on selected physical and medical conditions in African American, Caucasian, and Latino samples. While numerous health conditions and diseases may lead to varied changes in functional abilities, this symposium will focus on 1) predictors of mobility limitations, 2) individual and community predictors of frailty, 3) physical and psychological function in cancer patients, and 4) a caregiving approach to managing diabetes. To conclude the session, the distinguished discussant will integrate concepts presented and stimulate deeper discussion on the impact of health disparities on disability outcomes in minority elders.

### PREDICTORS OF MOBILITY LIMITATION IN MIDDLE TO OLD AGE AFRICAN AMERICANS

R. Thorpe[1], C. Bell[1], S.L. Szanton[4], J.C. Allaire[2], K.E. Whitfield[3], *1. Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, 2. North Carolina State University, Raleigh, North Carolina, 3. Duke University, Durham, North Carolina, 4. Johns Hopkins School of Nursing, Baltimore, Maryland*

The capacity to walk unaided is the hallmark of independence and a key indicator of quality of life among older adults. However, little is known about mobility among middle-age adults and African Americans. We examine the associations of mobility limitation with socioeconomic and health-related factors in adults ages 50 and older in the Baltimore Study of Black Aging. Mobility limitation was defined as any difficulty or inability to walk several blocks or climb several flights of stairs. Of the 602 adults, 53% were limited in mobility and mean age was 69.1 years. Women and older adults were more likely to be mobility-limited compared to men and younger adults, respectively. In the multivariate models, factors associated with being mobility limitation were CVD and arthritis. Efforts to maintain mobility in African Americans should focus efforts on reducing CVD and arthritis.

### MOBILITY LIMITATIONS AMONG OLDER ADULTS WITH TYPE 2 DIABETES

O.J. Clay, M. Crowe, *Psychology, University of Alabama at Birmingham, Birmingham, Alabama*

Diabetes is a contributor to the rising healthcare costs in the U.S with an estimated average medical cost 2.3 times higher in individuals with diagnosed diabetes. Illnesses such as type 2 diabetes are among the leading causes of mobility limitations and physical disability in older adults. These impairments have multiple causes that are due to diabetes complications and comorbidities. Diabetes increases the risk of conditions such as cardiovascular disease, stroke, vision loss, cognitive impairment and reduced physical function, all of which can contribute to mobility restriction in older adulthood. A primary goal of the Diabetes and Aging Study of Health (DASH) is to investigate predictors of mobility decline in African American and Caucasian older adults with type 2 diabetes. Telephone interviews are being conducted to collect data on psychosocial factors, health behaviors, cognitive function, health literacy, and mobility. Preliminary findings identifying factors associated with mobility limitations will be presented.

### INDIVIDUAL AND COMMUNITY PREDICTORS OF FRAILTY IN LATE-LIFE: FINDINGS FROM THE H-EPESE

M.P. Aranda[1], L.A. Ray[2,3], S. Al Snih[4,2], K. Ottenbacher[5], K. Markides[6,3], *1. School of Social Work, University of Southern California, Hacienda Heights, California, 2. Sealy Center on Aging, UTMB, Galveston, Texas, 3. Preventive Medicine and Community Health, UTMB, Galveston, Texas, 4. Division of Rehabilitation Sciences/School of Health Professions, UTMB, Galveston, Texas, 5. Neurological Rehabilitation Division, Rehabilitation Sciences, UTMB, Galveston, Texas, 6. Division of Sociomedical Sciences, UTMB, Galveston, Texas*

Prevalent with increasing age, frailty is associated with elevated risk for deleterious health outcomes such as poor quality of life, falls, hospitalization, institutionalization and mortality. We examined two-year follow up data to ascertain the rates and determinants of frailty along a continuum (none, pre-frailty, and frailty status) among 2,069 Mexican American adults (75+ years) from the Hispanic- EPESE). About 26% (n=842) met criteria for frailty or pre-frailty status. Using SAS Survey logistic procedure, frailty was predicted by the following: older age (p=<.001), no private insurance (p=<.01), higher medical comorbidity (p=<.001), higher functional impairment (p=<.001), baseline frailty (p=<.001), lower cognition ((p=<.05); lower positive affect (p=<.05), and lower percentage of Mexican Americans living in the neighborhood (p=<.05). Individual as well as neighborhood characteristics confer protective effects on health in a representative sample of older Mexican Americans. The implications that a barrio advantage persists in later life will be discussed.

### PHYSICAL FUNCTIONING, PSYCHOLOGICAL DISTRESS AND SYMPTOM MANAGEMENT IN OLDER CANCER PATIENTS

T. Baker, *University of South Florida, Tampa, Florida*

Functional status has important implications for policy, health and long-term care needs for many aged adults. An estimated 49 million persons report some degree of physical disability due to a chronic illness(es) or the aging process. This prospective study examined the relationship between physical impairment, distress, and symptom severity (e.g., cancer pain) in a sample of adults (N = 125) ≥ 55 (mean ± sd; 64.4 ± 6.46) receiving outpatient services from a large comprehensive cancer center. Results underscore the influence identified demographic characteristics, distress, pain and psychological well-being have in the day-to-day functional status of older cancer patients. This investigation emphasizes the need for further studies examining functional capacity and symptom management in older adults and other marginalized populations.

### MANAGING DIABETES AT HOME: A QUALITATIVE LOOK INTO THE PRACTICES OF MEXICAN-ORIGIN ELDERS AND THEIR CAREGIVERS

C.A. Mendez-Luck[1], E. Durazo[1], R. Ben-Ari[2], B. Chaudry[2], *1. Community Health Sciences, UCLA School of Public Health, Los Angeles, California, 2. Keck School of Medicine at USC, Los Anggles, California*

Families can play an important role in helping elders manage their diabetes at home. This study qualitatively examined the assistance family caregivers provided to Mexican-origin elders with type 2 diabetes. We observed six caregiver-care receiver dyads in East Los Angeles. Each dyad was visited at home 10-15 times over 3-4 months. Observational notes were analyzed for patterns in diabetes management across dyads. We found that all elders were functionally independent and relied on caregivers primarily for instrumental support rather than basic care. In terms of diabetes-related care, caregivers in all dyads were solely responsible for meal preparation, and three helped with medication management. Most dyads performed some diabetes management, but only two performed multiple practices on a regular basis. Our results suggest involving caregivers is a promising strategy for better glucose control among elder diabetics, however, both dyad members would benefit from more education and training in diabetes management skills.

## SESSION 1610 (SYMPOSIUM)

### BIOLOGICAL SECRETS TO HEALTHY AGING

Chair: *B.J. Willcox, Geriatric Department, John A. Burns School of Medicine, University of Hawaii, Honolulu, Hawaii, Kuakini Medical Center, Honolulu, Hawaii, Queen's Medical Center, Honolulu, Hawaii*

Centenarians are expert survivors. Japan has among the highest documented prevalence of such survivors in the world. Do the Japanese have particular genetic and/or other biological advantages? The relative contribution of genes and environment to healthy aging and longevity are not known but both appear important. In this session we will explore biological contributions to longevity. Did this centenarian have long-lived siblings or parents? Is there evidence of maternal transmission of longevity, as one would expect from protective mitochondrial genes? Were particular dietary habits common in the centenarian's family? What about particular health habits such as smoking, alcohol consumption or physical activity? This centenarian's experience will be compared and contrasted with findings that appear to enhance odds for healthy aging and longevity from the Hawaii Lifespan Study and the Okinawa Centenarian Study, ongoing studies of long-lived ethnic Japanese in Hawaii and Okinawa, Japan, respectively.

### DISTAL AND PROXIMAL EVENTS, COPING AND PERSONALITY CONTRIBUTORS TO LONGEVITY

P. Martin, *Iowa State University, Ames, Iowa*

This interview will explore the influences of distal and proximal events, personality and coping strategies, as well as supportive resources that would impact the health and longevity of a healthy centenarian.

### SURVIVING A CENTURY OF TRANSITIONS: THE ADAPTATIONAL STRATEGIES OF A 104 YEAR OLD MALE EXPERT SURVIVOR

D. Willcox[1,2], B. Willcox[2], M. Suzuki[1], *1. Okinawa International University, Ginowan, Japan, 2. Pacific Health Research Institute, Honolulu, Hawaii*

Male centenarians usually make up less than 15% of the centenarian population. The few men that do manage to survive a century or longer might therefore be thought of as "expert survivors" from whom we may have much to learn about healthy aging. Role loss through retirement, becoming a widower, and losing a child, are all extremely stressful life events that may increase risk for death. This seems to be particularly true for men. The existential challenge of going on with life following loss of a child is often mentioned by centenarians as one of their most difficult life course transitions. This interview session will focus upon life course transitions in the area of work, family and social relationships and the adaptational strategies and support systems of a healthy, male "expert survivor" who has outlived his wife, children, and most others in his social convoy.

## SESSION 1615 (SYMPOSIUM)

### CUSTODIAL GRANDPARENTS: THE IMPACT OF CAREGIVING AND THE EFFECTIVENESS OF SUPPORT SERVICES

Chair: *T.A. LaPierre, The Gerontology Center, University of Kansas, Lawrence, Kansas*

Discussant: *L. Yancura, University of Hawaii, Honolulu, Hawaii*

Despite a growing body of research on the impact of caregiving on custodial grandparents and the effectiveness of support services, a number of research questions remain under examined or unexplored. This symposium brings together a diverse group of empirical papers that take a fresh look at the positive and negative consequences of raising grandchildren, and the impact of support services on enhancing custodial grandparent empowerment and personal competency. The first paper in this symposium adds to the current body of research on the impact of raising grandchildren by looking at understudied predictors of burden. This paper, by Page and colleagues, focuses our attention on the importance of grandchild characteristics in predicting burden among custodial grandparents. The second paper, by LaPierre, draws our gaze to an understudied aspect of well-being among married and cohabiting grandparent caregivers: relationship quality. In a mixed methods study of custodial and non-custodial grandparents the third paper in this symposium, by Little and colleagues, examines the positive and negative consequences of raising grandchildren in a rural setting – an understudied population. The final two papers in this symposium assess the impact of support services on enhancing custodial grandparent empowerment and personal competency. Whitley and Kelley describe how a 12-month program designed to strengthen the social, physical and emotional states of custodial grandparents was able to improve some, but not all, aspects of family empowerment. In the last paper, Smith and Dannison report on the impact of the Grandparent Resource Site project on custodial grandparents' perceptions of personal competency.

### GRANDCHILD CHARACTERISTICS AND GRANDPARENT WELL-BEING

K.S. Page[1], B. Hayslip[1], J. King[1], C. Henderson[2], *1. Department of Psychology, University of North Texas, Denton, Texas, 2. Sam Houston State University, Huntsville, Texas*

Grandparents raising grandchildren often feel stressed and have difficulties in parenting. This study evaluated how well grandchild characteristics predicted well-being in a sample of grandparents (N = 185) raising their grandchildren. Participants completed surveys pertaining to their experiences of being a caregiver for a grandchild. For this study, self-perceived levels of burden served as the indicator of well-being. When several types of grandchild characteristics were investigated (demographic, structural/setting, and grandchild strengths and difficulties), hierarchical regression analyses indicated that structural/setting (e.g., locale and duration of caregiving) and strengths and difficulties predicted burden levels, $R2 = .28$, adjusted $R2 = .23$, $F(11, 174) = 6.14$, $p < .001$. Results suggest that as the number of hours caring, frequency of conflict and disagreement, and extent of conduct problems increases, so too does the grandparent's level of burden. Professionals may find this information useful in understanding grandparent caregivers and designing interventions for them.

### RELATIONSHIP QUALITY AMONG CUSTODIAL GRANDPARENTS

T.A. LaPierre, *The Gerontology Center, University of Kansas, Lawrence, Kansas*

A number of studies have investigated the consequences of raising grandchildren on the individual well-being of custodial grandparents; however, the impact of raising grandchildren on relationship quality has largely been ignored. This study explored relationship quality among married and cohabiting grandparents raising grandchildren in skipped generation households, compared to married/cohabiting grandparents living alone, married/cohabiting grandparents living with children, and married/cohabiting grandparents living in multi-generation households. Data come from 1,803 partnered grandparents in the 1992-1994 wave of the National Survey of Families and Households. Measures of relationship quality included perceived fairness, happiness and reported disagreements in a number of areas such as household chores, money, childcare/parenting, sexual intimacy, affection, and spending time together. Significant differences in some, but not all, measures of relationship quality were observed. Sometimes these differences reflected the effect of having dependents in the household, other times they reflected the unique experiences of grandparent caregivers with co-resident grandchildren.

### POSITIVE AND NEGATIVE IMPACT OF RURAL CUSTODIAL GRANDPARENTING

C.M. Little, M.R. Crowther, J. DeCoster, *The University of Alabama, Tuscaloosa, Alabama*

Much has been written about the phenomenon of custodial grandparenting. However, few studies have examined both the positive and negative consequences of rural custodial grandparenting. The present study examined 200 rural African American grandparents, half custodial and half non-custodial using both quantitative and qualitative methods. The mean age of the sample was 55.38 years old, with 83.8% female. Findings indicate that custodial grandparents reported stress or burden levels much higher than those of non-custodial grandparents $p=.01$. Custodial grandparents reported experiencing stress, decreased social and economic well-being, and reduced physical and mental health as a result of caregiving. The grandparents also reported many positive consequences of caregiving including: being able to provide their grandchildren with love, caregiving provided the grandparents with a sense of belonging, many grandparents reported a second chance at "parenting", along with providing socialization strategies necessary for survival, and the grandparents learned new skills such as computer literacy.

### PERCEPTIONS OF FAMILY EMPOWERMENT AMONG GRANDPARENTS RAISING GRANDCHILDREN

D. Whitley, S. Kelley, *Georgia State University, Atlanta, Georgia*

Empowerment is defined as a process that enhances an individual's sense of capacity to affect positive change within their environment. Many grandparents raising grandchildren (GRG) feel disempowered as they struggle to identify and access appropriate services to address family needs. This presentation reports on the findings from a quantitative study of perceived empowerment involving 311 GRG who are participating in a 12-month program designed to strengthen their social, physical and emotional states. All participants are African American grandmothers (95.5%), or great-grandmothers (4.5%), raising an average of 2.3 grandchildren. The Family Empowerment Scale (FES) was used as the primary measure of empowerment; it comprises three dimensions of empowerment (family, service and community/political) within four subscales (advocacy, knowledge, self-efficacy, and competency). Pre/post comparative analyses suggest grandparents' empowerment measures increased across all FES dimensions and subscales, except competency. This presentation highlights the findings and the implications for community-based practice.

### ENHANCING PERSONAL COMPETENCY IN GRANDPARENT CAREGIVERS: LESSONS LEARNED

L.L. Dannison, A.B. Smith, *Teaching, Learning and Educational Studies, Western Michigan University, Kalamazoo, Michigan*

The Grandparent Resource Site project, implemented in 9 states over a 2 1/2 year period, provided information and social support to grandparent caregivers. Program goals focused on enhancing grandparents' perceptions of personal competency by providing access to information, socialization opportunities and respite. Session topics included refining parenting skills, accessing community resources, building supportive networks, advocating for grandchildren and enhancing communication with extended family members. Post-test results (n = 115) showed significant improvement in grandparent caregivers' abilities to more effectively meet the unique challenges associated with this role. Isolation was reduced and social networks expanded through group participation. At post test, a significant majority ($p < .05$) of grandparents responded that they now had friends who understood the stresses and joys of being a "parent" to grandchildren. Lessons learned about building successful kinship care group services in diverse settings and results related to personal empowerment of grandparent participants will be shared.

## SESSION 1620 (SYMPOSIUM)

### ELDER ABUSE AND MISTREATMENT IN LONG-TERM CARE SETTINGS

Chair: *N. Castle, University of Pittsburgh, Pittsburgh, Pennsylvania*
Discussant: *T. Fulmer, New York University, New York, New York*

Issues of abuse are extremely important in the daily lives of residents; having implications for both morbidity and mortality. It certainly can also influence quality-of-life, is an issue of neglect, in addition to an issue of resident safety. Many barriers (such as underreporting, varying definitions, and differences in state regulations) make elder abuse in long-term care settings difficult to study. As such, relatively few characterizations of resident abuse in these settings exist. In this symposium, recent research on elder abuse and mistreatment is presented. Descriptive empirical analyses of nurse aides opinions of resident abuse is presented; in addition qualitative information of resident-to-resident elder mistreatment is presented. The symposia will present multiple methods of examining elder abuse and mistreatment including event reconstruction to create a typology of causes of incidents as well as contextual factors related to such incidents.

### NURSE AIDES OPINIONS OF RESIDENT ABUSE IN NURSING HOMES

N. Castle, *University of Pittsburgh, Pittsburgh, Pennsylvania*

Verbal, physical, psychological, caregiving, medication, material, and sexual abuse perpetrated by staff is examined. Information came from nurse aides included in the Pennsylvania nurse aide registry. A total of 4,117 nurse aides returned a 46 item questionnaire (response rate = 59%). Nurse aide responses to the verbal abuse and psychological abuse items were higher than for the other categories of abuse examined. For example, 36% of nurse aides observed argumentative behavior with residents and 28% observed intimidation. Lower figures were reported for physical abuse (6% observed pushing, grabbing, or pinching), caregiving abuse (10% observed staff to threaten to stop taking care of a resident), medication abuse (19% observed inappropriate delays in medication administration), material exploitation (10% observed taking assets), and sexual abuse (1% observed unwelcome discussion of sexual activity). These findings show that some types of resident abuse by staff are reported to be a common occurrence by nurse aides.

### WHY THEY FIGHT: EVENT RECONSTRUCTION OF RESIDENT TO RESIDENT ELDER MISTREATMENT (RREM) IN LONG TERM CARE FACILITIES

M. Lachs[1], K. Van Haitsma[3], J.A. Teresi[2], K. Pillemer[4], E. Haymowitz[4], T. Del Carmen[1], *1. Division of Geriatrics, Weill Cornell Medical College, New York, New York, 2. Hebrew Home for the Aged, Riversdale, New York, 3. Polisher Research Institute, Abramson Center for Jewish Life, North Wales, Pennsylvania, 4. Cornell University, Ithaca, New York*

Elder abuse by nursing home staff has been the focus of research and policy debate, but aggression between nursing home residents, which is probably more prevalent, has received little attention. In a large NIA-funded prevalence study of RREM in 10 nursing homes, we are conducting a qualitative component involving "event reconstruction" in a subsample of individual RREM episodes. This study is an exploratory effort to understand and categorize possible causes, processes, and consequences of aggression between older adults in long term care. Information was obtained from multiple sources regarding details about the event itself, exploration of potential inciting factors, previous health and behavioral characteristics of the participants, and outcomes of the RREM event (e.g., injury, escalation). A typology of RREM events was identified as well as contextual factors that influence and modulate the nature of events including participants' comorbidity, medication use, aspects of personality, environmental stressors, and physical space configurations.

### DEVELOPING A MEASURE OF RESIDENT-TO-RESIDENT ELDER MISTREATMENT: THE USE OF QUALITATIVE METHODS TO INFORM QUANTITATIVE DESIGN

B. Watkins[1,2], M. Lachs[2], J.A. Teresi[4], M. Ramirez[4], K. Pillemer[3], *1. Medicine, New York University School of Medicine, New York, New York, 2. Weil Medical College of Cornell University, New York, New York, 3. Cornell University, College of Human Ecology, Ithaca, New York, 4. Research Division, Hebrew Home at Riverdale, Riverdale, New York*

In an NIA-funded effort to develop and evaluate a quantitative survey examining resident to resident elder mistreatment (R-REM) in long term care, we used mixed-methods to identify, revise and improve the conceptual equivalence of the RREM instrument. Face-to-face survey questionnaires and semi-structured cognitive interviews were administered to a purposeful convenience sample of African-American [n=10], Hispanic [n=7] and White [n=10] nursing home residents. This allowed us to identify problematic items using two different methodologies, one that combines the quantitative and qualitative methodologies in a single questionnaire and one that separates out the quantitative survey items from the qualitative survey items. In an iterative process, our interdisciplinary team used the qualitative interview data to assess the conceptual equivalence of the indicators and develop a better measure. Using examples of items that changed as a result of the cognitive interviews, the benefits of qualitative methods for modification of measures will be illustrated.

## SESSION 1625 (PAPER)

## NEIGHBORHOOD MACRO-VARIABLES AND AGING

### AGE DIFFERENCES IN PERCEPTIONS OF NEIGHBORHOOD SOCIAL ENVIRONMENT

J.A. Ailshire[1], D. Keene[2], K. Cagney[3], *1. Andrus Gerontolgoy Center, University of Southern California, Los Angeles, California, 2. University of Michigan, Ann Arbor, Michigan, 3. University of Chicago, Chicago, Illinois*

Neighborhoods play a central role in shaping the health and well being of residents. One source of information on the neighborhood social environment is respondent perceptions of neighborhood characteristics, yet we know little about how these perceptions are shaped by individual characteristics, particularly age. This study uses data on 3,103 adults aged 18 to 92 from the Chicago Community Adult Health Study (2001-2002) to determine whether perceptions of neighborhood social cohesion, reciprocal exchange, and social disorder vary by age. We find that older residents reported higher levels of cohesion, but lower levels of disorder and that the highest level of exchange was reported by middle age adults (40-59). We hypothesize that home ownership and length of residence might explain the observed age differences in neighborhood perceptions since both of these factors increase with age and are likely associated with personal investment in and exposure to one's neighborhood. Home ownership and living in the neighborhood for at least 10 years are both positively associated with perceptions of cohesion and exchange, and home ownership is negatively associated with perceptions of disorder. Home ownership is more strongly associated with cohesion and disorder, while length of residence is more strongly associated with perceptions of exchange. With adjustment for home ownership, age differences in perceptions of cohesion, disorder, and exchange are reduced by 19-28%, 11-16% and 22-56%, respectively. Accounting for length of residence results in reductions in age differences in cohesion and exchange of 12-17% and 17-86%, respectively, with no reduction for disorder.

### MEASURING ASPECTS OF SOCIAL CAPITAL IN A GERONTOLOGICAL PERSPECTIVE

T. Poulsen, R. Lund, U. Christensen, K. Avlund, *Department of Public Health, Institute of Social Medicine, University of Copenhagen, Copenhagen K, Denmark*

Within the last 10 years there has been a growing interest in the relation between social capital and health in older people. The purpose of the present study is to develop theoretically grounded measurements covering different aspects of social capital at community-level (contextual level) related to older people, and to analyse how these measurements differ between 34 municipalities in Denmark. Data are from a Danish prospective cohort study on preventive home visits among 4,034 old people 75+ in 34 municipalities in Denmark. The measurements of aspects of social capital at community- level are based on theory of bonding, bridging, and linking social capital. The analyses show that municipalities with high social capital in bonding, bridging and linking have significantly higher levels of social diversity ($p=0.0047$), social participation ($p=0.0140$), satisfaction with social relations ($p=0.0012$), and trust to the home care in the municipality ($p=0.0006$).

### RESIDENTS ROLES IN PROGRAM DEVELOPMENT AND SERVICE UTILIZATION IN FOUR URBAN NORCS

L.D. Lovegreen[1], E. Kahana[2], B. Kahana[3], J. Brown[2], C. King[2], *1. Gerontology, Simon Fraser University, Vancouver, British Columbia, Canada, 2. Case Western Reserve University, Cleveland, Ohio, 3. Cleveland State University, Cleveland, Ohio*

This study examined the impact of resident involvement in program development and service utilization in urban Naturally Occurring Retirement Communities (NORCs). Our study of 187 residents of four diverse NORCs (mean age = 77.9, SD = 8.7), allowed us to consider resident participation at different stages of service program implementation. We explored experiences of residents living in two government subsidized NORCs in early stages of service program implementation (less than six months) and two privately owned NORCs where service programs were of long-term (5 years) duration. The majority of NORC residents were older women, living alone. Our data revealed the continuing influence of informal social supports for NORCs residents and that the availability of social networks (primarily adult children and friends), facilitated awareness of services and service utilization. Synergies existed between social capital afforded by the service programs of the NORC and personal social resources. Our data also indicate the important role of agency and proactivity among elderly NORC residents. Many residents actively contributed to program planning and participated as volunteers in implementation of services. Our data contributes to an understanding of service development in the context of an empowerment paradigm. NORCs offer an important arena for the exploration of consumer driven and naturally occurring service development. However cumulative disadvantages constrain benefits derived by lower income and by minority residents of NORCs.

### THE IMPACT OF URBAN PLANNING ON AGING-IN-PLACE: THE ATTITUDES OF MINORITY ELDERS IN NEW YORK CITY

A.W. Costley, *CUNY-York College, Queens, New York*

Aging-in-place requires establishing a successful balance between individual needs and environmental demands. It is not yet clear how many urban planners have come to terms with the environmental needs of aging populations, especially minority elders. The Jamaica Gateway Urban Renewal Area (JURGA) in Queens, New York, presents a unique opportunity to explore the impact of major redevelopment and rezoning efforts on the potential for "aging in place" in a regional urban community where 98 percent of residents are non-white and 27 percent of households have one or more persons over 65. Scaled attitude surveys and structured focus groups were used with 48 community residents at six senior centers within the designated urban renewal study area to assess unmet needs and attitudes toward safety, affordability, access, and opportunity. Data collection addressed two key domains: preferences among many essential city features proposed by the WHO Global Age Friendly Cities project (2005), and the potential impact of this development on quality of life and accessibility within the central business district of a community with over 25,000 adults over age 65. Descriptive statistics were used to document mean scores and preferences for age-friendly features including: lack of physical barriers, affordable housing, accessible transportation, and safe and attractive public spaces. Grounded theory and thematic analysis were used to explore shared views on the potential benefits and liabilities of the renewal plan of this size and scope and challenges for aging-in-place for older adults and their families.

## SESSION 1630 (PAPER)

## PERCEPTIONS OF AGE AND AGING

### CAN PHYSICAL OBJECTS ACTIVATE AGING STEREOTYPES?

G. Moriello[1,2], J. Cotter[2], N.J. Shook[2], D. Dodd-McCue[2], E. Welleford[2], *1. The Sage Colleges, Troy, New York, 2. Virginia Commonwealth University, Richmond, Virginia*

Stereotypes can be activated in everyday life through exposure to objects. Objects hold meanings which symbolize certain values and ideas and the presence of an object can activate constructs related to it. Although the use of objects representing the business world has been found to activate the trait of competition, the use of objects to activate stereotypes of aging has not been evaluated. The purpose of this study was to determine which objects represent stereotypes of aging and if exposure to these objects truly elicits aging stereotypes. A group of 18 older adults were interviewed to determine which particular objects represent stereotypes of aging. The seven most negative and seven most positive objects were utilized for the study. A separate group of 23 older adults were randomly assigned to a prime or no prime group. Participants in the prime group were exposed to the objects representing aging stereotypes and those in the no prime group were exposed to objects in a neutral condition. Participants were then required to complete a word fragment completion task which has been found to be sensitive to recently activated constructs. Chi Square testing was utilized to determine whether the participants who were primed were more likely to complete stereotypical words in the word fragment completion task than those in the no prime group. The types of objects representing stereotypes of aging and whether they elicited stereotypes will be discussed.

### DEATH OCCURRENCES AND STIGMATIZATION IN RESIDENTIAL CARE COMMUNITIES

D.J. Dobbs[1], J. Schumacher[2], M.C. Nemec[2], N. Park[1], *1. School of Aging Studies, University of South Florida, Tampa, Florida, 2. University of Maryland Baltimore County, Baltimore, Maryland*

Residential care homes have been associated with a stigmatizing social environment for reasons such as the loss of autonomy that comes with institutionalization, increased dependency, and the power differential between residents and staff, or between healthier residents and more frail residents. Older adults who try to form social relationships in residential care often experience death among their peers. The occurrences of death often make residents avoid building new relationships in fear of loss. A narrative analysis of over 400 ethnographic fieldnotes and interviews with residents, families, and staff, over a three-year period at five senior housing communities was conducted to: (a) explore death occurrences among residents in residential care settings and the role they play in stigmatization of the setting; (b) discuss how facility practices may contribute or negate the perpetuation of stigma as it relates to death occurrences; and (c) explore its relevance to issues of resident quality of care. Salient themes emerged including: emotional avoidance with the actively dying among residents; expectations of death among friends; sadness due to loss of relationships from both residents and staff; and lack of bereavement support and other coping mechanisms offered to residents, staff or families. The overarching theme of senior housing communities being the last stop before death perpetuates the stigma of these settings. The impact of the stigmatizing behaviors in these settings as well as suggestions for addressing these behaviors will be discussed.

### THE EFFECT OF IMPLICIT STEREOTYPES ON THE PHYSICAL PERFORMANCE OF OLDER ADULTS

G. Moriello[1,2], J. Cotter[2], N.J. Shook[2], D. Dodd-McCue[2], E. Welleford[2], *1. The Sage Colleges, Troy, New York, 2. Virginia Commonweath University, Richmond, Virginia*

Research has shown that exposure to stereotypes of aging can influence cognitive performance and behavioral outcomes in older adults. To date, there has been little research on the effect of stereotypes on physical performance in more real life situations. The purpose of this study was to explore how stereotypes affect physical performance in older adults. A multi-group pretest posttest design was utilized to determine whether implicit activation of positive or negative stereotypes has an effect on physical performance. 96 community dwelling older adults 65 years of age or older were included in the sample. Participants were randomly assigned to one of three groups: exposure to positive stereotypes of aging, exposure to negative stereotypes of aging, or a control condition. In order to simulate how older adults are exposed to stereotypes in real world settings, participants were primed with objects representing aging stereotypes. Gait speed, standing balance, and lower extremity muscle performance were tested before and after exposure to the stereotypes. Results of MANCOVA analysis, using self-relevance as a covariate, show the effect on those exposed to positive stereotypes, negative stereotypes, or the neutral condition. The study extends lab results of implicit stereotypes of aging on physical performance in a more real world setting. The session also considers the effect of other factors, like motivation and self-focus, competing for the control of behavior which are not present in the lab. These psychosocial factors may affect stereotype activation on physical performance.

### DOING AGE WITH HUMOUR – REPRESENTATIONS OF (OLD) AGE IN WEB-BASED GLBTQ COMMUNITIES

A. Siverskog, *National Institute for the Study of Ageing and Later Life, Linköping University, Norrköping, Sweden*

Internet offers new forms of establishing contacts and presenting the self and can, as a social arena, be seen as particularly important for homosexual, bisexual and transsexual persons in old age. Many old persons within the GLBTQ community have experienced shame and stigma during their lives since non-normative sexuality has been seen as deviant, perverted - and during certain time periods in a Swedish context - even as a disease or as criminal. In web-based gay communities where persons seek friends, partners and sexual contacts, the personal profiles vary from shorter personal descriptions with mug shots to more explicit pornographic texts with pictures of the naked body. This study aims to explore how age is expressed, used and negotiated in these personal profiles. The qualitative analysis concerns profiles from two different web-based gay communities of persons identifying as non-heterosexual aged 60 and over. These profiles constitute the empirical material supplemented by qualitative in depth interviews conducted with persons in these communities. Results point at humour being central when negotiating old age in these profiles. Self-irony is recurring and dark humour is used to speak against ageist notions of old age. Humour is also used through the use of proverbs and puns related to ageing and old age. Notions of old age as connected to passivity, slowness, humorlessness and asexuality are challenged through these ways of "doing age with humour". The analysis thus indicates that these web-based communities can be an arena for agency and for challenging ideas of old age.

## SESSION 1635 (POSTER)

## PHYSICAL ACTIVITY AND EXERCISE

### ATTITUDES AND BELIEFS INFLUENCE STRENGTH TRAINING ADOPTION IN OLDER ADULTS

M.K. Baker[1], D.J. Kennedy[4], P.L. Bohle[4], M.A. Fiatarone Singh[1,2,3], *1. Exercise Health and Performance Research Group, The University of Sydney, Lidcombe, New South Wales, Australia, 2. Jean Mayer USDA Human Nutrition Research Centre on Aging at Tufts University, Boston, Massachusetts, 3. Hebrew SeniorLife, Harvard Medical School, Boston, Massachusetts, 4. Ageing and Human Development Research Group, The University of Sydney, Lidcombe, New South Wales, Australia*

Participation in progressive resistance training is very low in older adults, despite its known benefits. We therefore sought to identify convergent themes associated with older adults' attitudes towards, and adoption of, PRT in a retirement community. METHOD Two interviewers conducted separate convergent interviews with 20 retirement village residents. Convergent themes that arose from the interview process were extracted and transformed into questionnaire format. All residents were next invited to complete questionnaires assessing demographics, physical activity, general health and questions based on the results of the convergent interviews. Finally, all residents were invited to take part in an on-site, 10-week randomized controlled trial (RCT) of PRT-based exercise program. RESULTS From the total population of 358 residents, 20 participated in the convergent interview process, 118 completed the questionnaires, and 38 people were recruited into the RCT. Convergent themes related to PRT included: health, injury, group activity, supervision, age, and location. Hierarchical regression analysis to predict adoption of PRT indicated that demographic variables accounted for 38% of the variance, and convergent themes ($\beta = .655$) explained an additional 18% of the variance in PRT adoption ($\Delta R2 = .179$, $p = .002$). DISCUSSION Identified convergent themes associated with older adults' attitudes towards PRT accounted for significant additional variance in the prediction of PRT adoption, beyond the effect of known demographic factors. A better understanding of the attitudinal factors that influence PRT participation is essential for the development of interventions promoting higher levels of participation among older adults.

### INTERGENERATIONAL TRANSMISSION OF PHYSICAL ACTIVITY: THE ROLE OF PERCEIVED FAMILY RESOURCES

S. Stahl, J.H. Patrick, *West Virginia University, Morgantown, West Virginia*

Research suggests individuals within a dyadic relationship exert mutual influences on one another's beliefs and behaviors (Bell, 1978; Kelley & Thibaut, 1978). The parent-child dyad is one of the most central, long-lasting, and emotional bonds between two people (Bowlby, 1980); however, relatively few studies have examined partner- and individual-level influences on health promotion from this dyadic perspective. The current study used an actor-partner interdependence model (APIM, Kenny, Kashy, & Cook, 2006) to explore the effects of internal health locus of control and perceived family resources on self-reports of physical activity within middle-aged mothers and young adult children dyads. We proposed that partners will indirectly influence one's own self-reported physical activity. Data were derived from 48 parent-child dyads (mothers' mean age = 48.54 years, SD = 3.93; children's mean age = 19.71 years; SD = 1.74). A number of differences between middle-aged mothers and their young adult children emerged. Mothers perceived fewer family health resources ($M = 12.68$; $SD = 4.66$) than children ($M = 15.62$; $SD = 4.22$), $t(47) = -3.35$, $p < .01$, and engaged in less physical activity ($M = 10.00$; $SD = 5.81$) than children ($M = 12.56$; $SD = 4.82$), $t(47) = -2.49$, $p < .05$. Results are discussed within a life-span developmental perspective and focus on ways in which both mothers and adult children can influence each other's engagement in health promoting behaviors.

### ASSESSING ACTIVITY IN OLDER ADULTS: A STUDY COMPARING STEP ACTIVITY MONITORING AND SELF-REPORT

K. Hall[1], R. Sloane[2], C.F. Pieper[2], H. Bosworth[1,2], K.M. Huffman[1,2], J.T. Cavanaugh[3], M. Pearson[1], M.C. Morey[1,2], *1. Geriatric Research, Education, and Clinical Center, Veterans Affairs Medical Center, Durham, North Carolina, 2. Duke University, Durham, North Carolina, 3. University of New England, Portland, Maine*

The degree to which self-reported physical activity (PA) and walking behavior corresponds to objectively-assessed ambulatory activity data in older adults is not well known. Methods: Sixty six older men (M age=67.12, Range=60-79 yrs.) participating in an on-going randomized controlled exercise trial were identified at baseline. Their baseline level of PA was assessed by the CHAMPS PA Questionnaire for older adults (Stewart et al., 2001; 1997) and the StepWatch Activity Monitor (SAM). The CHAMPS was used to assess the average duration and frequency of moderate-intensity activities over the previous 4 weeks. After completing the CHAMPS, patients were instructed to wear the SAM for 7 days. The SAM was used to quantify total number of steps, and minutes/week spent in light-, moderate-, and high-intensity activity. Associations between the CHAMPS items and the SAM outcomes were examined using bivariate analyses. Results: Minutes of high-intensity activity/week measured objectively by the SAM was significantly ($p \leq 0.05$), albeit weakly, associated with the following items from the CHAMPS: frequency of all moderate-intensity exercise-related activities ($r=0.29$), frequency of all exercise-related activities ($r=0.30$), frequency of walking/jogging activities ($r=0.39$), minutes/week of walking/jogging activities ($r=0.30$), and minutes/week of moderate-intensity activity ($r=0.32$). No other significant associations were reported. Conclusion: The lower-than-expected associations between the self-report items and the SAM suggest that these measures may be measuring related, but different, domains of PA. Future validation studies of the SAM criteria to classify activity intensity in older adults and studies that more closely align the assessment periods of the SAM and the CHAMPS are warranted.

### THE ASSOCIATION BETWEEN TAI CHI AND MEMORY IN OLDER ADULTS

A. Overton-McCoy, *UAMS-Texarkana Regional Center on Aging, Texarkana, Arkansas*

Each year there are increasing numbers of older adults within the United States. By the year 2030, 1 out of every 5 Americans will be 65 or over. By the age of 80, 1 out of every 2 older adults will be affected by a cognitive impairment. A growing body of literature supports the positive impact of cardiovascular/aerobic physical activity on cognition; however, little is known about mind–body physical activities and the impact on cognition of older adults. With the rising costs of health care, it is vital to explore physical activities that are physically feasible, such as Tai Chi, for older adults that can preserve or restore cognitive function. A quantitative, preexperimental, static group comparison design was utilized to assess the impact of Tai Chi on the cognitive abilities of older adults. A significant association between the practice of Tai Chi and global cognition, verbal memory, and process timing was found. Older adults who participated in Tai Chi not only performed better on testing but were faster in generating the correct answers.

### INVESTIGATING THE EFFECTIVENESS OF GUIDED RELAXATION AND EXERCISE IMAGERY IN LEISURE-TIME EXERCISE BEHAVIORS FOR OLDER ADULTS

B. Kim[1], R.A. Newton[1], M.L. Sachs[1], P.R. Giacobbi[2], *1. Public Health, Temple University, Philadelphia, Pennsylvania, 2. University of Arizona, Tucson, Arizona*

The main purpose of this study was to examine the effects of a repeated measures six-week intervention that used Guided Relaxation and Exercise Imagery (GREI) techniques in regards to leisure-time exercise behavior among older adults. A total of 93 older adults (Mage = 70.38; SD = 8.15; 66 female) were randomly placed into either a placebo control group (PCG) or an intervention group (IG). The IG received instructions to listen to an audio CD containing a GREI program and the PCG received an audio CD that contained two relaxation tracks and instructions to listen to their music of choice for six weeks. Results revealed that listening to a GREI CD for six weeks significantly increased leisure-time exercise behaviors. Further exploration of GREI and its effects on the psychological variables related to perceived exercise behaviors may substantiate its effectiveness as an intervention.

### BASELINE ACTIVITY LEVELS OF OLDER ADULTS WITH DISABILITIES

S. Stark, E. Somerville, M. Rothenberger, J.C. Morris, *Washington University, St. Louis, Missouri*

The health benefits associated with physical activity for older adults include decreased falls, lower mortality rates, and lower incidence of several debilitating conditions. To achieve a health benefit, older adults should participate in moderate to vigorous amount of physical activity for 30 minutes on five or more days of the week. Only one of three of older adults meet the recommended level of activity and baseline activity levels for disabled older adults are unknown. The aim of this study was to objectively assess physical activity levels of chronically diseased older adults with one or more mobility impairments. Older adults age 65-95 years, who reported a chronic health condition and mobility impairment, were recruited to participate in the study (n=20). Objective physical activity levels were gathered for 48 hours using the SenseWear® Pro3 actigraph monitoring system. Average metabolic equivalent (MET) levels and step count were calculated for each participant. Participants were primarily female and Caucasian with a range of 2 - 16 health conditions. Overall, physical activity was in the sedentary range. The participants overall average MET level was .95. Participants with a higher body mass index had lower average MET levels. There were no relationships found between number or severity of co-morbid conditions and MET levels. Most participants fell below the recommended levels of physical activity. These results suggest that chronically diseased older adults with mobility impairments are at risk for not meeting minimum daily exercise guidelines.

## DOG OWNERSHIP AND PHYSICAL ACTIVITY IN OLDER ADULTS

K. Gretebeck[1], R.J. Gretebeck[2], *1. University of Michigan, Ann Arbor, Michigan, 2. Wayne State University, Detroit, Michigan*

Dog ownership has been suggested as an intervention for promoting physical activity among older adults. The purpose of this study was to examine the relationship between walking, physical activity, functional ability, and perceived control and difficulty of performing physical activity between older adults who owned dogs and those who did not own dogs. Questionnaires were mailed to retired non-faculty staff members from a large university. Measures included the Physical Activity Scale for the Elderly, Physical Functioning Questionnaire and items related to dog ownership and perceived control and difficulty in performing physical activity. Participants included 1,091 (53.8% female) older adults (65-98 years, M age=75.47 ± 6.67). The analyses revealed that compared to non-dog owners, dog owners spent more time walking (M= 1-2 hrs/day ±.91 vs M= <1 hr/day ±.78, t=5.65, p<.001), had greater total physical activity scores (M= 153.08 ± 79.96 vs M=125.29 ± 72.35, t=4.42, p<.001), and reported significantly greater perceived behavioral control (t=6.21, p<.001) and less difficulty to be physically active (t=4.84, p<.001) when accompanied by their dog. No significant differences were found in functional ability scores between dog and non-dog owners. In this group of older adults, those who owned a dog walked more hours/day and were more physically active than those who did not. Dog ownership could be an effective strategy for increasing physical activity in older adults who walk.

## EFFECT OF FREQUENCY OF BEHAVIORAL APPROACH ON HOME-BASED EXERCISE ADHERENCE IN FRAIL OLDER ADULTS

R. Shigematsu[1], R. Nakanishi[1], K. Tanaka[2], *1. Faculty of Education, Mie University, Tsu, Mie, Japan, 2. Graduate School of Comprehensive Human Sciences, University of Tsukuba, Tsukuba, Ibaraki, Japan*

A behavioral approach to voluntary home-based exercise in frail older adults is essential; however, the effective frequency of such an approach is undetermined. The purpose of this study was to examine the effect of the frequency of behavioral approach on home-based exercise adherence. Thirty-nine frail older adults (aged 67-85 years) participated. They were placed into one of two groups: weekly session (n = 14; W group) or biweekly session (n = 25; BW group). Each session, which consisted of home exercise practice and a behavioral approach, was 90 minutes over a 3-month period. The home exercise routine included 4 stretches and 6 muscular-strength exercises. An exercise log was given to each participant. The log was checked by intervention staff members at each session. Participants explained how they would exercise at home until the next session. Illustrated stories or panel cartoons, shown behavioral change techniques, were given on 6 occasions to each group. Functional fitness (i.e., tandem balance, standing up 5 times from a chair, and sit-and-reach) was measured at pre- and post-intervention periods. During the 3 months, home exercise adherence in the BW group (77.2%) was not significantly different from that in the W group (78.7%). Significant improvements in functional fitness were observed in both groups. No interactions were found. In conclusion, the biweekly behavioral approach used in this study appears to be as effective in enhancing exercising adherence at home and in improving functional fitness in frail older adults as the weekly approach.

## PHYSICAL ACTIVITY AND DEPRESSION IN OLDER ADULTS FROM ELEVEN EUROPEAN COUNTRIES: RECIPROCAL RELATIONSHIPS ACROSS TIME?

M. Lindwall, P. Larsman, *Department of Psychology, University of Gothenburg, Gothenburg, Sweden*

This prospective study investigated the reciprocal nature of the physical activity-depression relationship in 18,373 older adults (Mage =63.46, SD =10.03) from eleven European countries across a two year follow up. Data was drawn from the Survey of Health, Ageing and Retirement in Europe (SHARE) database. A two-wave cross-lagged panel design and structural equation modelling was used to analyse data. Depression was measured at baseline (T1) and follow-up (T2) through the EURO-D scale, capturing the two factors of affective suffering and motivation. Physical activity was measured at T1 and T2 as frequency of moderate physical activity and vigorous physical activity. Age, gender and education at T1 were controlled for in the analyses. In cross-sectional analyses, higher levels of physical activity at T1 and T2 were associated with lower levels of affective suffering and motivation at T1 and T2 respectively. Physical activity at T1 had a prospective significant effect on affective suffering and motivation at T2. The effects of depression factors at T1 on physical activity at T2 were however not significant. When comparing different models, the analyses demonstrated strongest support for the effect of physical activity on future depression rather than vice versa. However, the best fitting model were the fully-cross lagged model, indicating the existence of a reciprocal causal relationship between physical activity and depression in older adults.

## DAILY CHANGES AMONG PHYSICAL ACTIVITY GOAL PROCESSES AND SUBJECTIVE WELL-BEING DURING MIDLIFE

E. Goedereis[1], J.H. Patrick[2], B. Ayotte[3], *1. Behavioral & Social Sciences, Webster University, Saint Louis, Missouri, 2. West Virginia University, Morgantown, West Virginia, 3. VA Boston Healthcare System, Boston, Massachusetts*

Because obesity rates may be highest during midlife, it is valuable to examine health-promoting behaviors such as regular physical activity during this period of the life span. Data from 35 individuals between the ages of 35 and 60 were collected three times per day for six days via Palm® handheld computers in order to investigate individual variability in the daily processes of physical activity goal pursuit within a sample of middle-aged adults who were obese or overweight and actively trying to lose weight. Results from within-person correlation analyses with repeated measures revealed a number of findings: (1) increases in control were associated with increases in goal-directed effort (r = 0.17), perceived progress (r = 0.21), positive affect (r = 0.25), and life satisfaction (r = 0.25); (2) decreases in control (r = -0.22) and perceived progress (r = -0.13) were associated with increases in negative affect; (3) increases in goal-directed effort (r = 0.19) and perceived progress (r = 0.60) were associated with increases in physical activity; and (4) increases in physical activity were associated with increases in positive affect (r = 0.14), all p < .05. Results from this study contribute to life-span perspectives in health and aging by considering the short-term trajectories of overweight and obesity, as well as the psychological processes and consequences associated with physical activity goal pursuit during midlife.

### MEASURING LOW RATES OF PHYSICAL ACTIVITY IN HEALTHY & MILDLY DEMENTED OLDER ADULTS

A. Watts[1], D.K. Johnson[1], J.M. Burns[2], E. Zelinski[3], *1. University of Kansas, Lawrence, Kansas, 2. University of Kansas Medical Center, Lawrence, Kansas, 3. University of Southern California, Los Angeles, California*

Physical activity is associated with positive outcomes in older adults including lower disease rates, decreased risk of falls, and better cardiovascular and cognitive function. Accurately measuring physical activity in older adults with self-report questionnaires is difficult and no known assessment tools exist to measure physical activity specifically in persons with dementia. Our aim was to assess the measurement properties of the Physical Activity Scale for the Elderly (PASE) and determine its applicability to individuals with mild dementia. We compared the PASE in two independent samples of adults aged 60+ including 604 non-demented adults from The Long Beach Longitudinal Study (LBLS), 78 mildly demented, and 83 healthy controls from a University of Kansas Alzheimer and Memory Program clinical sample. We used confirmatory factor analysis to assess the factor structure in the two samples. We found that the majority of older adults in both samples had low rates of participation in many of the PASE items (e.g. <8% participated in light sports); the demented participants had particularly low participation (e.g. walking and light housework were the only items with 50% or greater participation). We found a two-factor structure described the PASE in the LBLS sample using zero-inflated Poisson distributional assumptions to account for the low rates of participation. This approach was unsuccessful in the clinical sample, both healthy and demented, due to low rates of participation. We conclude that improved measures are needed to assess physical activity in demented and non-demented older adults with very low rates of activity participation and offer suggestions for improved assessment.

### PHYSICAL ACTIVITY AND WELL-BEING IN OLDER AND YOUNGER ADULTS WITH CHRONIC PAIN

J.L. Wetherell[1,2], J. Bougie[3], *1. VA San Diego Healthcare System, San Diego, California, 2. Dept. of Psychiatry, UCSD, La Jolla, California, 3. Loma Linda University, Loma Linda, California*

We compared 41 older adults (age 60-89) with 73 younger adults (age 26-59) presenting for treatment of chronic pain. The older adults reported lower levels of pain severity, interference, and depression, and higher levels of mental health-related quality of life, than did the younger adults. Although self-reported physical activity levels did not differ between the groups, activity was associated with lower levels of pain interference ($r = -.467$, $p = .001$) and depression ($r = -.420$, $p = .006$) and higher levels of quality of life ($r = .512$, $p = .001$) among the older adults; this was not true among the younger adults (r's = .27-.79). Objective data on physical activity using accelerometer-based actigraphy were also collected and will be used to examine these relationships. These preliminary data suggest that physical activity may be a particularly important component in the maintenance of well-being among older people with chronic pain and support the need for an emphasis on physical activity in treatment of geriatric pain.

### EFFECTS OF WEATHER CONDITIONS ON PEDOMETER-DETERMINED PHYSICAL ACTIVITY IN JAPANESE ADULTS

T. Sakai, *Doshisha University, Kyotanabe, Japan*

Seasonality has been reported to affect physical activities of adults; however, the role of weather conditions remains unclear. This study aimed at evaluating whether pedometer-determined physical activity was affected by the weather conditions in spring and summer. This study population consisted of 48 community-dwelling men and women (69.3 ± 6.3 years; 7 men and 41 women). All the participants were given an Active Style Pro HJA-350IT pedometer for 25 weeks (Omron Healthcare Co. Ltd, Japan). The participants were instructed to wear the pedometer on their waistline all day, except when bathing, showering, swimming, or sleeping. Access to data from the weather stations was provided by the Japan Meteorological Agency. Daily values of the highest and lowest temperatures (∞C), rainfall (mm/day), wind speed (m/s), and duration of daylight (h) were obtained from local meteorological stations. The data were classified into 3 categories. Overall, the participants had a mean step count of 6911.1 ± 4299.2 steps/day. The step counts on days when the lowest temperature was <15∞C, daylight was <2 h, or wind speed was >3.4 m/sec, the step counts were significantly different from those on other days ($P < 0.05$). However, there was no significant correlation between the step counts and the highest temperature. The change in physical activity may be partly explained by not only seasonality but also daily weather conditions. Increasing opportunities for the field of physical activity during spring and summer, when weather conditions are not very conducive, may mitigate the decline in physical activity.

## SESSION 1640 (SYMPOSIUM)

### POPULATION-BASED STUDIES OF STROKE AND INFORMAL CAREGIVING: THE REGARDS AND CARES PROJECTS

Chair: *D.L. Roth, University of Alabama at Birmingham, Birmingham, Alabama*
Discussant: *R. Schulz, University of Pittsburgh, Pittsburgh, Pennsylvania*

Stroke is the leading cause of adult disability in the United States and is known to disproportionately affect African Americans and residents of Southern States. The REasons for Geographic and Racial Differences in Stroke (REGARDS) project is a national epidemiologic investigation of stroke incidence and mortality that seeks to explain the reasons for these racial and geographic disparities. The Caring for Adults Recovering from the Effects of Stroke (CARES) project is enrolling stroke survivors from REGARDS along with their primary family caregivers into an ongoing longitudinal observational study. In this symposium, we will describe the methods used in these projects, including summaries of the recruitment and enrollment methods and the measures being used to address hypotheses concerning stroke survivor and caregiver outcomes. Quality of life (QOL) data have been collected for the stroke survivors both before and after their stroke events, providing a rare opportunity to measure changes in QOL from a prospective, population-based study. Questions pertaining to caregiving duties were asked of each REGARDS participant, and over 3,700 such caregivers were identified. The health and mortality risks associated with key caregiving-related variables will be examined for this diverse sample of caregivers. Questions of caregiving outcome are best addressed by comparing caregivers with carefully matched samples of non-caregivers. Case-by-case matching methods have been implemented in both CARES and REGARDS, including the application of a propensity score matching method to test whether caregivers are at a heightened or reduced risk for mortality compared to non-caregivers.

### DESIGN OF REGARDS AND CARES: ENROLLING NATIONAL SAMPLES OF STROKE SURVIVORS AND FAMILY CAREGIVERS

V.G. Wadley[1], G. Howard[2], V.J. Howard[3], O.J. Clay[4], J.S. Grant[5], J. Rhodes[5], W.E. Haley[6], D.L. Roth[2], *1. Medicine, University of Alabama at Birmingham, Birmingham, Alabama, 2. UAB Dept. of Biostatistics, Birmingham, Alabama, 3. UAB Dept. of Epidemiology, Birmingham, Alabama, 4. UAB Dept. of Psychology, Birmingham, Alabama, 5. UAB School of Nursing, Birmingham, Alabama, 6. University of South Florida, Tampa, Florida*

The REasons for Geographic and Racial Differences in Stroke (REGARDS) study enrolled a cohort of 30,239 White and African American adults aged >45 from 2003 – 2007. This cohort is followed every six months for reported stroke events, which are then adjudicated from medical records. In 2005, the CARES project was initiated to track the long-term effects of stroke on REGARDS stroke survivors and their primary family caregivers. Stroke survivor/family caregiver dyads are enrolled and interviewed by telephone approximately 9 months after the stroke events. An in-home evaluation of the stroke survivor's objective functional recovery is also completed using standardized stroke impact and recovery measures. Psychosocial outcomes of these stroke survivor/family caregiver dyads are compared to a matched sample of control dyads drawn from the same REGARDS cohort. This presentation will describe the methodological details of the REGARDS and CARES projects and establish the context for the remaining presentations.

### QUALITY OF LIFE AFTER STROKE: A PROSPECTIVE LONGITUDINAL STUDY

W.E. Haley[1], D.L. Roth[2], B. Kissela[3], M. Perkins[2], G. Howard[2], *1. School of Aging Studies, University of South Florida, Tampa, Florida, 2. University of Alabama at Birmingham, Birmingham, Alabama, 3. University of Cincinnatti, Cincinnatti, Ohio*

Participants in the REGARDS study with no history of stroke completed baseline SF-12 Mental (MCS) and Physical Component Summary (PCS) measures and a 4-item CES-D scale. Follow up QOL measures were completed later (M=35.1 months) by 114 stroke survivors nine months after an incident stroke event and 114 demographically matched stroke-free control participants. Analyses examined the association of incident stroke with QOL changes and whether race, gender, age, income, or social support moderated those changes. Compared with controls, stroke participants showed significant declines in all three QOL measures. Standardized effect sizes based on covariate-adjusted differences between the two groups were similar across the three measures and ranged from 0.30 to 0.41 standard deviation units. None of the other variables predicted differential decline after stroke. The inclusion of mild cases of stroke may allow for a more accurate estimation of these effects than research using clinical samples and without stroke-free controls.

### CAREGIVING STRAIN AND SELF-RATED HEALTH AS RISK FACTORS FOR MORTALITY AMONG FAMILY CAREGIVERS

M. Perkins[1], V.J. Howard[1], M. Safford[1], V.G. Wadley[1], M. Crowe[1], W.E. Haley[2], D.L. Roth[1], *1. Univ of Alabama at Birmingham, Birmingham, Alabama, 2. University of South Florida, Tampa, Florida*

We examined the relationship between caregiving strain, self-rated health, and risk for all-cause mortality in 3,718 REGARDS participants who indicated in baseline interviews that they were providing care to a disabled family member. These caregivers also indicated how much mental or emotional strain (none, some, or a lot) was associated with providing care. Highly strained caregivers were more likely to be White and female and reported worse mental and physical health than caregivers reporting moderate or no strain. Over a subsequent 4-year period, 153 caregivers (4.1%) died. Proportional hazards models that accounted for the effects of demographic and socioeconomic covariates revealed that highly strained caregivers were at an increased risk for mortality compared to no strain (HR = 1.69) and moderate strain caregivers (HR = 1.87). Self-rated health was also a significant risk factor for mortality (HR = 1.48). Implications for improving the health of caregivers will be discussed.

### METHODOLOGICAL APPROACHES FOR MATCHING CAREGIVERS WITH NON-CAREGIVERS IN POPULATION-BASED STUDIES

D.L. Roth[1], M. Perkins[1], M. Hovater[1], M. Henry[1], W.E. Haley[2], *1. University of Alabama at Birmingham, Birmingham, Alabama, 2. University of South Florida, Tampa, Florida*

Multiple methods have been used to match caregivers with non-caregiving controls in the literature, but many such studies are subject to serious selection biases. In REGARDS, participants were asked if they were currently a caregiver and to identify their likely caregiver in the event that they were to become seriously ill or disabled. This allowed us to determine whether potential caregivers became actual caregivers after stroke, and to match actual caregivers in CARES with non-caregivers on several demographic and relationship variables. Descriptive data from the first 114 stroke caregivers and matched non-caregivers confirm the effectiveness of this matching method. Furthermore, we are using a propensity score method to individually match over 3000 REGARDS caregivers with non-caregivers on demographic, socioeconomic, and medical history variables. Survival analyses suggest that family caregivers are at reduced all-cause mortality risk compared to propensity-matched non-caregivers, supporting research that suggests some positive health benefits from caregiving.

## SESSION 1645 (SYMPOSIUM)

### PSYCHOSOCIAL, PHYSICAL, AND SPIRITUAL INFLUENCES ON ADVANCE CARE PLANNING IN AN ETHNICALLY DIVERSE SAMPLE: EVIDENCE FROM THE NEW JERSEY END OF LIFE STUDY

Chair: *D. Carr, Rutgers University, New Brunswick, New Jersey*
Discussant: *W.E. Haley, University of South Florida, Tampa, Florida*

Despite widespread public support for advanced care planning, only half of Americans make such plans, with Blacks and Latinos far less likely than whites to do so. In this session, we explore the ways that race, religion, beliefs, and physical functioning affect three aspects of advance care planning: living wills, durable power of attorney for health care appointments, and holding discussions with loved ones. All papers use data from the New Jersey End of Life Study, a study of 305 terminally ill White, Black, and Latino patients residing in NJ. Idler et al. investigate religious differences in end-of-life care, and find that Conservative Protestants are most likely to say their religious beliefs would influence their treatment preferences, yet are least likely to have discussed their plans with others. Garrido et al. explore how values and beliefs affect end-of-life planning. They find that persons who highly value heroic measures and who believe that God should control the length of life are less likely to engage in advance care planning. Carr finds that Blacks are far less likely than Whites to make end-of-life plans, due largely to their belief that God controls death. Bodnar-Deren documents that persons with higher levels of functional impairment and who perceive that their illness is highly intrusive for everyday life are more likely to engage in advance care planning. Implications for policy and practice are discussed.

### ADVANCE CARE PLANNING AND BELIEFS ABOUT CONTROL OVER THE LENGTH OF LIFE

M.M. Garrido[1], E.L. Idler[2], H. Leventhal[1], *1. Institute for Health, Health Care Policy, and Aging Research, Rutgers University, New Brunswick, New Jersey, 2. Emory College, Atlanta, Georgia*

Advance care planning (ACP) improvement efforts emphasize patient values and beliefs, but these may either facilitate or deter advance directive (AD) completion or durable power of attorney (DPA) appointment. Using data from 305 chronically ill adults ≥55, we developed scales reflecting belief that God controls life length (GC) ($\alpha$=0.85) and that death is a natural part of life (ND) ($\alpha$=0.70). In multivariate models, minority respondents and those with higher importance of spirituality and religion, any religious affiliation, and monetary difficulties held stronger GC beliefs. Respondents with lower religious importance, higher spirituality importance, and higher education held stronger ND beliefs. Respondents with stronger GC beliefs valued being at peace with God. Respondents with stronger ND beliefs valued controlling death location and feelings of life completeness. Respondents valuing heroic measures and with stronger GC and weaker ND beliefs had lower

DPA likelihood. Respondents valuing controlling death location had higher AD likelihood.

### RACIAL DIFFERENCES IN END-OF-LIFE PLANNING: WHY DON'T BLACKS AND LATINOS PREPARE FOR THE INEVITABLE?

D. Carr, *Rutgers University, New Brunswick, New Jersey*

I evaluate the extent to which ethnic disparities in advance care planning reflect cultural and religious attitudes, and experience with painful deaths of loved ones. Data are from a sample of 293 chronically ill older adults who are seeking care at one of two large medical centers in urban New Jersey. Blacks and Hispanics are significantly less likely than Whites to have a living will, a durable power of attorney for health care (DPAHC), and to have discussed their end of life treatment preferences. Multivariate analyses reveal that the Black-White gap in advance care planning is largely accounted for by Blacks' belief that God controls the timing and nature of death. The Hispanic-White gap is partially accounted for by the belief that one's illness negatively affects one's family. Ethnic disparities are starkest for living will and DPAHC use, and less pronounced for discussions. Implications for policy and practice are discussed.

### UNDERSTANDING ADVANCE CARE PLANNING IN OLDER ADULTS: THE SALIENCE OF FUNCTION

S. Bodnar Deren, *Sociology, Instititute for Health, Health Care Policy, and Aging Research, Rutgers University, New Brunswick, New Jersey*

The aim of this study is to examine if there is a relationship between patient's function (objective and subjective) and the odds that a patient engages in formal advance care planning. Data come from a recent survey of 305 chronically ill, non-institutionalized adults in New Jersey aged 55 years and older. Logistic regression reveals that patient function is a significant factor in the likelihood that older adults formalize their advance care plans. Individuals with higher levels of functional limitations, pursuant to the SF-12 (objective function) are 40% more likely to have an advance directive (AD). Perceived intrusiveness (subjective function) also significantly increases the odds for having an AD. Individuals who perceived their functional limitations have major consequences were 50% more likely to have an AD. These findings broaden what we know about ACP, planning that focuses on function, may provide a framework to better meet EOL planning needs of patients.

### RELIGIOUS INFLUENCE ON AVOIDING END-OF-LIFE DECISION-MAKING

E.L. Idler[1], M.M. Garrido[2], H. Leventhal[2], D. Carr[2], *1. Emory University, Atlanta, Georgia, 2. Rutgers University, New Brunswick, New Jersey*

Recent studies show higher levels of religious coping among cancer patients associated with less use of advance directives and hospice care, and more use of aggressive treatment. What context of religious belief and practice makes patients reluctant to specify preferences for end of life care? Do religious traditions differ? We address these questions in a sample of elderly chronic disease patients who were diverse in terms of race, ethnicity, and religion (N=305). Conservative Protestants were significantly more likely than any other group to say their religious beliefs would influence their medical decisions and that they would prefer to die at home. However, they were least likely to have discussed their future health plans with anyone, or to choose hospice. In multivariate models, non-Hispanic blacks and Hispanics and those for whom religion was important had significantly fewer discussions with anyone about end of life preferences, and those with disabilities had more.

## SESSION 1650 (PAPER)

## SOCIO-PHYSICAL DIMENSIONS IN LONG-TERM CARE

### PERSONAL RELICS: A TOUCH OF HOME IN ASSISTED LIVING

R. Hrybyk, *Center for Aging Studies, UMBC, Baltimore, Maryland*

This study looks at the meaning of personal possessions in residents' rooms in an assisted living facility and on the process of moving from home to assisted living. Data is drawn from an on-going multi-site qualitative study, Stigma and the Cultural Context of Residential Settings for the Elderly, J. Kevin Eckert, P.I., and from in-depth interviews with nine residents and the admissions coordinator of an urban assisted living home. In the move to assisted living, it is not only one's living space that is being downsized; one's sense of self may be diminished during the disruptions of the move. Bringing cherished objects from home can mitigate this disruption. Reminiscence theory informs us that treasured objects act as repositories of memories and symbols of the self. Home and object become shrine and relic as they cue remembrances. Because connections to the past may be supported with personal objects, a touch of a past home in the AL room can bolster a fragile sense of self and foster continuity in the person. Autonomy of the elder, especially as it relates to the selection of items to bring to assisted living, is put forth as a moderator of disruptions to self. Practical suggestions to reinforce autonomy are offered for adult children, who often are conflicted during transitions of their aging parents. Guided by new insight, the well-being of residents in their adjustment to the new living situation could be impacted.

### THE IMPACT OF THERAPEUTIC DESIGN ON SOCIAL ENGAGEMENT AMONG RESIDENTS WITH DEMENTIA DURING PROGRAMMED ACTIVITIES IN DEMENTIA CARE UNITS

K.D. Frazee, H. Chaudhury, *Gerontology, Simon Fraser University, Vancouver, British Columbia, Canada*

There is growing evidence that therapeutic physical and social environments in special care units (SCU) can enhance quality of life and help reduce negative responsive behaviours among residents with dementia. A therapeutic milieu can be created within smaller units that have a homelike ambience, increased wayfinding opportunities, regulation of sensory stimulation, and access to secure wandering paths. Policies and programs can also reflect a holistic model of care that respects residents' personhood, fosters relationship building, and provides meaningful activity programming. While the body of literature on therapeutic design in dementia care has been expanding steadily since the early 1980's, little is known about the physical environment of SCU activity spaces, particularly what environmental features are conducive to successful activity programming and positive resident outcomes. Using a mixed-methods approach, this study explored the nature of residents' social engagement during programmed group activities in two dementia special care environments purposively selected for their contrasting physical environments. Findings from resident behavioural observations, staff member questionnaires, and family member focus groups shed light upon the complex interactions between physical, social, and organizational factors that come together to shape residents' experiences during group activities. The presentation will highlight findings on the role of the physical environmental on levels and quality of residents' social engagement, and staff members' abilities to offer successful activity programs. Finally the advantages and challenges of employing a mixed-methods approach to this type of study will be discussed. Implications for architects, interior designers, and facility planners will also be advanced.

### TRANSITIONAL CARE IN NURSING HOMES: THE POST ACUTE CARE TRANSITIONS (PACT) MODEL

M. Toles, R.A. Anderson, J. Barroso, C. Colon-Emeric, E.S. McConnell, K. Corazzini, *Duke University, Durham, North Carolina*

Annually, 2 million older Americans complete 3 - 4 weeks of post-acute care in nursing homes and many return home; however, scant research describes services to protect older adults during their transitions home. In hospital-based studies, transitional care interventions were associated with improved health outcomes for older adults; however, interventions added new staff positions, which is likely cost-prohibitive in nursing homes. This research aimed to develop and test a conceptual model of transitional care that will be used to guide observational research of the transitional care provided in nursing homes. Studies of transitional care and staff interaction processes were reviewed to identify critical elements in care aimed at preparing older adults for safe transitions from nursing homes to home. Finally, two case studies were conducted to explore the feasibility of using the new model to describe transitional care in a nursing home. Based on literature reviews and pilot research results, the Post-Acute Care Transitions (PACT) Model was developed. Using the PACT Model to describe transitional care for post-acute care patients in 2 case studies, five dimensions of care were described for each case, including: patient characteristics, nursing home structure, care processes, interaction processes, and anticipated outcomes. Use of the PACT Model also facilitated description of strengths and weakness in care for two cases. The PACT Model may be an effective tool for guiding transitional care research in nursing homes. Moreover, results indicate that existing nursing home staff may be an effective strategy for providing transitional care in nursing homes.

### MEDIUM-TERM HEALTH AND LIFE OUTCOMES OF NURSING HOME RESIDENTS FOLLOWING POST-KATRINA RELOCATION

J. Engberg[1], N. Castle[2], *1. RAND Corporation, Pittsburgh, Pennsylvania, 2. University of Pittsburgh, Pittsburgh, Pennsylvania*

In August 2005, Hurricane Katrina led to the closing of several nursing homes (N=13) in southern Louisiana. We use the 2005-07 Minimum Data Sets (MDS) to investigate the medium term consequences for residents (N=1958) in order to better understand the impact of relocation stress and the resulting change in the quality of care. We match these residents with residents elsewhere in the South based on Nursing Home Compare quality measures, facility characteristics, resident demographic characteristics and resident health status prior to August 2005. The MDS allows us to follow all residents who live in same state for two years following Katrina. In particular, we examine 3 month, 1 year and 2 year survival rates, as well as rates of ulcers, falls, depression and behavioral problems, and cognitive performance and ADL performance at these three intervals following relocation. Many, but not all, of the dislocated residents lived in low quality facilities prior to Katrina. We find that these residents mostly were relocated to facilities with higher values of NHC quality measures and higher staffing rates. We find that this increase in facility quality more than offsets the impact of relocation stress, leading to better outcomes on later health measures than for the matched comparison group. We use the variation in pre-Katrina facility quality and health status to estimate the trade-offs between the improvement to health prospects due to moving to a higher quality facility versus the risk to health prospects due to moving when very frail.

### NURSING HOME DIVERSION AND TRANSITION: A POPULAR IDEA, BUT DOES IT WORK?

E. Carpio[1], D.C. Carr[2], R. Applebaum[1,2], *1. Miami University, Oxford, Ohio, 2. Scripps Gerontology Center, Oxford, Ohio*

The growing demand for long-term services and supports has and will continue to place an enormous strain on state Medicaid budgets. Therefore, it is essential for long-term care systems to make sure that individuals receive services and support in the appropriate setting. With institutional care paid for by Medicaid costing $5000 per month, identifying ways to keep individuals out of institutions as well as developing mechanisms to help transition individuals who are in institutions back to the community have become critical to state Medicaid programs. Although the expansion of home and community-based services began in the 1970's, more aggressive diversion and transition efforts are now on the policy agendas of many states. In this presentation, we describe Ohio's nursing home transition and diversion initiative. Diversion and transition strategies employed in Ohio include such efforts as placing case managers in nursing homes to assist with transition, working with hospitals that include licensed nursing home beds to assist with community placements, using state data systems to identify nursing homes with low case mix scores to better target transition activities, care transition models, and high risk case management. The presentation will include preliminary data about the outcome of these strategies on participants following transition/diversion efforts including the programs and services utilized to facilitate diversions/transitions and the extent to which consumers successfully remain in the community. Implications for policy and practice are discussed.

## SESSION 1655 (SYMPOSIUM)

### THEMES IN FAMILY'S RESPONSES TO DEATH OF ELDERLY FATHER/HUSBAND

Chair: *M.S. Moss, Arcadia University, Glenside, Pennsylvania*
Discussant: *B. De Vries, San Francisco State University, San Francisco, California*

An ongoing study of the impact and meaning of the death of the first elderly parent—a father—yields rich and complex themes when viewed from a family perspective. Findings are presented based upon in-person interviews with multiple members of 15 bereaved families, found through newspaper obituaries. Deceased fathers ranged in age from 72 to 95 were primarily Caucasian, and included Catholics, Protestants, and Jews. Their occupations ranged from cab driver to professor. Two qualitative interviews with 39 surviving family members, (12 widows and 27 adult children), each averaging about 1 ½ hours, were audio taped and transcribed. Interviews were qualitatively analyzed for themes and general patterns in responses within and across families. Each of the four presentations raises significant questions in relation to our themes: 1) A case example questioning the meaning of family solidarity after the death (Rubinstein); 2) How does reciprocal protectiveness in the family get played out during bereavement? (S. Moss); 3) Does a folk spirituality replace traditional religious tenets and spiritual themes in the family narratives? (Black) and, 4) What are the artifacts that were not initially of direct interest to our research team (e.g. socio-cultural norms, interview context) and how might these artifacts influence our research findings? (M. Moss) Discussion (DeVries) will examine the implications of the study methodology and themes of family solidarity, protectiveness, and spirituality for understanding bereavement within the family. Funded by NIH 1R01AG031806-01A2 ARRA.

### IS FAMILY SOLIDARITY A ZEN CONCEPT?

R. Rubinstein, *UMBC, Baltimore, Maryland*

This paper develops an extended case study of the aftermath of the death of a 90 year old man through interviews with his widow and two surviving children. The family both does and does not have a degree of solidarity. While coming together around the death, the family described returned to a former pattern of both intimacy and non-intimacy at a distance. Although no family members believe in an afterlife, the widow feels the presence of her deceased husband in her home, a form of supernatural solidarity because he is 'there' for her. The children, especially the daughter, have become more solicitous of the mother since the father's death, but the mother wishes for continued independence, pulling away from the family as it, at times, grows closer to her. The paper examines in detail the patterns and shifts in family relation as perceived by the three family members after the death of the father/husband.

### DON'T ASK, DON'T TELL: PROTECTIVE COMMUNICATION PATTERNS IN BEREAVED FAMILIES

S. Moss, M.S. Moss, *Arcadia University, Glenside, Pennsylvania*

Family members frequently recall examples of protecting each other over the life course. For many bereaved families reciprocal protectiveness emerges as a salient theme with two complementary foci: (1) family members control expressions of thoughts and feelings around dying and death, and (2) family members express caring to enhance the quality of life of other members. This is exemplified by: adult children protecting the widow, the widow protecting the adult children, and each protecting themselves. Additionally, the deceased elderly father may be perceived as a continuing source of protection. Discussion examines: the morality of protectiveness; the conceptual differences between self-protection and protection of others; the Dual Process Model of bereavement focusing on loss and restoration (Stroebe, et al). Reciprocal protectiveness can be adaptive for bereaved families.

### THE PRAGMATIC SPIRITUALITY OF GRIEF

H.K. Black, *Behavioral Research, Arcadia University, Glenside, Pennsylvania*

This presentation reports on 10 families (20+ individuals) and the significance of religion/spirituality in reactions to the father's/husband/s death. Three themes emerged: 1) Context of death. Duration of prior illness, perceived suffering, and where death occurred (home, hospital, nursing home) influences family's need for solace, which religion/spirituality have traditionally provided; 2) Tension of beliefs. Belief in religious tenets along with belief that tenets are "not logical" results in tension between religious belief and a realistic approach to death and, 3) Rituals after death. A family's discussion of after-death rituals, such as memorials and graveside services, discloses their beliefs in a concrete way. A key finding of our presentation is that families interviewed find comfort in traditional religious doctrine only if they have done so throughout life. They also find solace in memories, as well as in highly personalized messages they believe the husband/father sends to them after his death.

### CONSIDERATION OF ARTIFACTS IN QUALITATIVE BEREAVEMENT RESEARCH

M.S. Moss, *Arcadia University, Glenside, Pennsylvania*

Several artifacts were discovered in our data that initially were not of direct interest to our research team. They include interviewees' and interviewers' perceptions about the research, its purposes, and how each may perform as "good" interviewees and interviewers. Three mutually interacting artifacts are: (1) How socio-cultural values and attitudes define what is seen to be normal and healthy responses to bereavement. (2) How interviewees, who bring a sense of evaluation apprehension, reflect their concern about whether and how the interviewer is judging them. (3) How each interviewee's awareness that we have or will interview one or two of his/her family members has an impact on the interviewee's responses . These and other "artifacts" of this special form of symbolic interaction ( our interviews) are discussed as they may impact the general patterns of themes and concepts that emerge from our study.

## SESSION 1660 (SYMPOSIUM)

### TRANSLATING INTERVENTIONS FROM PALLIATIVE CARE TO DEMENTIA CARE

Chair: *B. Ingersoll-Dayton, University of Michigan, Ann Arbor, Michigan*

Discussant: *S.H. Zarit, Penn State University, University Park, Pennsylvania*

A growing body of literature suggests that actively engaging both caregivers and care receivers in interventions may be especially promising. This symposium examines different methods by which Legacy Therapy, an empirically-based model developed for a palliative care population (Allen, Hilgeman, Ege, Shuster, & Burgio, 2008) can be translated to a dementia care population. The first paper in the symposium provides an overview of the different ways in which translational research can be conducted when adapting an intervention from one population (e.g., palliative care) to another population (e.g., dementia care). The three remaining papers provide findings from clinical research interventions that have translated the Legacy Therapy approach to dementia care in different settings and/or with different sets of caregiver-care receiver dyads. The first intervention, based upon a U.S. sample, incorporates family caregivers (e.g., adult children) to create a legacy object and to discuss advance directives. The second intervention, also using a U.S.-based sample, focuses on couples (e.g., spouses/partners) who reminisce about their lives together and create a book as their legacy object. The third intervention, based on a Japanese sample, focuses on husbands and wives who recollect their lives together and, through photographs as well as text, create a book as a legacy. Highlighted in each of the presentations will be a description of how the translation process occurred, the manner in which caregiver-care receiver dyads are incorporated into the intervention, and the outcomes for each member of the dyad following the intervention.

### DISENTANGLING THE TRANSLATIONAL SCIENCES: A SOCIAL SCIENCE PERSPECTIVE

L. Burgio, *University of Michigan, Ann Arbor, Michigan*

Translational efforts in the social sciences are at a crossroads, and its greatest challenge involves the movement of interventions gleaned from clinical trials to community settings. Four strategies for reaching this goal are discussed: the use of methods derived from health services research, a yet-to-be-developed strategy where decisions to modify aspects of an intervention derived from a clinical trial are triggered by data-based criteria, community based participatory action research (CBPR), and a hybrid system wherein methods from CBPR and traditional experimental procedures are combined to achieve translation. The author ends on an optimistic note, emphasizing the impressive advances in the area over the existing barriers and calling for a unified interdisciplinary science of translation

### COPING AND VALUES IN MILD DEMENTIA: PILOT DATA FROM A NEW PATIENT-CENTERED INTERVENTION

M.M. Hilgeman[1,2,3], R.S. Allen[1,2], L. Miller[1,2], J. Rhodes[1], R. Magnuson[1], C. Turgeon[1], *1. The University of Alabama, Tuscaloosa, Alabama, 2. Center for Mental Health & Aging, Tuscaloosa, Alabama, 3. VA Boston Healthcare System, Boston, Massachusetts*

Qualitative studies suggest that individuals with early/mild dementia cope through self-maintenance (prioritizing connections with their past) and self-adjusting strategies (acknowledging the disease/course). This paper presents pilot data from the Preserving Identity and Planning for Advance Care intervention, which targets these two coping strategies by guiding individuals with dementia (M=80.1 yrs; CDR=0.5 or 1) through the creation of a Legacy-based project and a patient-centered advance care planning discussion. Seventeen dyads were randomly assigned to a four-session intervention or phone-call control group. Intervention individuals with dementia reported more coping strategies and higher self-rated quality of life than control group individuals at Time 2. Intervention individuals also reported decreased decisional conflict related to advance care across domains (i.e., information, values clarity, and support) compared to control group individuals at Time 2. Interestingly, both groups reported reduced uncertainty about care planning from Time 1 to Time 2. Feasibility issues in implementation are also discussed.

### A COUPLES LIFE STORY APPROACH TO DEMENTIA CARE

B. Ingersoll-Dayton[1], B. Spencer[2], *1. Social Work, University of Michigan, Ann Arbor, Michigan, 2. University of Michigan, Ann Arbor, Michigan*

This paper describes a systematic effort to translate principles from Legacy Therapy to couples-oriented dementia care. The first phase of the translation process identified necessary adaptations (e.g., dyadic reminiscence and dyadic communication skills) based on data collected from pilot testing and focus groups with couples (in which one partner had mild or moderate dementia) augmented by observations from expert clinicians. The adapted intervention focused on teaching communication skills to caregiver-care receiver dyads. These skills were practiced as they created a Couples Life Story Book with labeled pictures and personal stories that was used to facilitate talk about positive memories. The second phase of the translation process monitored the acceptability and feasibility of the intervention and assessed change over time on the outcome measures. The data from this translational research project were quantitatively and qualitatively analyzed with respect to couples' communication, relationship satisfaction, and quality of life.

### SECONDARY TRANSLATION OF LIFE STORY APPROACH WITH JAPANESE COUPLES

R. Campbell[1], Y. Kurokawa[2], *1. Gerontology Institute, University of Tokyo, Tokyo, Japan, 2. Sophia University, Tokyo, Japan*

In Japan, with 21.5% of its population over age 65, increasing attention is focused on the quality of life for people with dementia and their caregivers. A key issue is the increase in couples-only households (37%), leading to "rourou kaigo," older people caring for older people, a departure from the Japanese tradition of intergenerational caregiving. This paper reports on a "secondary translation" (i.e., the translation of a translational research project) that applies the Couples Life Story approach to Japanese couples in which one partner has dementia. With an interventionist, these couples practiced communication skills and told the story of their marriage, facilitated by a diagram outlining the early years, middle years, recent years and hopes for the future. Couples selected and labeled photographs to assemble their Life Story Book. Outcomes included the care recipient's increasing participation in each session and the caregiver's expressing more positive feelings about the future.

## SESSION 1665 (SYMPOSIUM)

### HS PRESIDENTIAL SYMPOSIUM: CHANGES IN LATITUDES, CHANGES IN ATTITUDES: TRANSITIONS OF CARE IN TIMES OF DISASTER AND POVERTY

Chair: *C. Alessi, VA Greater Los Angeles Healthcare System, Los Angeles, California, University of California, Los Angeles David Geffen School of Medicine, Los Angeles, California*

Older people are particularly vulnerable to adverse consequences in times of disaster and poverty. Put simply, disasters are sudden events that overwhelm local capacity, require national or international assistance, and may result in great damage and suffering. The relationship between disaster and poverty is strong, and most disaster-related deaths around the world occur in developing countries, likely due to poverty and related problems of poor infrastructure and disease. In addition, health problems (such as cardiovascular and respiratory disease) and psychological problems (such as stress and depression) are common in older people after disasters. Transitions of care may be particularly problematic. Forced relocation; loss of livelihood; and limited access to medications, health care and personal care are all key problems for older adults in these settings. The first speaker, a leader in academic medicine who participated in the recovery and rebuilding of health care in New Orleans in the aftermath of Hurricane Katrina, will describe his experiences and important lessons learned from this disaster. The second speaker will recount her experiences volunteering as a wound care expert in Haiti after that impoverished country's recent devastating earthquake. Finally, the third speaker will draw on his experiences as a volunteer physician providing medical care in impoverished areas of Honduras. With compelling descriptions of first-hand experiences, these speakers will provide insights into key issues of disaster and poverty as they relate to older adults, calling on us all to accept the challenge to help address the needs of these most vulnerable elders.

### HURRICANE KATRINA: PERSONAL OBSERVATIONS AND LESSONS LEARNED

L.L. Hamm, *Internal Medicine, Tulane University, New Orleans, Louisiana*

Hurricane Katrina was among the worst natural disasters to affect the United States. Although this tragedy provided many lessons, the harsh outcomes inflicted upon the most vulnerable populations was dramatic and visible for the nation. Everyone in the region was affected, but the poorest, the most ill, and the elderly were impacted the most. These populations had the most difficulty evacuating before the storm and the most difficulty rebuilding their lives. Katrina forced us to re-examine our disaster preparations. The elderly, ill, and poor deserve our attention most. Every community is subject to some disaster. Is yours prepared? In re-building after Katrina, the opportunity arose to re-think many aspects of our city. Schools and medical services have been drastically altered. Does each community need to wait for a disaster to change?

### WOUND CARE IN HAITI 1 MONTH POST EARTHQUAKE: INFECTION, REPAIR, AND REHABILITATION

B. Bates-Jensen, *1. School of Nursing, University of California, Los Angeles, Los Angeles, California, 2. VA Greater Los Angeles Healthcare System, Los Angeles, California*

As the chief of wound services at the University of Miami tent hospital in Port Au Prince 1 month after the earthquake, I coordinated outpatient and inpatient wound care for the pediatric and adult tent, scheduled all wound surgeries and adult wound procedures and managed outpatient wound care and 'home' visits. Three transitions that occurred included: shifts in wound type and surgery, increased infections, and first discharges and rehabilitation efforts. Infection was evident from the initial surgeries and was a direct reflection of the environment. Pressure ulcers occurred from lying in rubble and on army cots for 4 weeks with limited mobility. As most patients were homeless, they were discharged to a small tent city erected on the compound and followed in the outpatient wound tent for wound care and rehabilitation. Lack of basic supplies, inadequate patient information, and limited community resources were all issues.

### THE IMPORTANCE OF AN EFFECTIVE CARE TRANSITION IN IMPOVERISHED AREAS OF HONDURAS: PARTNERSHIPS, RESPONSIBILITIES AND OPPORTUNITIES FOR VOLUNTEER HEALTH PROFESSIONALS

S. Barczi, *1. Madison VA Geriatric Research, Education & Clinical Center (GRECC), Madison, Wisconsin, 2. University of Wisconsin School of Medicine & Public Health, Madison, Wisconsin*

Honduras is one of the poorest countries in Central America with over 35% of the population living on less than $2 a day. Its economy has suffered from complicated regional politics and several natural disasters in the past 2 decades. Access to health care is problematic in that the population is widely dispersed in rural areas and the majority of medical resources are located in the most developed cities. Poverty, under-developed government health system infrastructure, discontinuity of medical providers and variable access to appropriate medications provide great challenges for older Hondurans. This speaker will recount personal experiences in providing care in partnership with Honduran health practitioners in the setting of abject poverty and unpredictable resources. He will offer insights into the complex relationships between international aid organizations, short-term volunteer health professionals, Honduran-financed health clinics and older patients, and the associated transitions of care issues that develop with these interactions.

## SESSION 1670 (PAPER)

## FRACTURE, FATIGUE & FUNCTIONAL OUTCOMES

### THE INFLUENCE OF WALKING AIDS ON THE ASSESSMENT OF FUNCTIONAL OUTCOMES IN GERIATRIC REHABILITATION

M. Schwenk, P. Oster, K.A. Hauer, *Bethanien-Hospital at the University of Heidelberg, Heidelberg, Germany*

Background: Walking aids are frequently used by geriatric patients and often incorporated in motor assessment. The use of assistive devices has been discussed as a potential confounder when assessing functional outcomes in geriatric rehabilitation. However, no study has investigated the influence of walking aids on the assessment of changes over time in motor performance within rehabilitation. Methods: One hundred and nine geriatric patients took part in a longitudinal study with functional evaluation at the beginning and prior to discharge of inpatient rehabilitation. Subjects performed three established motor tests (Electronic gait analysis [GAITRite] during walking at maximum speed [parameters: gait speed, cadence, stride-time, stride-length, base-of-support, double-support]; Tinetti's Performance-Oriented-Mobility-Assessment [POMA]; Timed–Up-and-Go [TUG]) with and without a 4-wheeled rollator. Relative differences between test results obtained with vs. without walking aid were calculated for baseline assessment and for functional outcomes (changes between pre- to post test). Results: At baseline, performances in all tests were significantly higher when a walking aid was used compared to unaided assessment (Differences with vs. without aid: GAITRite: 4.6-84.1% $p \leq 0.001$-0.060 dependent on parameter; POMA: 82.7% $p<0.001$; TUG: 6.5% $p=0.002$). Improvements in functional performance during rehabilitation were significantly more pronounced when patients' performed motor assessment without a walking aid (Differences between test outcomes assessed with vs. without aid: GAITRite: 4.9-39.8% $p \leq 0.001$-0.008 dependent on parameter; POMA: 39.8% $p<0.001$; TUG: 6.5% $p<0.001$). Discussion: The use of rollators during motor testing limits the assessment of initial motor deficits and leads to an underestimation of functional gains achieved during geriatric rehabilitation.

### THE HIP FRACTURE INTERVENTION TRIAL (HIPFIT): A 12 MONTH RANDOMIZED CONTROLLED MULTI-MODAL INTERVENTION TO IMPROVE FUNCTIONAL OUTCOMES

M.A. Fiatarone Singh[1,2,3], S. Quine[6], L.M. Clemson[7], C. Russell[7], B. Lloyd[1], D.A. Williamson[1], T.M. Stavrinos[4], N.A. Singh[7,4,5], *1. Exercise Health and Performance Research Group, University of Sydney, Lidcombe, New South Wales, Australia, 2. Hebrew SeniorLife, Harvard Medical School, Boston, Massachusetts, 3. Jean Mayer USDA Human Nutrition Research Centre on Aging at Tufts University, Boston, Massachusetts, 4. Balmain Hospital, Sydney, New South Wales, Australia, 5. Royal Prince Alfred Hospital, Sydney, New South Wales, Australia, 6. School of Public Health, The University of Sydney, Sydney, New South Wales, Australia, 7. Faculty of Health Sciences, The University of Sydney, Lidcombe, New South Wales, Australia*

Aims Our aim was to reduce long-term disability following hip fracture, using a multi-modal treatment protocol targeting known modifiable precipitants. Methods Participants were recruited from 3 hospitals in Sydney and randomised to 12 months of active intervention or usual care/contact-only control group. The intervention group received up to 11treatments specifically targeting baseline deficits related to long-term disability. These included supervised high intensity resistance and balance training, dietary advice and nutritional supplementation, home assessment and referral to community services, evaluation and management of fear of falling and falls risk, cognitive impairment, vitamin D deficiency, visual impairment, depression and social isolation, low self-efficacy, and poly-pharmacy. The blindly assessed primary outcome was functional dependency, assessed by residential status and observed and self-reported disability across a wide range of basic and instrumental ADLs. Results Fifteen percent (248) of hip fracture patients were eligible and 124 were enrolled. At baseline, the groups were well matched for age (79+10 years), gender (69% female), marital status (57% widowed), living situation (92% lived independently), co-morbidities, quality of life, pre-fracture functional status, type of fracture and surgical treatment. Only twelve participants (9.7%) dropped out. Dropouts tended to be younger, less disabled, with fewer chronic diseases but more sedentary than completers, and no dropouts were related to study procedures. Conclusion It is possible to safely target and treat multiple complex precipitants of disability in a frail older cohort for 1 yr after hip fracture, including the provision of high intensity resistance training, with minimal dropout and no major adverse events.

### 6 MINUTE WALK PERCEIVED FATIGUE AND EXERTION IN OLDER ADULTS WITH HIP OR KNEE OSTEOARTHRITIS

N.B. Alexander[1,2], S.L. Murphy[1,2], A.K. Lyden[2], J.F. Koliba[2], B. Grincewicz[1], E. Pear[2], *1. VAAAHCS GRECC, Ann Arbor, Michigan, 2. University of Michigan, Ann Arbor, Michigan*

Background: Fatigue is common in older adults with osteoarthritis (OA), but few studies have evaluated the fatigue response to specific activities which may impact overall function. Methods: Eighty-nine older adults with painful knee or hip OA and reported fatigue (i.e., "moderate amount" or "most of the time" within the past week) (mean age 72) performed a six minute walk (6MW) test, reported fatigue at pre-test (PreF), and at post-test (PostF), and rated perceived exertion (RPE) at 2 minutes and at post-test (2minRPE, PostRPE), using a 0-10 scale. Change scores were also computed for fatigue (PostF - PreF) and RPE (PostRPE - 2minRPE). Results: While participants walked mean (SD) 1115 (231) feet, mean distances at 2, 4, and 6 minutes were similar (approx 370 feet). Both mean fatigue and RPE increased by at least 50% ($p<0.001$), PreF 1.4 (2) to PostF 3.9 (2), and 2minRPE 2.3 (2) to PostRPE 4.6 (2). Nearly all fatigue and RPE ratings were significantly correlated ($p<0.05$ for all $r>0.25$). Highest correlations were seen with PostF (range 0.39-0.88) and PostRPE (0.36-0.88), both of which were correlated with 6MW distance (0.44 and 0.42 respectively). Conclusion: In symptomatic knee or hip OA, even with steady 6MW walk speed, fatigue and RPE increase. Post-walk ratings of fatigue and RPE may be the best indicators of distance as well as effort, i.e. indicators of functional ability.

### TIRED AND WEAK: FATIGUE AND ITS LONG-TERM DISABILITY OUTCOMES

C. Cigolle[1,2,3], P. Lee[2,3], N.B. Alexander[2,3], Y. Lee[2], C. Blaum[2,3], *1. University of Michigan Department of Family Medicine, Ann Arbor, Michigan, 2. University of Michigan Department of Internal Medicine, Ann Arbor, Michigan, 3. VA Ann Arbor Healthcare System Geriatrics Research, Education and Clinical Center (GRECC), Ann Arbor, Michigan*

Fatigue is common among older adults and predicts disability and mortality. Yet, research is lacking on its long-term outcomes. We hypothesized that the disability outcomes of fatigue persist over years. We analyzed waves 2000-2008 of the Health and Retirement Study, a nationally-representative longitudinal health interview survey. Our study sample included community-dwelling adults >=65 years (n=10,121, representing 32.1 million) in 2000. Respondents were asked whether they had severe fatigue/exhaustion as a persistent/troublesome problem in the previous two years. Outcomes included prevalent and new (compared to baseline) dependency in activities of daily living (ADL) and instrumental activities of daily living (IADL) in 2002-2008. Covariates included six demographic characteristics and eight chronic diseases. We performed logistic regression modeling and investigated mortality as a competing outcome. 19.3% (n=1,963, representing 6.2 million) reported fatigue at baseline. Their prevalence of ADL dependency was increased, compared to respondents without fatigue (p<0.0001 for each): 2002: 18.0% vs. 6.8%, 2004: 15.4% vs. 7.6%, 2006: 14.1% vs. 7.8%, 2008: 12.1% vs. 7.7%. New ADL dependency was also increased, compared to those without fatigue (p<0.0001 for each): 2002: 16.2% vs. 6.1%, 2004: 17.8% vs. 8.5%, 2006: 22.9% vs. 10.6%, 2008: 24.4% vs. 11.8%. Similar results were found for prevalent and new IADL dependency for 2002-2008. The association between fatigue and ADL dependency (unadjusted odds ratio [OR]=1.7, p<0.0001) persisted after adjusting for covariates (OR=1.4, p<0.0001). Older adults with fatigue have increased disability that persists for years. Further investigation is needed to understand the pathophysiology of fatigue in affecting daily function over years.

## SESSION 1675 (PAPER)

## GLOBAL PERSPECTIVES ON AGING: THE EVOLVING EXPERIENCE IN CHINA

### MODERNIZATION AND ITS IMPACT ON THE IMAGE OF AGING IN CHINA - REPORTING THE FINDINGS OF A SCALE VALIDATION STUDY

X. Bai[1], N. Chow[1], K. Chan[2], *1. The University of Hong Kong, Hong Kong, Hong Kong, China, 2. The University of Macau, Macau, Macau, China*

This presentation reports the findings of a study which examines the impact of modernization on the image of aging in China. We successfully interviewed 454 elderly people living in Wuhan, an industrial and highly populated city in central China, by using a structured questionnaire with a 20-item Self-Image of Aging Scale (SIAS-C). The Scale is a revised version of the 18-item Image of Aging Scale developed by Levy in 2004 (Permission has been obtained to use Levy's Scale). The 20 items in our revised Scale are all translated into the Chinese language to suit the understanding of our interviewees. Exploratory factor analyses showed that five areas, including general physical health, life attitudes, cognitive functioning and capacity, social virtues, and mental status, stood out from the Scale. Results also showed that the SIAS-C attained overall acceptable internal consistency (Cronbach's alpha= 0.804), as well as the subscales (alphas ranged from 0.544 to 0.764). Criterion validity of SIAS-C further demonstrated correlations with the life satisfaction, number of daily activities and chronic illnesses, all pointing in the expected directions. We suggest that our revised version of the SIAS-C can be used to objectively assess the image of aging in Chinese communities. Since a positive image of self can permit older people to maintain feelings of well-being and life satisfaction, we believe that our findings would help better understand how modernization has changed the image of aging in China and the mapping of an effective strategy to promoting a constructive image among the Chinese elderly.

### CHRONIC DISEASES AND GERIATRIC CONDITIONS AMONG OLDER PEOPLE: EVIDENCE FROM ASIA

H. Kim[1,2], Y. Jung[1], S. Cho[1,2], *1. Seoul National University Graduate School of Public Health, Seoul, Republic of Korea, 2. Seoul National University Institute of Health and Environment, Seoul, Republic of Korea*

The high prevalence of multiple chronic conditions and geriatric syndromes among the older adult population and their impacts on health and health care use have been widely reported in North America and Europe, yet limited comparable evidence exists on older adults in Asia. The purpose of this population-based study was to examine the co-occurrence of three major chronic diseases (hypertension, arthritis, and diabetes) and two key geriatric conditions (incontinence and falls) using the 2006 baseline data from Korean Longitudinal Survey of Aging Study (KLoSA), a survey comparable to the Health and Retirement Study (HRS) in the United States. Among 4,165 survey respondents representing approximately 4 million community-dwelling Korean older adults, about 62.9% had at least one of the five conditions and 27.7% had two or more conditions. Older adults with more conditions were more likely to be female and unmarried, and to have a lower education level and Medicaid (p<.05). Of the respondents with one condition, 19.2% to 42.5% had two or more additional conditions (depending on the index condition). The study findings show a high co-occurrence of the observed conditions in Korean older adults, suggesting a need for better awareness of the complex care needs of older adults and the provision of coordinated chronic care management programs in Korea, the country with the most rapidly aging population in the world. Also beneficial would be cross-national comparison studies to understand the health services use and outcomes of older adults with high comorbidities in different health care systems and socio-cultural contexts.

### EXPLAINING OLDER PARENTS' AMBIVALENT FEELINGS TOWARD THEIR ADULT CHILDREN: THE CASE OF RURAL CHINA

M. Guo[1], M. Silverstein[2], I. Chi[1], *1. School of Social Work, University of Southern California, Los Angeles, California, 2. University of Southern California - Davis School of Gerontology, Los Angeles, California*

The concept of intergenerational ambivalence, the coexistence of both positive and negative elements in intergenerational relationships, has been rarely studied in Asian context. Using data from a survey of 1,224 older adults and their 4,449 children in rural Anhui province, China, this study explored the sources of ambivalence among Chinese elders toward their children. The results of multilevel analyses showed that most variance in intergenerational ambivalence lied within rather than between families. Among the parental characteristics examined, the level of depression of the parent was associated with greater ambivalence toward their children. Widowed mothers were less ambivalent toward their children than non-widowed mothers. Among children's characteristics, the household registration status of the child, specifically, being a registered rural rather than a urban resident, was the most significant predictor of parent's ambivalence. Both mothers and fathers reported greater ambivalence toward their sons than toward their daughters. Mothers were also more ambivalent toward the oldest child and those who did not work. The amount of monetary support provided by the child reduced fathers' ambivalence. Both parents had greater ambivalence if they helped with caring grandchildren. Taken together, the findings of this study suggested that the failure of adult children to achieve certain social status and independent living generated the feelings of ambivalence among older adults in rural China. We conclude that the issues of intergenerational ambivalence among Chinese elders need to be understood in the larger context of social transformation and involving parental expectations on their adult children in contemporary China.

### STRESS-RELATED MORTALITY AFTER A MAJOR EARTHQUAKE AMONG CHINESE NONAGENARIANS

J.H. Flaherty[1,2], B. Dong[3], H. Wu[3], Y. Zhang[3], T. Malmstrom[5], J. Guralnik[4], J.E. Morley[1], *1. Internal Medicine/Geriatrics, Saint Louis University, St. Louis, Missouri, 2. St. Louis VA GRECC, St. Louis, Missouri, 3. West China Hospital, Sichuan University, Chengdu, Sichuan, China, 4. NIA/NIH, Baltimore, Maryland, 5. Saint Louis University - Department of Neurology & Psychiatry, St. Louis, Missouri*

Background: Several reports link the psychological stress related to earthquakes to an increase in non-trauma mortality rates. This study compared one-year mortality rates between two groups of age-matched Chinese nonagenarians: a pre-earthquake group and a post-earthquake group; and examined other predictors associated with mortality using pre-earthquake health assessment data. Methods: Three years prior to the China earthquake of May 2008, geriatric assessments were performed on 870 Chinese age >90 years, in Dujiangyan, 30 miles from the epicenter. The pre-earthquake group (subset of the 870) were ages 93-95 at the beginning of "Time Frame 1" (July 2005-June 2006) (n=229). The post-earthquake group (a different subset of the 870) were ages 93-95 years (and alive) at the beginning of Time Frame 2 (July 2008-June 2009). (n=235). Deaths due to possible trauma related to the earthquake were excluded. Results: The one year mortality rate among the pre-earthquake group was 8.3% (19/229) and that of the post-earthquake group was 16.2% (38/235) (P<.001). The 12-month Kaplan-Meier survival curve also showed a difference (Mantel-Cox log rank chi-squared = 6.8, P<.009). In adjusted Cox regression analyses, being in the post-earthquake group was the strongest predictor of mortality [OR 2.46, (1.38-4.39), P<.002]. Other predictors included impaired cognition [OR 1.96, (1.09-3.54), P<.024), decreased albumin [OR 0.90, (0.82-0.98), P<.015] and increased triglycerides [OR 1.52, (1.16-2.00), P<.003]. Demographics, ADL impairment, comorbidities and hyperlipidemia were not predictors. Conclusion: These data suggest that among nonagenarians, a major psychological stress may be a more important predictor of mortality than other health variables.

# SESSION 1680 (POSTER)

## HEALTHCARE SETTINGS: ORGANIZATIONAL AND CARE ISSUES

### LONG TERM CARE SETTINGS AND ELDER MISTREATMENT: A REVIEW OF DEATHS BY THE MEDICAL EXAMINER

M.W. Baker[1], R.C. Harruff[2], *1. University of Washington School of Nursing, Seattle, Washington, 2. Seattle/King County Public Health, Office of the Medical Examiner, Seattle, Washington*

Elder mistreatment (EM) includes acts of omission or commission by a "trusted other" that result in harm or threatened harm to the health or welfare of older adults. Medicolegal professionals have concerns that EM causes or contributes to death, but that cases are being missed. The study purpose is to analyze medicolegal factors in deaths of older (65+) LTC residents in King County in 2005. Specific aims are to describe LTC resident characteristics and death reporting factors to identify potential EM forensic markers. The medical examiner (ME) assumed jurisdiction in 109 of 2,885 cases, with 26 autopsies and 31 external examinations. Mean (SD) age was 84 (8.8) years; 60% were female. Jurisdiction assumption was highest when the person reporting the death was a family member or funeral worker; lowest when the reporter was an adult family home or hospice worker. Non-natural manners of death were accident (n=55), homicide (n=1), suicide (n=1), undetermined (n=2), and complication of therapy (n=2). Twelve cases had "red flags" for EM; manners of death were natural except accidental (n=1) and undetermined (n=2). All deaths were reported by someone other than the LTC representative. Results suggest that reporter is an important factor in ME jurisdiction decisions. Law enforcement reporters may be proxies for concerned family members, healthcare professionals, and others. Care setting transitions at end-of-life complicate efforts to identify LTC-related deaths and responsibility for possible EM-related injuries. Further research is needed to validate reporter as an EM forensic marker and identify and validate other EM forensic markers.

### TIMING OF ADVERSE EVENTS IN NURSING HOMES IN MANITOBA, CANADA

P. St. John[1], D. Strang[1,2], M. Doupe[1], *1. University of Manitoba, Winnipeg, Manitoba, Canada, 2. Deer Lodge Hospital, Winnipeg, Manitoba, Canada*

Objective: to determine if there are high risk periods for adverse events (AEs) in nursing homes (NHs.) Setting: All NHs in the Canadian province of Manitoba for the years 1999 to 2004, except those administered directly by the federal government (N=2); and chronic care hospitals (N=2). Methods: Secondary analysis of administrative data. Population: 122 NHs were included, with 22,846 residents representing 45,691 person-years at risk. Data: Administrative data on NHs and individuals were used. NH variables include profit status (for profit vs not for profit); size (number of beds); and juxtaposition next to an acute hospital. Resident-level data include demographic characteristics, comorbid conditions derived from ICD-9CM codes, and level of care. Time periods of risk were considered based on time after admission and prior to death: a) 30 days following their first NH admission; b) 30 days following transfer between NHs; c) 60 days preceding death; and d) all other times. Outcomes considered were: hip fracture, non-hip fracture, falls requiring hospitalization; respiratory infection, and skin ulcers. These were also derived from ICD-9CM codes from administrative data. Analysis: Bivariate analysis and multilevel poisson regression models. Results: AEs were much more common immediately after admission to NH, and immediately prior to death. The combined rate of AEs per 100 person-years was: 45.9 in the first 30 days following transfer from community; 64.7 in the first 30 days following transfer from hospital; 46.3 following transfer from another NH; 174.3 in the 60 days before death; compared to 30.9 at all other times. Most of these differences persisted after adjusting for NH-level and resident-level factors. Conclusions: The time immediately after admission and immediately prior to death are high risk periods for AEs. Clinicians should monitor residents closely after admission. Administrators should also consider these high risk periods when developing policies to reduce AEs.

### CHANGE IN SEVEN YEARS OF RATES OF EMERGENCY DEPARTMENT VISITS AND HOSPITAL ADMISSIONS ACCORDING TO AGE

R. Rozzini[1,2], P. Barbisoni[1,2], I. Sleiman[1,2], M. Trabucchi[2], *1. Poliambulanza Hospital, Brescia, Italy, 2. GRG, Brescia, Italy*

Background/aim: it has been reported that patients aged over 65 years account for 25% of Emergency Department (ED) attendances, but there have been few studies on time trends of older people's attendance of ED in the last years. This study describes ED attendance patterns over 7 years of older people using data from a middle sized general hospital (Poliambulanza Hospital, Brescia, Italy). Setting and methods: ED attendance data were collected for the period from 1 January 2003 to 31 December 2009. Patients seen in the ED were identified, and their further fate was traced, including transfer to a Medical or Surgical ward in the same hospital and DRG weight (proxy of clinical complexity). Results: An overall trend in the rate of ED visits for the older patients was observed (+14.2 and +54.1 for 75-84 and 85+ age groups respectively); the same trend in the percentage of patients attending the ED and subsequently admitted to hospital was seen. In medical wards for 75-84 and 85+ age groups the increase was respectively of 14.0 and 49.5%; in surgical ward the increase was 12% for 75-84 and 61% in patents 85+. An increased trend of DRG weight was also found (p<0.000). Conclusions: this study shows a significant increasing level use of ED by those aged over 65 years during the last 7 years. This highlights the need for continued systemic monitoring of ED attendance patterns, in order to enable planners and physicians to accommodate the specific needs of ageing population.

### WORKPLACE HAZARDS IN IOWA NURSING HOMES: PERCEPTIONS OF CERTIFIED NURSING ASSISTANTS

K. Culp, S. Ramey, D.P. Burdsall, *College of Nursing, University of Iowa, Iowa City, Iowa*

Certified nursing assistants (CNAs) are the principal bedside caregivers in nursing homes, yet little is known about their perceptions of the work environment. This population-based, cross-sectional study used a mailed questionnaire and was sent to a random sample of Iowa CNAs (N = 584), representing 166 nursing homes. Key workplace hazards reported were musculoskeletal injuries, exposure to body fluids, and being bitten or kicked by confused residents. However, what was surprising were how often these incidents were reported to their employer. Estimates of incidence and prevalence will be presented including reports of inappropriate touching and verbal abuse by supervisors. These workplace hazards will be paired with nursing home ratings, data collected on site visits by the Department of Inspections and Appeals.

## CHANGE IN LOCUS OF CARE PRIOR TO THE HIP FRACTURE

N. Leland[1], J.M. Teno[1], J. Bynum[2], P.L. Gozalo[1], V. Mor[1], *1. Center for Gerontology and Health Care Research, Brown University, Providence, Rhode Island, 2. Dartmouth College, Hanover, New Hampshire*

Objective: The objectives of this study are: 1) to identify the number of patients with a nursing home (NH) stay prior to admission to a United States (U.S.) hospital for a first hip fracture between 1999 and 2007 and 2) examine difference in their survival compared to their community-living peers. Method: We used Medicare claims and MDS data to examine prior locus of care among Medicare beneficiaries 75 years of age and older were not enrolled in managed care and underwent surgical repair of initial hip fracture and were discharged alive between 1999 and 2007 (N=1,264,573). Results: Between 1999 and 2007, 15% of all first time hip fracture hospitalizations were patients residing in a NH at the time of the fracture with an additional 5% having a prior NH stay in the six months prior to hip fracture. Between 1999 and 2007, NH as the locus of care at the time of fracture decreased from 17.9% to 12.8%. Those with a prior NH stay slightly increased from 5.3% to 6.1%. Those residing in the NH at the time of the HF died sooner (514.07 vs.756.47 days, p <.001) than those living in the community prior to index event with no history of a NH stay. Conclusion: Over an 8 year period, NH as the locus of care prior to hip fracture has decreased.

## FEEDING IN ELDERLY WITH LATE-STAGE DEMENTIA (THE FIELD TRIAL): FIDELITY TO TREATMENT IN AN EFFICACY TRAIL IN THE NURSING HOME SETTING

M.B. Aselage[1,2,4], E. Amella[1], D. Garrow[3], L. Bowers[1], *1. Medical University of South Carolina College of Nursing, Charleston, South Carolina, 2. University of North Carolina Wilmington School of Nursing, Wilmington, North Carolina, 3. Medical University of South Carolina Digestive Disease Center, Charleston, South Carolina, 4. John A. Hartford Foundation BAGNC Scholar, Charleston, South Carolina*

Background: Fidelity to treatment is a critical methodological concern in trials conducted in multiple sites by multiple persons over time and is essential to the internal validity of an efficacy trial. This presentation outlines steps taken to increase fidelity in an efficacy study that compares hand feeding with tube feeding in individuals with late-stage dementia developed by an interdisciplinary team and conducted in the three nursing home settings. Methods: Using the NIH Behavior Change Consortium recommendations (Bellg, et al., 2004), steps taken to ensure fidelity include: assuring congruence with study design, monitoring and improving training, delivery of treatment, receipt of treatment, and improving enactment of treatment skills. Results: Certified Nursing Assistants and licensed nursing staff in all sites were trained using various media to adhere to mealtime protocols. A shared-decision making model guided the research and framed the relationships. Training was standardized across sites, as were performance criteria. Booster sessions were held monthly and trainees were debriefed at the close of each subject's participation. Using the best evidence, scripted intervention protocols and treatment manuals and role-play scenarios were developed; videos were produced. Using an extensive checklist, trainees confirmed abilities and were observed at least monthly by the study coordinator. Discussion & Conclusion: While this study is in progress and full results will be available at the meeting, it is expected that through minimizing threats to design validity, we will be able to better insure quality, fidelity and implementation of the tested effect.

## SLEEP AND THERMAL COMFORT IN NURSING HOME RESIDENTS

D.L. Sturdevant, B. Holtzclaw, *College of Nursing, University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma*

Environmental conditions in nursing homes are often overlooked as factors influencing sleep quality in older adults, yet the feeling of being too hot or too cold can significantly disturb sleep. Structural design of care facilities, heating and cooling systems, and air circulation in nursing homes generally influence ambient temperature over entire units, making it difficult to maintain an environmental temperature that is comfortable for all residents. Current literature pays little attention to this problem, yet emerging science may inform care and comfort of vulnerable residents. Purpose: A systematic review research findings was performed to determine the state of the science regarding 1) effects of thermal discomfort on sleep in nursing home patients, and 2) cross-disciplinary research on thermal comfort that may be amenable to translation. Methods: A literature search of MEDLINE, CINAHL, EMBASE, PubMed, PsychINFO databases, included research from physiology, gerontology, environmental science/technology, psychiatry, sleep science, chronobiology, medicine, and nursing. Discipline-specific interpretations were compared for relevance to an interdisciplinary care approach. Descriptive and intervention studies were included and evaluated for design and sampling adequacy, clear description, ease and validity of measurement, conceptual congruence for use with other measurements. Findings: Evidence that age-related changes affect thermal sensitivity, thermal comfort, and risks for insomnia in older adults, has produced few studies or application to nursing home settings. Advances in thermal physiology, industrial/environmental technology, and measurement of thermal comfort in non-institutional settings, offer clear rationale and possibilities for translation into interdisciplinary research on assessment and care of older nursing home residents.

## ELDERS' ADHERENCE TO NEUROPATHIC PAIN TREATMENT PLAN

D.M. Burge, *University of Arkansas for Medical Sciences, Little Rock, Arkansas*

Purpose: Study purposes were to examine the effects of medication side effects, cognitive impairment, depression, and medication affordability on adherence of elders to a neuropathic pain treatment plan and to identify additional variables predicting non-adherence. Design: The study utilized a correlational study design. Setting: Study setting was an outpatient pain clinic. Sample: 95 adults age 65 or older participated. Methods: Descriptive information was collected from each participant's medical record. Cognitive ability was measured by the Mini Mental Status Exam. Depression was measured using the Center for Epidemiologic Studies Depression Scale. Descriptive statistics were used to identify the means and standard deviations. Correlation statistics, independent two-sample t-test, and linear regression were utilized to identify statistically significant relationships between variables. Findings: Thirty (32%) patients demonstrated non-adherence. Medication side effects were found to be the primary reason for non-adherence (n=25, 83.3%). No participants demonstrated cognitive impairment or depression. Some participants reported difficulty in affording treatment plan medications (n=10, 10.5%) but did not give medication affordability as rationale for non-adherence. Failure to understand the treatment plan was an unanticipated reason for non-adherence (n=5, 16.7%). No relationship was found between non-adherence and cognitive impairment, depression, or medication affordability. In the regression model, medication side effects were a significant predictor of non-adherence (p=0.04). Conclusions: As frequency of medication side effects increased, participant non-adherence increased. There is no effect on non-adherence by cognitive impairment, depression, or medication affordability. Misunderstood treatment plans may lead to non-adherence.

### DEVELOPMENT OF CARE SYSTEM TO ACTIVATING FRAIL OLDER ADULTS' ACTIVITIES IN DAILY LIFE: III. EFFECTIVENESS OF EXERCISE BY SYNTHETIC TECHNIQUES OF CHROMA-KEY

Y. Lau[1], K. Yamauchi[2], A. Ogita[3], S. Oshita[4], T. Ichikawa[5], R. Izawa[1], H. Tamura[6], *1. Tokyo Women's Medical University School of Nursing, Tokyo, Japan, 2. Keio University Institute of Physical Education, Kanagawa, Japan, 3. Osaka City University Research Center for Urban Health and Sports, Osaka, Japan, 4. Izumi Junior College Department of Child Welfare, Kanagawa, Japan, 5. Matsuyama Shinonome Junior College Department of Early Childhood Education and Care, Ehime, Japan, 6. Kokushikan University, Tokyo, Japan*

Introduction: Audio visual system by synthetic techniques of Chroma-key as learning material of exercise for older adults has been developed and part of it has been reported in GSA2009. Further development of the audio visual system based on the effectiveness has been carried out. Some problems that we encountered were demonstrated in a survey that we present here. Purpose: The purpose of this research was to clarify the effectiveness of audio visual system by synthetic techniques of Chroma-key as learning material of exercise. Methods: Two types of learning materials were provided for older adults living in the suburb of K prefecture in Japan for a trial. One type of learning materials was a DVD in which pictures of the learner were synthesized into the pictures of the instructor on the screen in real-time. Another type was that pictures of the instructor were cut into the pictures of the learner on the screen. Different types of background on the screen, such as scenery of nature or learner's house, were also compared. After these trials, learners were asked for their impression in questionnaires and interviewed regarding these learning materials. Results: The learners stated that although they felt comfortable if the background on the screen was their house, they were not interested in doing exercise. On the other hand, the background of scenery of nature made them experience virtual reality and enjoy exercise. Choosing the background on the screen by the learners was effective for them to be motivated and continue exercising regularly.

### RELATIONSHIP OF EMOTION AND COGNITION TO WANDERING BEHAVIORS OF PEOPLE WITH DEMENTIA (PWD)

K. Lee, D. Algase, *School of Nursing, University of Michigan, Ann Arbor, Michigan*

Background: Wandering is one of the most frequently encountered dementia-related behaviors and has been associated with negative consequences such as higher morbidity and mortality. However, little research has focused on the influence of emotion on wandering. Purpose: To explore the relationship of cognitive and emotional factors to wandering behavior of persons with dementia. The Need- driven Dementia-compromised Behavior (NDB) model guided this study. Design and methods: A cross-sectional, descriptive study design was used. Subjects were recruited from 17 nursing homes and 6 assisted living facilities in Michigan. A total of 31 PWD data was coded for preliminary analysis. Wandering was rated by nursing staff to answer a question "He/she is a wanderer" with a 4-point Likert scale. Cognition was measured by score by the MMSE; emotion was measure by the Observable Display of Affect Scale (ODAS). Hierarchical multiple regression was used to determine factors associated with wandering. Mediation analysis was used to examine whether cognition mediates the association between emotion and wandering. Results: Preliminary results showed that wandering was significantly associated with positive affect ($\beta$ =0.989, p=0.011), negative affect ($\beta$ =-1.123, p=0.004), and cognition ($\beta$ =-0.509, p=0.004). Specifically, problematic wanderers tended to show more positive affect, less negative affect, and more cognitive impairment. Mediation analysis did not support cognition as a mediator of the impact of emotion on wandering. Conclusions: Positive/negative affect and cognition independently influence wandering. Therefore, a tailored intervention addressing both emotions and cognitive functioning may be required to improve wandering behaviors of PWD.

### CARE-RELATED QUALITY OF LIFE IN DEMENTIA CARE – ACTUALLY MEASURABLE?

J. Gräske[1,2], T.W. Fischer[2], A. Kuhlmey[1], K. Wolf-Ostermann[2], *1. Charité Universitätsmedizin Berlin, Institute for Medicine Sociology, Berlin, Germany, 2. Alice Salomon University of Applied Sciences Berlin, Berlin, Germany*

Objectives Given the Fact that there Is No Cure for Dementia Currently Available, the Outcomes of Care for People Suffering from Dementia are of Great Importance. Quality of Life (QoL) is Now Considered a Major Outcome. Nevertheless Definitions of Quality of Life Lack of Homogeneity and are Not yet Fully Comprehensive, especially in Regard to Care-Related Characteristics. Vaarama (2009) First Developed a Model of Care-Related Characteristics of QoL in Old Age. Our Aim Was to Examine if Existing Dementia-Specific QoL-Instruments Cover the Domains of this Model. Method In December 2009 We Conducted a Systematic Search of the Literature - using the Terms "Dementia" OR "Alzheimer" AND "Quality of Life" in the Databases Cinahl, Embase, Gerolit, PsycInfo, and Pubmed to Identify Articles Including Dementia-Specific QoL - Instruments. We Compared if the Domains Included in These Instruments Match with the Domains of the Model of Care-Related Quality of Life. Results We Identified 154 Studies Satisfying these Criteria. No Study Aimed to Investigate Care-Related QoL. We Identified 21 Dementia-Specific Quality of Life Instruments, Including Self- and Proxy-Ratings as well as Observational Methods. We Found no Dementia-Specific Instrument that Includes all Domains of Care-Related Quality of Life. Of all instruments QUALIDEM (Ettema et al. 2007) has the Best Match for Care-Related QoL. The Domain Care Relations includes seven Items. Conclusion Actually In Dementia Care there is No Instrument Available to Measure Care-Related Quality of Life although there clearly is a need to include this aspect in patient assessment.

### A SYSTEMATIC REVIEW OF INTERVENTIONS TO PROMOTE EFFECTIVE TRANSITIONAL CARE FROM HOSPITAL TO HOME

S. Ramsaroop, A. Nagarajan, C. Reid, E. Siegler, *Internal Medicine/ Geriatrics, Weill Cornell Medical College, New York, New York*

Background/ Purpose:The transition from hospital to home is often a complex process vulnerable to miscommunication and error. Approximately half of all patients experience a medical error after discharge. One in 5 patients suffers an adverse event within three weeks of discharge. The consequences of poor transitions include increased emergency room visits and readmissions, increased mortality and increased health care expenditures. The purpose of this study is to systematically review studies designed to promote effective transitions from hospital to home. Design/ Methods:Extensive bibliographic searches of English-language literature published from January 1970 through July 2009 were conducted. Investigators abstracted pre-specified information (e.g. design, study duration, types of interventions employed) and outcomes measured. Results: 64 studies met inclusion criteria. Two thirds of studies employed an intervention post discharge. Nurses or advance practice nurses were the most common providers delivering the interventions. The most commonly utilized interventions were regularly scheduled telephone calls to patients post discharge and regularly scheduled home visits post discharge. 71% of studies showed reductions in unplanned readmission rates. The most successful studies all provided 24 hour phone availability to patients. Conclusions: The most successful interventions for effective transitions from hospital to home utilized regularly scheduled, direct communication and follow up with providers.

These time and labor extensive measures may not be feasible for busy, primary care practices. Further study is needed to develop effective and efficient interventions for the transition from hospital to home.

### A SURVEY ABOUT SKILL MIX IN OCCUPATIONAL THERAPY IN QUEBEC WITH ELDERS WITH BATHING DIFFICULTIES

M. Guay[1,2], M. Dubois[1,2], J. Desrosiers[1,2], J. Robitaille[2], J. Charest[2], *1. Université de Sherbrooke, Sherbrooke, Quebec, Canada, 2. Research Center on Aging, Sherbrooke, Quebec, Canada*

Introduction: Occupational therapists working in Quebec (Canada) have to deal with a shortage of human resources. In the case of bathing-equipment recommendations, a proposed solution—albeit controversial—is to use skill mix, defined as “a more efficient deployment of employee skills and competencies through the introduction of extended roles and cross-skilling” (Stanmore and Waterman, 2007). The purpose of this study is to describe the use of skill mix in home-care occupational therapy in Quebec (Canada) with clients with bathing difficulties. Methods: All provincial health and social services centres (N=95) were contacted by phone and surveyed on their setting and use of skill mix. Results: The participation rate was 91% and results indicate that 89% of the clinical organizational models in home-care services involve skill mix to determine the need for technical assistance with bathing. Generally, occupational therapists collaborate with physical therapists or with home-health aides; substitution occurs by task assignment. Clinical occupational therapists provide informal training, lasting between 1 and 40 h (mean of 8 h), and have developed 63 versions of “home-made” protocols to assist those involved in the task. Contribution: This study provides a portrait of the use of skill mix in home-care occupational therapy in the province of Quebec (Canada) with clients with bathing difficulties, an internationally sensitive topic for which research is much needed.

### DOES ILLNESS BURDEN INDEPENDENTLY PREDICT NURSING HOME ADMISSION IN AN ELDERLY COHORT?

K.D. Sheppard[1,3], C. Ritchie[1,3], M. Hovater[2], R.M. Allman[1,3], D.L. Roth[2], C.J. Brown[1,3], *1. University of Alabama at Birmingham Division of Gerontology, Geriatrics, and Palliative Care, Birmingham, Alabama, 2. University of Alabama at Birmingham School of Public Health Department of Biostatistics, Birmingham, Alabama, 3. Birmingham/Atlanta VA GRECC, Birmingham, Alabama*

The purpose of this study is to assess whether illness burden independently predicts nursing home (NH) placement in community-dwelling older adults over an eight-year follow-up. Methods: A random sample of Alabama community-dwelling Medicare beneficiaries stratified by race, gender, and rural/urban residence had baseline in-home assessments of socio-demographic measurements, Charlson comorbidity score, symptoms, and cognition. Illness burden was created from a composite score of patient reported symptoms. Every 6 months, participants (or proxies) completed telephone interviews to ascertain nursing home placement. Cox proportional hazard modeling was used to examine the significance of illness burden as a predictor to nursing home placement after adjusting for other variables. Results: The mean age (N=1000) was 75.3 years (S.D. = 6.7). The sample was 51% rural, 49% African American, and 50% male. Seventy six participants (7.8%) were identified as being admitted to the nursing home during the eight years. Sixty-three percent of the cohort has a Charlson co-morbidity index score of ≥2. Sixty-eight percent of the cohort demonstrated illness burden scores ≥2. Using Cox proportional hazard modeling, illness burden remained independently associated with time to nursing home placement (HR=1.11, p-value=0.02). Other significant factors included: Charlson comorbidity score (1.30, p-value=0.0001), African American race (HR=0.53, p-value=0.008) and age (HR=1.12, p-value<0.0001). Conclusion: Illness burden is a risk factor for nursing home placement, even after controlling for existing comorbidity and other known risk factors. This project was supported by Grant Number T32HS013852 from the Agency for Healthcare Research and Quality.

### POST-ACUTE CARE AND 30-DAY HOSPITAL READMISSION RATES

S.E. Hardy[1], H.D. Lum[1], S. Studenski[1], H.B. Degenholtz[2], *1. University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania, 2. University of Pittsburgh Graduate School of Public Health, Pittsburgh, Pennsylvania*

Thirty-day readmission rates are frequently considered an indicator of the quality of hospital care, but little is known about the role of post-acute care (PAC) in determining hospital readmission rates. We use data from the 2001-2003 Medicare Current Beneficiary Survey (MCBS), a nationally representative sample of Medicare beneficiaries, to determine readmission rates for hospitalized older adults who receive no PAC, PAC through a home health agency (HHA), or PAC through a skilled nursing facility (SNF). Between fall 2001 and fall 2003, 985 Medicare beneficiaries aged 65 years or older were admitted to a short-term acute care hospital and discharged home without PAC (74%), home with HHA (10%), or to a SNF (15%). 30-day readmission rates were 12% for participants discharged home with no PAC, 18% for those with HHA, and 21% for those with SNF (p=0.04). After adjustment for age, gender, race, socioeconomic status, social support, self-rated health, functional status, cognitive and psychiatric symptoms, smoking, comorbidity, body mass index, ICU utilization, and length of stay, the relative odds of readmission were significantly increased for SNF but not HHA compared to no PAC [OR (95% CI) 1.75 (1.05-2.94) and 1.39 (0.74-2.60), respectively]. Older adults who receive PAC after an acute hospitalization are more likely to be readmitted than those who do not receive PAC. After adjusting for numerous biopsychosocial factors, only SNF-based PAC is associated with an increased 30-day readmission rate. Older adults receiving SNF-based PAC are a good target for interventions to decrease readmission.

## SESSION 1685 (SYMPOSIUM)

### IS 85 THE NEW 75? HEALTHY AGEING IN THE NEWCASTLE 85+ STUDY

Chair: *C. Jagger, Institute for Ageing and Health, University of Newcastle, Newcastle upon Tyne, United Kingdom*
Discussant: *E. Crimmins, USC Davis School of Gerontology, Los Angeles, California*

There is remarkably little up-to-date information about the health of the oldest old (over 85 years), demographically the fastest growing section of the population of most developed countries. There is a need, from both a policy and scientific perspective, to describe in detail the health status of this population and the factors that influence individual health trajectories. For a very large proportion of medical conditions, age is the single largest risk factor. Gaining new knowledge about why aged cells and tissues are more vulnerable to pathology is likely to catalyse radical new insights and opportunities to intervene. The Newcastle 85+ Study aims to determine the spectrum of health within an unselected inception cohort of 800 85 year-olds (1921 birth cohort); to examine health trajectories and outcomes as the cohort ages, and their associations with underlying biological, medical and social factors; and to advance understanding of the biological nature of ageing. The study secured a high level of participation from 85 year olds in the target area of Newcastle and North Tyneside, UK; 851 people (59% of those eligible) were recruited to a detailed domiciliary health assessment plus review of general practice medical records, 188 (13%) to record review only, and 3 (0.2%) to health assessment only. The cohort was representative in terms of the proportion of people living in institutions and also included the cognitively impaired. This symposium describes the study’s first results on health, dependency and biological markers of ageing.

### HIGH LEVELS OF DISEASE AND HEALTH SERVICE USE BUT GOOD FUNCTIONAL STATUS AND SELF-RATED HEALTH ARE FOUND IN 85 YEAR OLDS

J. Collerton[1], K. Davies[1], C. Jagger[1], A. Kingston[1], J. Bond[2,1], M.P. Eccles[2,1], L. Robinson[2,1], T. Kirkwood[1], *1. Institute for Ageing and Health, Newcastle University, Newcastle upon Tyne, United Kingdom, 2. Institute of Health and Society, Newcastle University, Newcastle upon Tyne, United Kingdom*

High levels of disease were found in 85 year olds; the prevalence of diagnosed hypertension (58%), atherosclerotic disease (47%), osteoarthritis (52%), and cataract (47%) were each close to 50% and almost 90% of participants had at least 3 chronic diseases, median (interquartile range (IQR)) count 5 (3-6). Hearing impairment was reported by 60%, visual impairment 37%, falls 38%, severe/profound urinary incontinence 21% and moderate/severe cognitive impairment identified in 12%. Use of health services was high; in the previous year 22% were admitted to hospital (median (IQR) length of admission(s) 7 (3-20) days) and 94% had consulted their general practitioner (median (IQR) annual consultation rate 5 (2-8)). Surprisingly good levels of functional ability and self-rated health were found; the median (IQR) number of activities of daily living undertaken with difficulty was 3 (1-8) and 78% rated their health, compared with others of the same age, as good/very good or excellent.

### DISABILITY AND DEPENDENCY: HOW MUCH CARE IS IN THE COMMUNITY?

C. Jagger[1], J. Collerton[1], L. Robinson[2,1], M.P. Eccles[2], A. Kingston[1], T. von Zglinicki[1], T. Kirkwood[1], J. Bond[2,1], *1. Newcastle University Institute for Ageing and Health, Newcastle upon Tyne, United Kingdom, 2. Newcastle University Institute for Health and Society, Newcastle upon Tyne, United Kingdom*

Despite considerable diagnosed morbidity, people aged 85 born in 1921 living in Newcastle and North Tyneside are remarkably independent. Using the concept of interval need operationalised by the need for help with IADLs and ADLs, we estimate that just over 11% have short-interval dependency (help required at regular intervals each day) and 8% have critical-interval dependency requiring help potentially at any time or constant supervision. Although three-quarters of those with critical interval needs and almost a third of those with short interval need were in care homes, the main helper for 20% of the critically dependent and 4% of those with short interval need was a spouse. If dependency levels remain constant and assuming our cohort represents those aged 80+ years we estimate that the number of people aged 80+ years with critical or short interval dependency will increase by 25% in England and Wales between 2010 and 2020.

### BIOMARKERS OF AGEING AND THEIR RELATIONSHIP TO DISABILITY AND COGNITION

T. Kirkwood, C. Martin-Ruiz, C. Jagger, J. Collerton, A. Kingston, T. von Zglinicki, *Newcastle University Institute for Ageing and Health, Newcastle upon Tyne, United Kingdom*

Ageing is the single greatest risk factor for death and major diseases. However, biological age can differ significantly from chronological age. Various biomarkers of age have been developed in recent years, including measures such as telomere length in white blood cells but multiple biomarkers may need to be measured simultaneously to reliably capture biological age. We present data on the relationship between an extensive set of biomarkers and both disability (measured by difficulty in 17 activities of daily living) and cognitive function (measured by the Mini-Mental State Examination (MMSE)). Disability was categorised into 4 levels (difficulty with 0/1-6/7-12/3-17 activities) and MMSE into 4 categories (0-17/18-21/22-25/26-30). Biomarker values were categorised into gender specific centiles (<10th,10-90,>90th). We evaluated the effect of high and low values of biomarkers on disability and MMSE by ordered polytomous regression models adjusted for gender.

## SESSION 1690 (SYMPOSIUM)

### SMARTSENIOR - INTELLIGENT SERVICES FOR SENIOR CITIZENS

Chair: *M. Gövercin, Geriatric Medicine, Charité- University Medicine Berlin, Berlin, Germany*
Co-Chair: *M.C. Balasch, Deutsche Telekom AG, Berlin, Germany*
Discussant: *E. Steinhagen-Thiessen, Geriatric Medicine, Charité-University Medicine Berlin, Berlin, Germany*

Forming the German project SmartSenior – Intelligent services for senior citizens, 28 renown industry companies and research institutes have allied to develop and validate technologies in the service of elderly people. In the first session, objectives and approaches are introduced from the comprehensive point of view of the coordinator. In the second session a solution for the challenge of safe and secure medical data collection and transmission from home care devices into patient records is presented: mdoc, the generic electronic health record. A third session deals with the results from focus groups – a qualitative social research tool – on the potentials and the requirement of an interactive trainer. The fourth session presents data of a novel sensor based activity monitoring and fall detection tool that recorded data from a full week at elderly peoples homes. The project is funded by the German Federal Ministry of Education and Research.

### HIGH RESOLUTION ACTIVITY RECORDING ON ELDERLY FOR SEVERAL DAYS AND NIGHTS

R. Feichtinger[2], M. Gövercin[1], R. Walter[3], T. Hortmann[4], E. Steinhagen-Thiessen[1], *1. Geriatric Medicine, Charité- University Medicine Berlin, Berlin, Germany, 2. Humotion GmbH, Münster, Germany, 3. Universitätsklinikum Tübingen, Tübingen, Germany, 4. Medical Park Bad Wiessee St. Hubertus, Bad Wiessee, Germany*

Accelerometers for activity monitoring have often been used in recent years. We built a sensor system adding gyroscopes in 3 dimensions and validated the readouts on an isokinetic dynamometer (IsoMed2000) with co-linearity factors Rx=0,999962, Ry=0,999968, Rz=0,999987, respectively. We measured with accelerometers and gyroscopes at the lower lumbar (L5). We found a placement variability of 2cm to be tolerable. A first study on 22 rehabilitation patients with hip-TEP (average 22 days post OP) to 31 age- and BMI-matched controls (64,9y/62,4y; BMI 27,1/27,3) revealed significant differences in several gait asymmetry and irregularity parameters derived from autocorrelation. We present data on (A) progression during rehabilitation therapy, (B) activity patterns at home for up to seven days comparing an elderly to a young urban population and (C) assessment of quantitative parameters correlated to risk of fall.

### AAL CONNECTED TO DAILY ROUTINE IN CLINICS

M. Schröder, *Tembit Software GmbH, Berlin, Germany*

The prolongation of living in their home environment is one of the main targets of older people. This objective requires new technology to collect and transmit medical data safely and securely from home care devices into patient records considering a data handling conform to all constraints of (tele-)medicine services. Thereto mdoc - the generic electronic health record - provides a rule based decision matrix to identify and estimate critical values and initiate the appropriate steps depending on predefined levels of escalation. mdoc is used in medical consultations to work on (importable) clinical pathways including the necessary telemedicine data. mdoc offers interfaces to the local hospital information system and supports physicians to select and monitor patients for clinical trials. Necessary parameters of the patients can be added, modified, and archived by treating physicians at any time.

### FOCUS GROUP DISCUSSION FOR THE DETECTION AND USER CENTERED DESCRIPTION OF REQUIREMENTS FOR THE DEVELOPMENT OF AN INTERACTIVE TRAINER

M. Gövercin, J. Kiselev, M. Haesner, Y. Költzsch, E. Steinhagen-Thiessen, *Geriatric Medicine, Charité- University Medicine Berlin, Berlin, Germany*

User centered design is a key method to develop new technologies especially in assisting health care technologies for elderly people. Here we present data of a focus group discussion that was conducted in the context of the SmartSenior project. The three focus groups consisted of six users with a fall history, six users with stroke and a group of health care experts like nurses, therapists, health insurance employees, general practitioners etc. According to a focus group discussion guide including an interactive presentation to demonstrate the user the planned development, we discussed and questioned relevant topics. 75% of the multimorbid elderly had previous contact with IT. As an example for results and consequences of the focus groups, we decided to implement a live Audio-Video stream because there was a clear consensus that patient-professional contact has to be essential in the design of an interactive trainer.

### COMPREHENSIVE OVERVIEW OF THE OBJECTIVES AND APPROACHES OF THE SMARTSENIOR PROJECT

M.C. Balasch, *Deutsche Telekom AG, Laboratories, Berlin, Germany*

SmartSenior strives towards an integration of solutions to maintain life standard of elderly with regards to economic, health and social aspects. The project focuses on three scenarios: safe mobility, health and healing as well as independent living at home. Concepts, prototypes and services of integrated and intelligent environmental technologies are being developed. Particular emphasis is put on a comprehensive ICT-infrastructure, intuitive user interfaces, a mobile emergency detection device, an integration of services for the prevention and rehabilitation of functional limitations, and solutions to enhance the safety of elderly at home and away. These solutions will be evaluated in a field test including 35 homes of elderly people. SmartSenior covers the whole value chain along the mission of an independent life for elderly by partners in the essential fields. It focuses on solutions within one concept and will ensure impulses for health industry and the economic changes within an ageing society.

## SESSION 1695 (SYMPOSIUM)

### TRENDS AND TRAJECTORIES OF ORAL HEALTH: LINKING COGNITIVE FUNCTION, SYSTEMIC DISEASES, AND ORAL HEALTH IN OLDER ADULTS

Chair: *B. Wu, Gerontology, University of North Carolina at Greensboro, Greensboro, North Carolina*
Discussant: *R. Nowjack-Raymer, National Institutes of Health, Bethesda, District of Columbia*

This symposium aims to address gaps in the gerontological and oral health literatures: oral health disparities for minority elders, linkages between oral health and systemic diseases, and relationship between cognitive function and oral health trajectories. The first study presents national trends of edentulism (complete tooth loss) among Americans aged 50 and over. Overall, there was a significant downward trend of edentulism from 1999 to 2008. However, significant variations existed across five major racial/ethnic groups. This is one of the first known studies to examine edentulism trends for Native Americans and Asians alongside those for Whites, Blacks and Hispanics. The second study compared the oral health of young and old Mexican American and European Americans from 3 socioeconomically-matched neighborhoods. The third study assessed the oral health-systemic disease link in low income older patients of a mobile dental clinic who experienced higher rates of diabetes, depression, osteoporosis and hypertension than the U.S. population. The study found that elders with chronic diseases, especially diabetes, osteoporosis and depression, and those on some prescriptions were more likely to have poorer oral diseases and conditions. The fourth study examined the linkages between cognitive functioning and oral health over a five-year period. The study found that cognition predicted the levels of filled teeth and a DMFT summary measure (i.e., decayed, missing, and filled teeth), whereas these linkages were partially mediated by oral hygiene behaviors. Dr. Ruth Nowjack-Raymer will discuss potential NIH funding sources for oral health research in older adults.

### ETHNIC VARIATIONS IN EDENTULISM AMONG MIDDLE-AGED AND OLDER AMERICANS, 1999-2008

B. Wu[1], J. Liang[2], C. Remle[1], B. Plassman[3], X. Luo[1], *1. Gerontology, University of North Carolina at Greensboro, Greensboro, North Carolina, 2. University of Michigan, Ann Arbor, Michigan, 3. Duke University, Durham, North Carolina*

Research on ethnic variations in oral health trends is rare, particularly those involving American Indians and Asians. This study examined the trends of edentulism (complete tooth loss) among Americans aged 50 and over. Data came from the National Health Interview Surveys between 1999 and 2008. Respondents included 616 American Indians/Alaska Natives (AIAN), 2,666 Asians, 15,295 Blacks, 13,068 Hispanics, and 86,755 Whites. Overall, there was a significant downward trend of edentulism from 1999 to 2008 (OR=0.97, 95% CI: 0.96, 0.98). However, significant variations existed across five major racial/ethnic groups. AIAN had the highest rate of edentulism (27.7%), followed by Blacks (19.8%), Whites (17.4%), Hispanics (14.6%), and Asians (12.9%). Controlling for population heterogeneity, multivariate analyses revealed that relative to Whites, Hispanics were less likely to lose all teeth (OR=-.53, 95% CI: 0.50, 0.57), whereas AIAN remained at higher risk of being edentulous (OR=1.33, 95% CI: 1.07, 1.66).Supported by NIH/NIDCR (1R01DE019110).

### DISPARITIES OF AGE, GENDER AND ETHNIC STATUS IN DENTAL CARIES

M.J. Saunders[1,2], C. Yeh[1,2], S. Lee[1,2], J.E. Cornell[1,2], H.P. Hazuda[1], *1. UTHSCSA, San Antonio, Texas, 2. GRECC, STVHCS, San Antonio, Texas*

This study documents the disparity of dental health status among younger and older Mexican and European Americans (MAs and EAs) using a dataset from the cross-sectional component of the aging study since there is no longitudinal oral health data at this time—Oral Health: San Antonio Longitudinal Study of Aging (OH: SALSA). The ratio of coronal caries to existing teeth were analyzed based on two age groups (younger <65 and older >or=65 yrs), sex, and ethnic status. There were significant differences in dental caries between age (p<0.0001) and ethnic status (p<0.0005) groups. Older subjects have more caries compared to their younger counterparts and MAs have worse caries experience than EAs. The caries rate is almost three times more in older MAs than younger EAs. These results confirm that disparities of oral health exist among younger vs. older and EAs vs. MAs in a community-based population.

### SYSTEMIC AND ORAL DISEASES: WHAT IS THE LINK?

A.H. Kiyak, *Institute on Aging, University of Washington, Seattle, Washington*

There is growing evidence that oral health is impaired in elders with chronic diseases, especially diabetes, osteoporosis and depression, and those on some prescriptions (e.g. antidepressants, antihypertensives). This presentation summarizes findings of two studies (n=87 and 72) that assessed the oral-systemic disease link in low income older patients of a mobile dental clinic, with higher rates of diabetes, depression, osteoporosis and hypertension than the U.S. population. Elders with hypertension and arthritis had more denture problems (p=.01, p=.001), while those with osteoporosis were missing more teeth (p=.01). Those using antihypertensives had worse soft tissue (p=.03) and those on cholesterol meds had more caries (p=.04). The sheer number of Rx meds used (5.45 on average) is associated with tooth loss (p=.001), suggesting that tooth loss is a good marker of poor general health. Despite small samples, these data suggest the importance of maintaining good oral health among elders with systemic diseases.

### COGNITIVE FUNCTIONING, ORAL HYGIENE, AND ORAL HEALTH TRAJECTORIES AMONG OLD ADULTS

J. Liang[1], B. Wu[2], B. Plassman[3], Y. Lee[1], C. Remle[2], L. Bai[2], J. Beck[4], *1. University of Michigan, Ann Arbor, Michigan, 2. Gerontology, University of North Carolina at Greensboro, Greensboro, North Carolina, 3. Duke University, Durham, North Carolina, 4. University of North Carolina at Chapel Hill, Chapel Hill, North Carolina*

There is little research on the dynamic linkages between cognitive functioning and oral health over an extended period of observation. This study analyzes how cognitive functioning is associated with oral health trajectories directly and indirectly via dental hygiene. Data came from the Piedmont Dental Study and the Duke Established Populations for Epidemiologic Studies of the Elderly. The sample consisted of 810 older Americans who were dentate at the baseline with up to 4 repeated observations between 1988 and 1994. Multilevel models with ordered logit were employed to chart the trajectories of oral health including decayed teeth, filled teeth, missing teeth, and DMFT (a summary measure of decayed, missing and filled teeth). Cognitive functioning predicted the levels of filled teeth and DMFT, whereas these linkages were partially mediated by oral hygiene (i.e., brushing, flossing, and rinsing). Supported by NIH/NIDCR (1R01DE019110).

## SESSION 1700 (SYMPOSIUM)

### WHERE DO I GO FROM HERE? ELDERS' TRANSITIONS FROM ED TO HOME

Chair: *L.R. Phillips, Nursing, UCLA, Los Angeles, California*
Discussant: *G. Guo, Peking University, Beijing, China*

While older individuals seek care in a variety of settings, recent data from the 2006 Emergency Department (ED) Summary of the National Center for Health Statistics National Hospital Ambulatory Medical Care Survey indicate that compared to the overall per capita ED visit rate (40.5 visits per 100 persons), the rate for those 65+ is 48.5 visits per 100 persons. For elders living in the community, 65% percent of ED visits result in discharges to home. Data also shows that compared to younger persons, older adults have poorer ED outcomes including more repeat visits, longer stays and higher rates of adverse outcomes following ED visits. This symposium frames the problem of poor ED outcomes in the context of the special needs of older adults and poorly managed "ED to home transitions." The first paper focuses on describing, from the perspectives of elders and caregivers, the factors that influence ED encounters and transitions home. The second paper reports on geriatric syndromes as a factor that complicates transitions to home. The third paper characterizes the contribution of dehydration as a complicating factor in ED encounters. The last paper explores the influence of cognitive problems as they complicate ED encounters and transitions to home. The goal is to design ED interventions that more adequately account for these unique transitional care problems among community dwelling older adults.

### WHEN 2 + 2 = 6: GERIATRIC SYNDROMES AS PART OF THE ED EQUATION

L.R. Phillips[1], M. Cadogan[1], J. Mentes[1], D. Woods[1], H. Aronow[2], *1. Nursing, UCLA, Los Angeles, California, 2. Cedars-Sinai Medical Center, Los Angeles, California*

Dealing with geriatric syndromes is a fact of life for many older persons and their caregivers. However, the degree to which geriatric syndromes complicate ED encounters and transitions to home is unknown because our current record-keeping systems are not designed to capture data specifically about geriatric syndromes. This study was designed to use an existing database (archived ED records) to describe the characteristics of vulnerable community-dwelling elders who seek and receive urgent care in a large, urban emergency department and return to home without a hospital admission with a focus on the frequency of geriatric syndromes and patterns of co-morbidity. Two ED outcomes are considered in the analysis: (1) repeat ED visits and (2) admission to the hospital within 6 months.

### DEHYDRATION AS BACKGROUND NOISE IN THE EMERGENCY DEPARTMENT

J. Mentes[1], G. Guo[2], H. Aronow[3,1], *1. UCLA Center for the Advancement of Gerontological Nursing Science, Los Angeles, California, 2. Peking University School of Nursing, Beijing, China, 3. Cedars Sinai Health Services, Los Angeles, California*

Dehydration is a common, yet often overlooked, precipitating or co-occurring factor in emergency room contacts in older adults. The purpose of this study was to characterize the contribution of dehydration to ED contacts in adults older than 65 years. We used one fiscal year of ED data, n=1000, of a large urban medical center to compare older adults who present to the ED with a primary diagnosis of dehydration to those adults who present with a secondary diagnosis of dehydration. Characterizing these different presentations can provide meaningful information for individually tailored interventions to minimize dehydration in this population.

### REVOLVING DOORS: TRANSITIONS OF ELDERS FROM ED TO HOME

M. Cadogan, L. Phillips, *UCLA School of Nursing, Los Angeles, California*

Older adults are frequent users of emergency department (ED) services and most return to their original places of residence. Little is known about the experiences of older adults who are discharged home from the ED without a hospital admission. Using qualitative data from interviews with older adults and/or their caregivers, this presentation will describe, from the perspectives of elders and their caregivers, factors that influenced their ED encounters and transitions home. Their perceptions of (a) the antecedents of their ED visit (health concerns, co-morbid conditions and geriatric syndromes); (b) the events that occurred in the ED; and (c) their post-ED experiences (problems encountered in interpreting instructions and following through with changes in treatment protocols, and the degree to which their original problems were resolved) will be highlighted.

### WHO'S CONFUSED: HOW COGNITIVE AND BEHAVIORAL PROBLEMS CONTRIBUTE TO ED ENCOUNTERS

D. Woods, *UCLA Center for the Advancement of Gerontological Nursing Science, Los Angeles, California*

Behavioral symptoms of dementia (BSD) rooted in cognitive problems associated with dementia are known to influence seeking services which contribute to upwards of 30% of acute care hospital admissions. Currently, however what is not known is the influence of cognitive problems on Emergency Department (ED) encounters, how they complicate these encounters, and subsequent discharge to home. This study was designed to utilize an existing database (archived ED records) to describe the characteristics of vulnerable community-dwelling elders who receive urgent care in a large, urban ED and return to home without a hospital admission. Three ED outcomes are considered in the analysis: (1) the frequency of cognitive problems and/or BSD as a presenting problem; (2) the frequency of cognitive problems and/or BSD as a secondary problem; and (3) the frequency of ED revisits.

## SESSION 1705 (SYMPOSIUM)

### BRIDGING THE WORLDS OF RESEARCH, ADVOCACY, POLICY AND PRACTICE: THE NATIONAL ALLIANCE FOR CAREGIVING

Chair: *G. Hunt, National Alliance for Caregiving, Bethesda, Maryland*
Co-Chair: *D. Wagner, Towson University, Towson, Maryland*
Discussant: *R. Schulz, University of Pittsburgh, Pittsburgh, Pennsylvania*

The National Alliance for Caregiving (NAC), a non-profit coalition of national organizations, works to advance the understanding of family caregiving, foster research that instructs policy in family caregiving, and educates policy makers and advocates about informal caregiving. The first national survey of family caregivers was conducted using a telephone survey instrument by NAC in 1997. This survey was replicated in 2004 and again in 2009. Although each sample was unique in the surveys, the surveys provide a snapshot of family caregiving that has been used to educate policy makers, employers and advocacy groups interested in aging, family issues and family caregiving. This symposium is designed to explore the contributions of the NAC caregiving study, the challenges associated with blending the policy and research agenda and the development of appropriate material for the array of audiences. An overview of the NAC survey design and data collection as well as key findings from the 2009 survey will be provided as will information about the use of the data by the research community.

### NAC SURVEY DATA AS A RESOURCE FOR ENRICHING CAREGIVER POLICY RECOMMENDATIONS

R. Schulz, *University of Pittsburgh, Pittsburgh, Pennsylvania*

The NAC survey data is an invaluable resource for addressing key questions regarding the prevalence of caregiving, the types of care being provided, the effects on the caregiver and changes over time in these parameters at the population level. In addition to providing data useful in addressing core policy questions it can also provide useful insights regarding subpopulations of caregivers varying in ethnic/racial diversity, care recipient characteristics, and age. AS an example of the in-depth of analysis possible with these data we test several multivariate models identifying factors associated with technology use among caregivers, caregiver burden and distress, and caregiver needs, These types of analyses are important supplements to the basic findings reported from this survey and can provide greater precision in making policy recommendations for caregivers.

### DEVELOPING RESEARCH AND REPORTS TO SHAPE PRACTICE AMONG EMPLOYERS WITH CAREGIVING EMPLOYEES

D. Wagner, *Gerontology, Towson University, Towson, Maryland*

Approximately 10% of the workforce is involved in providing help to an older family member or friend. The NAC surveys (1997, 2004, 2009) estimate that 60% of those providing help to an older person are employed, most of them on a full-time basis. NAC and other advocacy groups undertook efforts to educate employers about productivity issues related to caregiving. Using data from the surveys with funding from MetLife Mature Market Institute, the hidden costs to employers were estimated and reports issued. These estimates have been widely circulated among employer groups and used as a rationale for making change in the workplace to better support caregiving employees. Other data have been collected to explore workplace issues such as gender, intervention effectiveness and health effects. This presentation reviews the strategy used by NAC to effect practice change through strategic research and publications targeted at employers and employer groups as well as the key findings of the research conducted.

## SESSION 1710 (SYMPOSIUM)

### ECONOMIC ASPECTS OF TRANSITIONS FOR OLDER ADULTS

Chair: *C.E. Bishop, Heller School for Social Policy and Management, Brandeis University, Waltham, Massachusetts*

Although health and social needs drive many transitions made by older adults, economic assets, financing, regulation, and provider payment also play important roles. The information that might flow among providers during care transitions may be impeded by payment and resource issues, with potentially costly outcomes. The symposium will present research concerning three important transitions of older adulthood. Decline in physical function may highlight shortcomings of a home as a supportive environment; but household assets also affect whether desired residential transitions occur. Long-term care insurance has the potential to provide care resources to insured elders at the time when care is needed, shaping transitions among types of care. In the end-of-life period, failures of coordination associated with transitions may lead to poor outcomes and further transitions. Systems that do not provide resources for information sharing, or that provide incentives for inappropriate transitions, may be in part responsible for these outcomes. The symposium will present analyses of these transitions of older adults incorporating both economic and other factors.

### THE IMPACT OF HOUSEHOLD WEALTH ON LATE LIFE RESIDENTIAL CHANGES

K. Stoeckel, *Gerontology, University of Massachusetts - Boston, Jerusalem, Israel*

The economic status of older adults influences what residential options are available for their consideration. This research examined the relationship between residential transitions and an array of factors, including housing characteristics, functional status, physical health, and economic resources. Relocation into non-institutional settings was emphasized. Data were drawn from the 1998-2006 waves of the Health and Retirement Study with a sample of non-institutionalized respondents age 70+ at baseline. A household wealth variable, inclusive of income and net worth, was created to sensitize the results to the combined influence of income and assets on residential transitions. Results showed that greater overall household wealth was a significant predictor of actualization of residential transitions. Conference participants will be able to discuss the prevalence of residential transitions made by a nationally representative sample of community residing older adults. Participants will be able to explain the influence of economic status on residential transitions in later life.

### LONG-TERM CARE TRANSITIONS AMONG PEOPLE WITH PRIVATE LONG-TERM CARE INSURANCE

M. Cohen, J.S. Miller, X. Shi, *LifePlans, Inc., Waltham, Massachusetts*

Presentation of results from a study of an admissions cohort of private long-term care (LTC) insurance policyholders and the factors associated with using and choosing long-term care services. Specific emphasis is placed on establishing a profile of individuals as they begin using paid LTC services and tracking their patterns of service use, satisfaction and transitions over a 28 month period. Although many factors may affect care setting transitions, this study focuses on understanding the decision making process while exploring the connection between the availability of financing for LTC and choosing or transitioning to a care setting.

### TRANSITIONS AT THE END OF LIFE AND ASSOCIATED COSTS: A NATIONAL STUDY

P.L. Gozalo, J.M. Teno, V. Mor, *Community Health, Brown University, Providence, Rhode Island*

Objective: Poorly executed transitions are associated with medical errors, information discontinuity, functional decline, often leading to additional transitions. Our goal is to provide time and regional variation estimates for patterns of transitions and their associated expenditures in the last year of life. Methods: Using the national 2000-2007 MDS and Medicare Claims, we created a measure of last year of life transitions across providers among all decedent Medicare Beneficiaries with no Managed Care coverage. Descriptive analyses illustrate geographic and temporal variations of total, complicated and potentially burdensome transitions. A multivariate model examines state policy associations with end-of-life transitions adjusting for person specific case-mix. Results and Conclusions: There are substantial regional variations in transitions and expenditures experienced by people in their last year of life, both in the community and among institutionalized populations. Blacks, Hispanics, and those without advance directives are at increased risk of transitions.

## SESSION 1715 (SYMPOSIUM)

### EVALUATION OF INNOVATIVE MODELS FOR FAMILY AND INFORMAL CAREGIVING

Chair: *D.J. Sheets, School of Nursing, University of Victoria, Victoria, British Columbia, Canada*
Co-Chair: *M. Marcus, Harry and Jeanette Weinberg Foundation, Inc, Owings Mills, Maryland*
Discussant: *R. Stone, Institute for the Future of Aging Services, Washington, District of Columbia*

In September 2009, the Harry and Jeanette Weinberg Foundation launched a 3 year funding initiative providing nearly $8 million in funding for the development of innovative and evidence-based community projects to help support family and informal caregivers. This initiative was one of the first in the nation to focus on family caregivers rather than the care recipient. This symposium compares and contrasts the different evaluation activities for 4 nonprofits implementing innovative caregiver programs under the Weinberg initiative. Evaluation of the CARES project which adapts the Wraparound System of Care to caregivers (commonly used for children with mental illness) focuses on issues of treatment fidelity, training and implementation. Another presenter considers evaluation of a project designed to enhance services in two rural and resource scarce counties in Maine which is implementing a caregiver navigator role. A third presenter assesses evaluation in the context of the Caregiver Central project which is testing the effectiveness of using computer technology to support family caregivers as well as the involvement of community stakeholders. A fourth presenter is using several innovative evaluation methodologies, including Appreciative Inquiry, Assets Based Mapping, and Most Significant Change. This presentation describes the theory and practice behind these methodologies and their use as evaluation tools to identify needs, develop priorities, engage stakeholders, and assess sustainability of the resulting caregiver support network. All presenters will describe implementation successes and challenges, using examples from the first year of program evaluation.

### PROJECT EVALUATION FOR CARES: CAREGIVERS ACCESSING RESOURCES & ESSENTIAL SERVICES

K. Black*, College of Arts and Sciences, University of South Florida Sarasota - Manatee, Sarasota, Florida*

The CARES project is an innovative caregiver program being conducted by Jewish Family and Children's Services of Sarasota, Florida. The main intervention is based on the Wraparound System of Care, an approach used throughout the nation in the care of children with serious mental illness. For the CARES project, the Wraparound process was modified for application to caregivers and is conducted over four distinct phases which encompass the following four principles for practice: Voice and Choice; Strengths Based, Collaborative Team Approach, and Planned Outcomes. A logic model of the project will be presented. Aspects of treatment fidelity will be discussed along with the training and implementation of this innovative approach to caregivers. Measurement of outcomes to caregivers will also be reviewed.

### USING AND EVALUATING THE IMPACT OF TECHNOLOGY WITH FAMILY CAREGIVERS

A. Kelly*, Florida Southern College, Lakeland, Florida*

Caregiver Central addresses the needs of family caregivers in central Florida. Key components are the Caregiver College, an information hub of resources with computers, trainers and training software in four community locations, and the Web Tool, an interactive website featuring evidence-based self-assessment tools, referral to direct care and case management, education and support. Novice internet users are assisted in using the Web Tool at four Caregiver College campuses. By emphasizing personal caregiver needs along the specific continuum of care, the project connects caregivers with appropriate and timely solutions. Anticipated program outcomes for caregivers include increased internet comfort and facility, appropriate use of direct services, enhancement of caregiving skills, improved caregiver self-efficacy, relief of caregiver strain, and an awareness of the caregiving role earlier in the caregiving trajectory. This paper describes the evaluation which examines the specific impact of technology on caregivers as well as high involvement among local community stakeholders.

### INNOVATIVE METHODOLOGIES FOR EVALUATING THE DEVELOPMENT OF A CAREGIVER SUPPORT PARTNERSHIP

R. Berman, M. Iris*, Leonard Schanfield Research Institute, CJE SeniorLife, Chicago, Illinois*

Caring Together, Living Better (CTLB) is a partnership of non-profit community and faith-based organizations. The goal of the partnership is to develop and sustain culturally sensitive programs and services for low-income, minority caregivers in south suburban Chicago. Evaluation activities include several innovative methodologies, such as Appreciative Inquiry, Assets Based Mapping, and Most Significant Change. These methods are being used to identify needs, develop priorities, engage stakeholders, and assess sustainability of the resulting caregiver support network. This presentation will describe the theory and practice behind these methodologies and their use as evaluation tools. Presenters will describe implementation successes and challenges, using examples from the first year of the program evaluation.

### EVALUATION CHALLENGES IN ASSESSING CAREGIVER NETWORK PROGRAMMING IN RURAL COMMUNITIES

J. Crittenden[1], L.W. Kaye[1], N. Merrill[2], D. Poulton[2]*, 1. Center on Aging, University of Maine, Bangor, Maine, 2. Eastern Area Agency on Aging, Bangor, Maine*

Maine's Weinberg Foundation-funded caregiver network project focuses on building enhancements in the community service infrastructure of two of the most rural and resource scarce counties in the state. It emphasizes a broad partnership collaborative among cooperating organizations, university-community linkages, intergenerational programming, and expanding/sustaining a range of enriched caregiver support services including adult day care, home care, respite, transportation, education, and training programs. The establishment of an available and affordable caregiver navigator is a linchpin programmatic component. Evaluation and needs assessment methodologies are premised on maintaining a modified participatory research design in which community stakeholders significantly participate in the process. In rural communities, trust building, cultural and political sensitivity, attention to literacy and dual relationship issues, assessing capacity and discovering informal caregiver support networks is particularly challenging. Working with small agencies without formalized intake procedures has required constructing data tracking strategies that are both user friendly and efficient.

## SESSION 1720 (PAPER)

## HOUSING, NURSING HOMES, AND RESIDENTIAL CARE II

### TRENDS IN LONG-TERM CARE TRANSITIONS: LESSONS FROM A POORHOUSE IN DEPRESSION-ERA DETROIT

J. Tucker, R. Dunkle, *Social Work & Anthropology, University of Michigan, Ann Arbor, Michigan*

While discussions of care transitions (Kane & Kane 1989) increasingly include populations at risk for long-term care and the important role of social workers in the aging experience for elders, social work literature that takes a comparative historical approach is scant. This paper discusses original, qualitative, ethnographic research conducted in the archives of the Hannan Foundation, a nonprofit organization that assisted over 800 community dwelling elders with pensions in Detroit between 1927 and 1971. Focusing on the U.S. Great Depression era, this study deals with Hannan elders who were sent to Eloise, a Detroit county poorhouse and mental institution with over 14,000 people in its care. Addressing the conference theme "Transitions of Care," we compare risk factors among Hannan elders who were institutionalized during the 1930s with current trends in social work literature on long-term care transitions. Findings identify similar factors for elders who were institutionalized 80 years ago as for those institutionalized today: age, gender, lack of social support, and health and mental health, with mental health as the most predictive variable. Our findings also support the prevailing historical role of social workers in elder transitions to long-term care. Discussion incorporates the political and moral dilemmas that social workers continue to face in elder institutionalization and implications for current understanding about the experience of aging for elders at risk for long-term care transition.

### KITCHEN LIVING IN LATER LIFE: A UK DISCUSSION

S. Peace[1], J. Percival[1], M. Maguire[2], C. Nicolle[2], R. Marshall[2], R. Sims[2], *1. The Open University, Milton Keynes, United Kingdom, 2. Loughborough University, Loughborough, United Kingdom*

The kitchen in often a focal point within the domestic home: a material, social and psychological environment encompassing both public and private space of varied meaning and purpose. This research from the UK's New Dynamic of Ageing Research Programme brings together social gerontologists with ergonomists and specialists in design and technology to consider through ethnographic and ergonomic methods both oral histories of kitchen living and examination of contemporary living conditions. The research is based on a purposive sample of 48 older people in their 60s, 70s,80s and 90s living in two locations – Loughborough and Bristol living in both mainstream and supportive housing. Through this paper, participants will gain an understanding of the role, function and design of the current kitchen from older people living in a range of British housing types; consider the value of multi-disciplinary research within environmental gerontology, and address issues of person-environment interaction through the juxtaposition of individual health and well-being, kitchen living and the potential for adaptation to meet needs. Issues of time, space and setting will be central

### TESTING ASSISTED LIVING STAFF KNOWLEDGE OF MEDICATION ADMINISTRATION PRACTICES

D.A. Reed[1], S. Zimmerman[1,2,3], L.W. Cohen[1], P. Sloane[1,4], K. Love[5], J. Brickley[6], *1. Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, 2. School of Social Work, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, 3. School of Public Health, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, 4. Department of Family Medicine, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, 5. Center for Excellence in Assisted Living, Falls Church, Virginia, 6. North Carolina Division of Health Service Regulation, Raleigh, North Carolina*

Assisted living communities provide care for approximately one million older persons, the majority of whom have chronic illnesses and require multiple medications. With the numbers and acuity of persons in assisted living continuing to increase, concern has been raised about the competence of assisted living staff to ensure that medication errors do not occur in this setting. This presentation reports on the evaluation of a knowledge of medication administration practices test (MAP) that was completed by 40 assisted living staff who administered medications in 11 different assisted living communities in two states. Domains of knowledge included in the test were terminology, medication monitoring, techniques of administration, documentation, infection control, and regulations. These staff were also observed administering more than 4300 medications with the observations then compared to the medication administration record to determine if errors had occurred. Results indicate that the MAP demonstrated internal consistency reliability (> 0.90 for the entire test). In addition, the MAP discriminated among staff with different levels of licensure/certification. In a logistic regression, the MAP was a significant predictor (P = .002) of the occurrence of a medication error with moderate to significant potential for harm. Better performance on the MAP was associated with lower odds of committing such an error. The findings suggest that training staff on the items included in the MAP and using it to evaluate staff who administer medications or assist residents with self-administration could reduce medication errors in assisted living. Next steps in refining the MAP also will be discussed.

### PREDICTORS OF ORGANIZATIONAL TENURE AMONG STAFF IN ASSISTED LIVING: A MULTILEVEL ANALYSIS

E. Sikorska Simmons, *Sociology, University of Central Florida, Orlando, Florida*

Retention of adequate staff is becoming a major challenge in assisted living (AL). Little, however, is known about factors that foster staff retention. This research examines the role staff characteristics (Level 1) and organizational factors (Level 2) as predictors of organizational tenure (Level 1) among AL staff. The sample consisted of 950 staff in 22 AL facilities. All staff members who were hired and paid by the facility during a 12-month period were included. Organizational tenure (i.e., length of employment in the facility) was measured in days (at the individual level). Staff characteristics included age (at the time of hire), race, foreign-born status, job type, employment type, and prior experience working in the facility. Organizational factors included facility size, ownership, average wage, level of care, and the quality of management (i.e., administrator's education and organizational justice). The results of multilevel analysis indicated that 27% of the variance in organizational tenure was due to between-facility variation. Staff members, who worked full-time, were rehired, foreign-born, skilled, and white tended to have longer organizational tenure. Controlling for staff characteristics, longer organizational tenure was predicted by smaller facility size, nonprofit ownership, lower level of care, and better quality of management. In particular, policies that foster organizational justice had the strongest effect on organizational tenure. Together, organizational factors explained 52% of the between-facility variance in organizational tenure. These findings point to the importance of organizational factors in predicting staff retention and have practical implications for administrators who want to increase staff stability.

## SESSION 1725 (POSTER)

## INTERGENERATIONAL RELATIONSHIPS, SOCIAL ROLES & SUPPORT

### PREDICTORS TO THE PERCEPTIONS OF CHILDREN'S FILIAL PIETY AMONG OLDER ADULTS IN CHINA

W. Mao, I. Chi, *School of social work, University of Southern California, Los Angeles, California*

Filial piety, a value rooted in Confucianism, has traditionally served as a guide for children's behavior and attitude toward their parents, and still exerts influence in Chinese families. In a few existing studies regarding perceptions of filial piety from the perspective of older parents, perceived filial piety is consistently found to be a pivotal indicator of older adults' well-being. However, no study has addressed probable predicting factors related to perceived filial piety. This study aims to fill that gap by exploring factors that predict perceptions of children's filial piety among older adults in China. Data used in this study is from the national representative study Sample Survey on Aged Population in Urban and Rural China in 2000, conducted by the China Research Center on Aging. A subsample (N=19,430) of adults age 60 and above with offspring was included in the analysis. Results from multiple regression show that adults age 70 and above who are female, married and living with a spouse in an urban area, literate, and non-religious are more likely to consider their children observant of filial piety. In addition, economic security, fair monetary exchange with children, better health status, and co-residence with sons and daughters-in-law are significant in predicting a higher level of perceived filial piety. The results suggest that identifying potential predictors of filial piety and deploying them as protective factors could play a vital role in interventions targeting older Chinese adults and their families.

### FAMILY STRUCTURE AND CUSTODIAL GRANDPARENT HEALTH STATUS IN CHINA

S. Deng, S. Kolomer, *University of Georgia School of Social Work, Athens, GA*

Background: In the U.S. custodial grandparents in skipped generation households have been identified as having poorer physical health as compared to their noncustodial counterparts. In China, where intergenerational households are considered part of the fabric of society, little attention has been paid to grandparents residing in homes with their grandchildren without a parent present. Therefore, little is known about their physical health. This study examines health differences in China among grandparents living in three generation families with the presence of at least one parent, grandparents living alone, and grandparents residing with grandchildren without a parent present. Method: Utilizing secondary data from The China Health and Nutrition Survey (CHNS) collected by the Carolina Population Center at UNC at Chapel Hill and the National Institute of Nutrition & Food Safety at the Chinese CDC, comparisons of 212 grandparents across household structures were made. Logistic regression was used to examine predictors of health status of grandparents in the three different household structures. Results: Grandparents residing with grandchildren without a parent present (n= 40) were found to be in significantly better health that either grandparents living in three generational households (n=129) or grandparents living alone (n=43) ($\beta$=1.37, p< .05). Age, gender, and living environment were also found to be significant predictors of health status. Discussion: The physical health status of grandparents living in skipped generation households in China is remarkably different than what is known about custodial grandparents in the U.S. Plans for future cross cultural research and implications for practice will be discussed.

### ALTRUISM AND SELF-INTEREST IN INTERGENERATIONAL RELATIONSHIPS

S. Daatland, K. Herlofson, I.A. Lima, M. Veenstra, *NOVA, Oslo, Norway*

Population ageing may create conflicts between older and younger generations if the growing number of elders will in self-interest support benefits to seniors over benefits to children and families. Earlier findings are mixed. Esping-Andersen (1997) support the conflict argument from a European perspective, while Logan and Spitze (1995) rejects the claim based on a US study, and finds older people to be motivated by altruism more than self-interest in intergenerational relationships. This paper analyses the issue for the Norwegian case, with data from the Norwegian Life-course Ageing and Generations Study (NorLAG). The findings give mixed support for either position. Older people tend to expect less from younger family members than the younger themselves feel obliged to provide. Attitudes to the welfare state are, however, slightly balanced towards self-interest, inasmuch as the support for elder services increases moderately with age, whereas the support for families and child care decreases. The paper explores the strength of altruism and self-interest in intergenerational relationships in the family and societal domains, and the extent to which the two work in conflict or in support for each other.

### RELATIONSHIP OF ORIENTATION TO TRADITIONAL NORMS WITH NEGATIVE INTERACTION OF OLDER ADULTS WITH THEIR SON IN NEPAL

R. Gautam[1], T. Saito[2], S. Houde[1], I. Kai[2], *1. Department of Nursing, University of Massachusetts Lowell, Lowell, Massachusetts, 2. University of Tokyo, Tokyo, Japan*

Intergenerational relationships are important elements affecting health and psychological well-being in late life. The norm in Asian traditional culture has been to co-reside in multigenerational families. However, Nepalese society is rapidly changing which may cause conflicts among generations. The aim of this study was to examine the relationship of orientation to traditional norms (gender roles, caste system, child gender preference) with negative interaction of older adults co-residing with their married son. A cross-sectional quantitative study of 489 older adults aged 60 and older in Nepal was conducted with face-to-face interviews using structured instruments. The dependent variable, negative interaction, was measured by a pool of 4 widely used items in the literature: make too many demands, criticize, argue more than usual, give more than usual problems (Cronbach's $\alpha = 0.93$). Age, gender, marital status, religion, education, financial satisfaction, work status, health, number of sons, age, education of son, inter/intra caste marriage of son were used as control variables in the study. The multiple regression analyses illustrated that those older adults with higher orientation to traditional norms were significantly more likely to report higher levels of negative interaction with their son ($b = .201$, $\beta = .167$, $p < .001$). Health and policy implications are discussed in the context of an Asian developing country. The study results will contribute to the knowledge of aging in Nepal by exploring family relationships of older adults, which are important considerations when developing policy to meet the needs of both older adults and their family members.

### GENERATIONAL DIFFERENCE IN ATTITUDE TOWARD FILIAL PIETY IN HONG KONG

T. Lum[1], E. Yan[2], A. Ng[2], G. Leung[2], D. Lam[2], M. Chow[1], *1. University of Minnesota, St. Paul, Minnesota, 2. University of Hong Kong, Hong Kong, Hong Kong*

Objective: Although filial piety is a key Confucian virtue in Chinese society and is the key social value supporting Chinese system of family care for frail elderly, very little is known about how the support of filial piety changed across different generations of Chinese people. The objective of this study was to understand intergenerational difference in support of filial piety and its implication for family care for frail elderly among Chinese people. Methods: We used a mixed methods approach in this study. First, we conducted a telephone survey in Hong Kong in 2008. Respondents were selected by simple random sampling. We successfully interviewed 1,014 people and the successful rate was 61 percent. Second we conducted five focus groups in Hong Kong with people from different age groups to understand their view on filial piety. All focus group discussions were taped and transcribed by the research team. A grounded theory approach was used to analyze the focus group data while multivariate regression analysis was used to analyze the survey data. Findings: Support for filial piety was stronger among the elderly and younger adult populations, but lowest among middle age people. Older people were very willing to live with their adults children. However, most non-elderly adults were reluctant to live with their aging parents. Among non-elderly adults, the willingness to live with aging parents was highest among younger adults than middle age adults. Implications of these findings to the future of family care in Chinese society will be discussed.

## THE IMPACT OF THE INFORMAL CAREGIVING NETWORK ON ADULT CHILD'S CAREGIVER BURDEN

N. Tolkacheva[1], M. Broese Van Groenou[1], A.D. Boer[2], T. Van Tilburg[1], *1. VU University, Amsterdam, Netherlands, 2. The Netherlands Institute for Social Research, The Hague, Netherlands*

Previous research has typically relied on the adult child – parent dyad in understanding the caregiver burden experienced by adult children. This study uses information on multiple informal caregivers and examines how characteristics of the informal caregiving network affect the adult child's caregiver burden. In 2007, Dutch caregivers (N = 602) assisting their older parents reported on parental and personal characteristics, care activities, experienced burden and characteristics of other informal caregivers. A path model was applied to assess the relative impact of the informal caregiving network characteristics on the caregiver burden. An adult child experienced lower caregiver burden when the informal caregiving network size was larger, when more types of tasks were shared within the network, when care was shared for a longer period of time and when the adult child had no disagreements with the members of caregiving network. Considering growing needs in care for older parents, the informal caregiving network becomes a significant benefit for adult children involved in long-term care activities. More caregivers will turn into managers of care, as they increasingly have to organize the sharing of care among informal helpers and cope with disagreements in the informal caregiving network.

## GRANDPARENTS RAISING THEIR GRANDCHILDREN: NEGOTIATED RELATIONSHIPS WITH CHILD WELFARE WORKERS

J. Gladstone, R.A. Brown, *School of Social Work, McMaster University, Hamilton, Ontario, Canada*

Increasing attention is being paid to caregiving grandparents whose grandchild is involved with the child welfare system. The interaction that grandparents have with child welfare workers can be framed as a negotiated process. Nevertheless, little is known about the nature of these negotiations. Our qualitative study addressed 3 research questions: (1) What issues are perceived by social workers to be negotiable (or non-negotiable) with grandparents? (2) What strategies do social workers perceive themselves to use in these negotiations with grandparents? (3) What contextual factors influence the way that negotiations take place? Data were gathered through in-depth, active interviews with 42 social workers involved with grandparents in a child welfare setting. Data were analyzed using a constant comparison grounded theory approach. Findings showed that negotiations take place around issues that are not perceived by social workers to be protection concerns. Social workers offer resources and may support grandparents' efforts to gain custody of their grandchildren. Social workers, in return, expect grandparents to be compliant and dutiful. Strategies used by social workers in these negotiations include clarifying role and purpose, utilising basic helping skills, and depersonalising power. Several factors influence the way that negotiations take place, including structural factors (eg. legislation), grandparent investment (eg. their reaction to child welfare involvement),and competing negotiations (eg. grandparents' relationships with the grandchild's parent). Our conclusion is that grandparents who understand the position taken by social workers will be more empowered in these negotiations.

## FACTORS ASSOCIATED WITH PSYCHOLOGICAL WELL-BEING OF GRANDPARENTS RAISING GRANDCHILDREN IN KOREA

H. Yoon[1], K. Choi[2], *1. Hallym University, Chuncheon, Gangwon-do, Republic of Korea, 2. Hallym University, Chuncheon, Gangwon-do, Republic of Korea*

In spite of the increased number of grandparents raising grandchildren, little attention has been given to the impact of caregiving on psychological well-being of grandparents in Korea. This study examines factors associated with psychological well-being of grandparents raising their grandchildren as primary caregivers. The data for this study came from the Hallym Aging Study conducted by the Hallym University Aging Research Institute in 2003. 96 grandparents raising grandchildren as primary caregivers ("skipped generation" household) were compared with 484 older persons living with grandchildren and grandchildren's parents ("three generation" household). PGCMS constructed by Lawton was administered to assess psychological well-being. Grandparents raising grandchildren as primary caregivers showed significantly lower psychological well-being than grandparents living with grandchildren and grandchildren's parents. Multiple regression analysis was used to determine factors associated with psychological well-being of grandparents raising grandchildren as primary caregivers. Grandmothers reported lower level of psychological well-being than grandfathers. Poor health status was associated with lower level of psychological well-being. Grandparents who were responsible for living showed lower psychological well-being. Spirituality was associated with higher level psychological well-being. The findings suggest more attention to grandparents raising grandchildren as primary caregivers. The policy and practice implications to increase psychological well-being of grandparents raising children as primary caregivers are discussed in a Korean context.

## THE PRIMACY OF RELATIONAL CONCERNS AMONG OLDER ADULTS: RESULTS FROM AN IMAGE-BASED NEEDS ASSESSMENT

D. Scott, *Planning and Development, Greater Lynn Senior Services, Lynn, Massachusetts*

In 2008-2009, Greater Lynn Senior Services conducted a needs assessment of the seniors in its service area. This needs assessment employed an innovative methodology, image-based focus groups, a significant departure from its previous needs assessments which were primarily conducted through surveys of registered voters. In this recent needs assessment, relational and social issues stood out clearly as one of the most important life concerns for seniors. This finding contrasted sharply with results from previous survey-based need assessments. In 2001, relational concerns were largely absent from the design of the survey instrument. In 2005, the survey instrument included questions about loneliness and other relational concerns, but the results were difficult to interpret, and relational concerns were not identified as a primary finding. In 2008-2009, relational concerns were one of the top three categories of concern, along with health and resources such as money and housing. Hence, image-based focus groups opened up new investigative possibilities. Focus groups provide a narrative space in which participants may express relational concerns not easily captured in check boxes. The less-structured format also allows seniors to speak about relationships in positive as well as negative terms, thereby providing a fuller picture of their significance. Finally, images allow participants to project personal concerns in a way that may be less intimidating. These findings raise thorny policy questions and associated research implications. Should social service agencies take as a significant portion of their mission promoting social connections among older adults? If so, how can this be done?

### CONFIRMATORY FACTOR ANALYSIS OF THE KOREAN VERSION OF THE REVISED LUBBEN SOCIAL NETWORK SCALE

M. Hong, B.L. Casado, D. Harrington, *School of Social Work, University of Maryland Baltimore, Baltimore, Maryland*

The Lubben Social Network Scale (LSNS) was designed to measure perceived social support received from family and friends. Several versions of the LSNS were developed by modifying the original 10-item LSNS, and have been translated in several different languages. This study tests the structural validity of a Korean version of the 12-item revised LSNS (K-LSNS-R) and the 6-item LSNS (K-LSNS-6). The data were drawn from a survey interview of 130 Korean American caregivers in the Washington D.C. metropolitan area. The average age of the respondents was 57.8 (SD=12.9) and 77.3% of them were female. Confirmatory factor analysis (CFA) was performed to confirm the factor structure and internal consistent reliability was examined using Cronbach's alpha and corrected item-total correlations. The K-LSNS-R demonstrated a good internal consistency ($\alpha$=.84) and the items of the scale were sufficiently homogeneous without redundancy (item-total correlation coefficients ranged from .36 to .66). However, the CFA with two factors (family and friendship) revealed an overall poor fit ($\chi 2$=209.018, df =53, CFI = .764, TLI= .707, RMSEA = .151). In comparison, the CFA of the K-LSNS-6 yielded a good model fit ($\chi 2$=15.965, df =8, CFI = .977, TLI= .957, RMSEA = .084). The 6-item model also had a good internal consistency ($\alpha$= .81). Findings suggest that the K-LSNS-6 may be better for assessing social network, at least in Korean samples, because of its better model fit and parsimoniousness.

### FAMILY BENEFITS FROM OLDER ADULTS' VOLUNTEERING

S. Hong, *Social Work, National University of Singapore, Singapore, Singapore*

Although the theoretical assumption that benefits from older adults' volunteering can expand to their family has been postulated, it has been rarely tested. This study examines the relationship between older adults' volunteering and their family functioning. From 72 social service agencies in Singapore, individual and family information was collected from 361 older volunteers aged 50 and above. As the study outcomes, family functioning was measured by Family Adaptability and Cohesion Scale. Older volunteers' psychological benefits and well-being, volunteering experience, and socio-demographics were also measured. The study volunteers reported that spouses were the closest family member who got along with and the next one was their siblings. The family members to who they turned for help most frequently were their adult children and siblings. Since joining their volunteering, a majority of volunteers were better satisfied that their families accept and support their wish to take on new activities or directions (72%). They were better satisfied with the way their families shared time together (68%) and the way their families expressed affection and responded to their emotions (62%). While controlling for socio-demographics and health status, higher level of volunteering intensity was associated with higher level of family functioning. This study documented a wide range of family and individual benefits from older adults' volunteering. Furthermore, it contributes to the knowledge base to improve well-being for older adults and their families: the study findings highlight positive potentials of volunteering as an applicable intervention strategy for more conducive family support system in later life.

### DOES INTERGENERATIONAL DAY CARE AFFECT CHILDREN'S VIEWS OF OLDER ADULTS?

J.C. Heyman, I.A. Gutheil, L. White-Ryan, *Graduate Social Service, Fordham University, West Harrison, New York*

Intergenerational efforts help build relationships between generations (Generations United, 2010). There is a growing body of research on the benefits of intergenerational programs, but limited research on preschoolers' experiences. This purpose of this research was to understand preschoolers' attitudes toward older adults. The study's aim was to determine whether there is a difference in how preschool age children who participate in an intergenerational day care program and those in day care that is not intergenerational view older adults. Using a static group comparison design, face-to-face interviews were conducted with 32 preschoolers in the experimental group and 18 in the comparison group. As part of the interview, children's reactions to a sketch of an older man and one of an older woman were gathered to assess their views of older adults. Two group discriminate analysis was used to understand the differences in attitudes between those children who participate in an intergenerational program and those who did not. The Wilkes lamba indicated that the two groups were significantly different on the measures overall. Based on these measures, 82% of children were classified correctly with respect to program participation. Preschoolers in the intergenerational program viewed older adults as healthier compared to preschoolers who did not participate in the intergenerational program. The implications of the findings for future research and program development will be discussed.

### EFFECTS OF THE CHRONIC DISEASE SELF-MANAGEMENT PROGRAM ON HEALTH BEHAVIORS AND WELL-BEING OF GRANDPARENT CAREGIVERS

J. Kim, L. Ferretti, E. Kintner, P. McCallion, *Social Welfare, University at Albany, State University of New York, Albany, New York*

[Purpose]: Stressors related to demands of caregiving have been reported to negatively affect grandparents' health and many grandparent caregivers report multiple chronic health conditions. As they balance their caregiving responsibilities it is important find ways to manage those conditions and reduce stress. The Chronic Disease Self-Management Program (CDSMP) a 6 week series of skill building workshops (Lorig, et al., 2005) offers a potential mechanism. This study examines how this evidence-based intervention affected the health behaviors and well-being of a group of grandparent caregivers as compared to non-grandparent caregiver peers. [Method]: In a matched (age, gender, and ethnicity) group design, CDSMP was delivered to 62 completers and pre and post-test scores compared. [Result]: Baseline health status was lower for grandparent caregivers than for non-grandparent caregivers. The comparison of pre and post-test scores found improvement in both groups in health status and physician visits and fatigue, in shortness of breath for the grandparent caregiver group only and in pain for the non-grandparent caregiver group only. [Implications]: Findings confirmed a beneficial impact of CDSMP in both groups and in particular for grandparent caregivers with a compromised health status. More work is needed to increase access to evidence-based health promotion programs for grandparent caregivers.

## SESSION 1730 (PAPER)

## INTERVENTIONS AND SERVICES ACROSS CONTEXTS I

### FACILITATING THE ADOPTION OF INNOVATIONS FOR OLDER ADULTS: AN ORGANIZATIONAL FIELD ANALYSIS

B.J. Bedney, R.B. Goldberg, K. Josephson, L. Kotler-Berkowitz, W.C. Daroff, *The Jewish Federations of North America, Washington, District of Columbia*

The health and well-being of older adults is a national priority for gerontologists, aging services providers, and policy makers, all of whom understand the profound impact the aging of the baby boomers will have on the nation's social and economic fabric. Within this context, it is social service providers who are, and will be, called upon to serve and support older adults, both through the expansion of existing services and the adoption of new ones. In this study, we examined the factors that were most helpful to agencies adopting 'NORC-supportive service programs,' community-based interventions designed to help older adults age in place in 'naturally occurring retirement communities.' Preliminary data analysis of 17 surveys returned to date from 26 agencies in a National NORCs Initiative suggests that relationships and resources the agencies were able to garner from the network of external institutions, interactions, and norms that together constitute their 'organizational fields' (DiMaggio and Powell, 1983) were among the most helpful facilitating factors. The data also revealed distinctions between resources in their 'local' organizational fields and resources in their more distant or 'supra' organizational fields. In this session, we will use the results to show how the concept of organizational fields can be used to study program adoption, and discuss implications of the framework for researchers, policy makers, and aging services providers. Participants will leave the session with an increased understanding of the organizational field framework, and the ability to use the framework to both implement and study the program adoption process.

### THE EXPANDING ROLE OF AREA AGENCIES ON AGING IN PROVIDING HOME AND COMMUNITY BASED SERVICES AND SUPPORTS

A. Lackmeyer, S. Kunkel, J. Straker, *Scripps Gerontology Center, Miami University, Oxford, Ohio*

Area Agencies on Aging (AAAs) across the nation are an integral part of the Aging Services Network which supports older adults so they may continue to live as independently as possible in their homes and communities. In addition to providing core services such as home delivered meals and transportation, AAAs have expanded their role to be more responsive to consumer needs and preferences by providing better access to services through single entry points and Aging and Disability Resource Centers, offering consumer directed services and evidence based disease prevention programs, assisting with the transition of older adults from institutional care back into the community and targeting and serving diverse populations. Surveys were conducted in 2007, 2008 and most recently in 2010 to explore the capacity of AAAs to provide services to the older adults in their community and to track innovative programming used to enhance these services for the future. Results show that AAAs have made progress in expanding the populations they serve (in 2008, 63.4% of AAAs were the single point of entry for at least some services for adults ages 18-59 compared to 49.4% in 2007), offering consumer directed services (48.4% in 2008), and facilitating the transition of consumers from institutional placement back into their communities (60.5% in 2008). As the population of older adults grows, so will the importance of AAAs, their role in livable communities for people of all ages, and their ability to meet the needs of consumers in a streamlined and consumer oriented way.

### COST EFFECTIVENESS OF A PILOT OCCUPATIONAL THERAPY INTERVENTION IN A PUBLIC AGENCY SETTING

C.A. Smith[1,2], M. Becker-Omvig[3], *1. University of Maryland School of Social Work, Baltimore, Maryland, 2. Montgomery County Health and Human Services, Rockville, Maryland, 3. Howard County Office on Aging, Columbia, Maryland*

Public agencies are confronted with greater demand for services to assist older adults with functional limitations to "age in place" and decreasing availability of informal caregivers and declining budgets to support public interventions. Public agencies need to identify cost-effective strategies to promote independence, safety, and quality of life, for the large number of older adults that wish to remain in the community within the reality of constrained budgets. A randomized controlled study was conducted within a large public agency to examine the cost-effectiveness of a occupational therapy (OT) intervention as a supplement or adjunct to a standard social work intervention. The theoretical approach of the study was that the person-environment gap (i.e., degree to which a person's needs exceed the ability of the environment to support them) can be narrowed through the introduction of assistive devices, home modifications, and individualized trainings. The goal of this approach is to help people maximize what they can do for themselves, rather than becoming dependent on others for supportive services. Preliminary data indicated that the intervention produced statistically significant changes ($p < .0005$) in both dosage of service requires [48% reduction from 3.38 hours (SD = 1.68) to 1.76 hours (SD = 2.06)] and functional independence [14.0 vs. 8.9 for intervention group on SAFER instrument]. Participants in this session will be exposed to findings that indicate that an OT intervention can produce similar or better outcomes for vulnerable older adults at a marked reduced expenditure rate with implications for direction of scarce public dollars.

### DEVELOPING A WEB-BASED CONSUMER DIRECTORY FOR RESIDENTIAL CARE FACILITIES FOR THE ELDERLY

C. Flores[1], R. Newcomer[1], T. Donnelly[1], G. Levenson-Palmer[3], T. Boughton[2], M. Weigand[1], *1. Social and Behavioral Sciences, University of California, San Francisco, San Francisco, California, 2. California Healthcare Foundation, Sacramento, California, 3. Department of Social Services, Sacramento, California*

This study was designed to develop a web-based consumer directory for Residential Care Facilities for the Elderly (RCFE) in California. This presentation is a case study of a collaborative effort between researchers, the California Healthcare Foundation (CHCF) and California Department of Social Services, Community Care Licensing Division (CCLD). A multidisciplinary workgroup, including state licensing managers and staff, RCFE providers, advocates, consumers, and researchers was organized. The workgroup participated in the recognition and formulation of necessary and optional elements of information to be provided via an electronic questionnaire completed by RCFE providers. This information, combined with available state licensing data, led to the collection of the data elements to be provided to consumers. Information related to facility characteristics, staff, safety, resident care and services provided, health and behavioral conditions allowed, food, activities, comfort and amenities, and cost and pricing structure is included. Web and electronic data system consultants aided in the development of the reporting formats, web site presentation formats, and planning for pilot testing the electronic web service system. A pilot test was conducted among RCFE providers and further refinements were made. A consumer directory utilizing the RCFE data will be established on the CHCF website, www.CalqualityCare.org. This product is designed to use health information technology to make information available to consumers, to increase access to care, and provide information for facility management, industry and regulatory planning and policy purposes. This study was funded by the California Healthcare Foundation (grant #08-1915).

## SESSION 1735 (SYMPOSIUM)

### LESSONS FROM THE CALIFORNIA FALL PREVENTION CENTER OF EXCELLENCE (FPCE)

Chair: *J. Pynoos, Andrus Gerontolgy Center, Univ. of Southern Calif., Los Angeles, California*

Discussant: *M. Kullman, The Archstone Foundation, Long Beach, California*

This symposium will describe the Fall Prevention Center of Excellence's (FPCE) efforts to better understand and identify causes of falls and develop effective interventions at individual, program and systems levels. The first three presentations will provide an overview of the development and implementation of the InSTEP model programs as well as preliminary results from the outcome and process evaluations conducted with English and non-English speaking older adult groups. Topics will include the relative effectiveness of the models; how senior centers with different levels of resources can organize and operate effective and sustainable, multifactorial fall prevention programs; and lessons learned. The creation and validation process of a self-assessment tool funded by the Centers for Disease Control will be presented, as well as next steps for the Center. FPCE is a consortium of the University of Southern California's Andrus Gerontology Center (Andrus); the Center for Successful Aging (CSA) at California State University, Fullerton; the VA Greater Los Angeles Healthcare System Geriatric Research, Education and Clinical Center (GRECC); and the California Department of Public Health, State and Local Injury Control Section (SLIC). Its mission is to provide leadership, create new knowledge, improve practice, and develop sustainable fall prevention programs for seniors and their families, professionals, program administrators, and policymakers.

### INSTEP (INCREASING STABILITY THROUGH EVALUATION AND PRACTICE): PROCESS EVALUATION

B. Kramer, *VA Greater Los Angeles Healthcare System, Geriatric Research Education Clinical Center (GRECC), Los Angeles, California*

Josea Kramer, PhD will discuss the process evaluation of how senior centers adapted, integrate and sustained InSTEP within their operations and the impact of InSTEP at the center level. Methods included individual and group interviews, failure analysis and LOGIC modeling. Findings include pitfalls in implementation and issues that will affect sustainability for fall prevention programming as well as strategies recommended by center directors to successfully disseminate InSTEP as a modular program which can be enhanced until a fully comprehensive fall prevention program can be sustained with existing funding at the center level.

### INSTEP (INCREASING STABILITY THROUGH EVALUATION AND PRACTICE): OUTCOME ANALYSIS

L. Rubenstein, *VA Greater Los Angeles Healthcare System, Geriatric Research Education Clinical Center (GRECC), Los Angeles, California*

We present preliminary outcome data from InSTEP- a multifactorial program aimed at reducing seniors' fall risk. We analyzed the relative effectiveness of six InSTEP models, which differ by intensity of professional involvement (high, medium and low) and by presence or absence of a formal discussion group. We investigated whether InSTEP models of higher intensity can more effectively reduce fall risks and whether a discussion group improves protocol adherence and long-term involvement in fall prevention activities. We used several validated instruments to measure fall risk behaviors, concerns about falling, fall history, and current physical activities and conducted balance and fitness tests. Preliminary results show improved agility from baseline to 3-months and significant reductions in self-reported balance problems ($p<.000$), walking problems ($p=.008$), and fear of falling ($p<.000$). Effects were generally greater in the higher intensity programs. The discussion groups did not seem to provide additional benefit, although they were well received.

### STAYING INDEPENDENT: VALIDATING A FALL RISK SCREENER

L. Rubenstein, B. Kramer, R. Vivrette, *VA Greater Los Angeles Healthcare System, Geriatric Research Education Clinical Center (GRECC), Los Angeles, California*

The FPCE was commissioned by the Centers for Disease Control (CDC) to develop and validate a fall risk informational brochure that includes a self-scored fall risk assessment instrument. The brochure, Stay Independent, was developed with input from seven focus groups at four senior centers and uses community dwelling seniors' natural language in discussing falls, perceptions about fall risks and activities to reduce risk. Since seniors identified factors that were not part of the standard medical evidence-based screening for fall risks, the self-administered risk screening instrument was validated in a population of community-dwelling seniors, which demonstrated excellent correlation between self-rated scores on the instrument and an independent fall risk assessment by a geriatrician. We will present data on the development and validation of this consumer-driven product, which facilitates both identification and quantification of fall risk.

### THE FALL PREVENTION CENTER OF EXCELLENCE: NEXT STEPS

J. Pynoos, *Andrus Gerontolgy Center, Univ. of Southern Calif., Los Angeles, California*

Co-Director of the Fall Prevention Center of Excellence, Dr. Jon Pynoos, will describe future objectives for the Center. In addition to enhancing the Center's core functions, priority objectives include expanding education and training for existing and future professionals and providers; strengthening collaboration with national, state and local agencies; testing the InSTEP model in other settings (e.g., assisted living and retirement communities) and with other population groups; and assisting the California Department of Public Health with falls data analysis. Improving the capacity of existing organizations to play a more effective role in fall prevention (e.g., local fire department's establishment of a protocol to refer older adults who have fallen to services that reduce fall risk) will also be discussed.

### INSTEP (INCREASING STABILITY THROUGH EVALUATION AND PRACTICE): TESTING PROGRAM EFFICACY IN TWO ETHNICALLY DIVERSE GROUPS

D. Rose, *California State University, Fullerton, Fullerton, California*

Following its successful implementation with English-speaking older adult groups, the efficacy of the moderate intensity InSTEP model was tested with a group of older adults whose primary language was Korean ($N = 60$) and a second group whose primary language was Spanish ($N = 60$). With the exception of the exercise component, all other components of the program were delivered in the primary language spoken by each group. An interpreter was present in the exercise class to clarify instructions or translate feedback provided by the English-speaking instructor. Post-program functional outcomes were similar to those obtained for the same model implemented with English-speaking older adults. Program adherence and satisfaction was also high for both groups. A process evaluation conducted with program participants, staff, and center administrators raised issues of sustainability and the need for additional program modifications aimed at improving its reach among ethnically diverse older adult groups.

## SESSION 1740 (SYMPOSIUM)

### THE BOOMERS' CHALLENGE: LEAVING A LEGACY

Chair: *W. Achenbaum, University of Houston, Houston, Texas*
Co-Chair: *H.R. Moody, AARP, Washington, DC, District of Columbia*
Discussant: *K.E. Sykes, EPA, Washington, DC, District of Columbia*

Boomers understandably have been preoccupied with their jobs and finances in recent years. They want sufficient resources to sustain their well-being and to give money to others. But our individual and collective legacies also entail leaving the world in better shape than we received it. This symposium focuses on two areas: (1) how to promote the notion of "social insurance" (a responsibility as citizens to protect ourselves against common risks, ably enunciated by FDR in the 1935 Social Security Act) and (2) our responsibility as world citizens to address global issues.

### WHAT LEGACIES SHOULD BOOMERS LEAVE?

W. Achenbaum[1], H. Moody[2], K.E. Sykes[3], E. Kingson[4], *1. University of Houston, Houston, Texas, 2. AARP, Washington, DC, Florida, 3. EPA, Washington, DC, District of Columbia, 4. Syracuse University, Syracue, New York*

Usually people think in terms of bequests to family members, friends, and charitiable/religious institutions when they consider leaving a legacy. Here, we invite professionals in aging to think about the values and calls for civic engagement embodied in the concepts of "social insurance" and the "environment." These concepts engage us in future-oriented collective action that affects all age groups. Unfortunately, these terms need to be refurbished to be sustainable.

## SESSION 1745 (SYMPOSIUM)

### IPSEN FOUNDATION LONGEVITY PRIZE LECTURE ON CELLULAR SENESCENCE AND CANCER

Chair: *Y. Christen, Fondation Ipsen, Boulogne-Billancourt, France*

This symposium is the traditionnal Ipsen Foundation Awarding ceremony of the Longevity Prize (usually organized during a Symposium of the GSA meeting). The 2010 laureate is Judit Campisi (UC Berkeley, Buck Inst.)fro her pionneer work on the relationships between cellular senescence and cancer. She will give a talk. G. Martin (Seattle) will give a shorter talk in order to introduce the laureate and the topic. Leonard Poon (Athens), president of the Ipsen Foundation Jury, and Yves Christen (Paris), President of the Ipsen Foundation, will chair the session

## SESSION 1750 (SYMPOSIUM)

### ESPO/BS SYMPOSIUM: HUMAN BIOGERONTOLOGICAL RESEARCH: RESULTS FROM ESPO RESEARCHERS

Chair: *M.E. Matzko, Biobehavioral Health, Penn State, University Park, Pennsylvania, Geisinger Medical Center, Danville, Pennsylvania*

Co-Chair: *D.A. Rivas, Tufts University, Boston, Massachusetts*

This symposium will highlight the research of young and emerging scientists in the field of biogerontology. The biology of aging is multifaceted and well-informed by invertebrate and rodent models. These models provide a unique approach to investigating molecular mechanisms of the aging process. Additionally, biogerontological research in humans is challenging, highly valuable, and can yield great insight for complex etiologies like age-related disease. This symposium will provide the forum for young investigators to present work on diverse topics such as human caloric restriction models, human diseases relevant to aging, nutrition, metabolism, and exercise. Diverse research methods will be applied including genetic, physiological, biostatistical, and molecular techniques. All work will attempt to convey the importance of multidisciplinary biogerontological research to the understanding of the human aging process.

### GHRELIN IN HUMAN CALORIC RESTRICTION: GASTRIC BYPASS SURGERY

M.E. Matzko[1,2], R. McCarter[1], G. Gerhard[2], C. Still[2], *1. Biobehavioral Health, Penn State, University Park, Pennsylvania, 2. Geisinger Medical Center, Danville, Pennsylvania*

This study investigated the actions of ghrelin, a hunger hormone known to affect many physiological systems, in human gastric bypass patients. Ghrelin responds to changes in energy intake and modulates processes involved in aging: immune function, growth hormone secretion, and appetite. Total plasma ghrelin was measured in 40 middle-aged obese women one month before and six to twelve months after Roux-en-Y gastric bypass surgery. Liver tissue ghrelin protein levels were measured in 40 obese middle-aged women with fatty liver disease and Type II Diabetes and those without either condition. Finally, 700 patients were genotyped for two ghrelin receptor gene SNPs previously demonstrated to be related to BMI and dietary weight loss success. Relationships with aspects of ghrelin and BMI, weight loss success, and metabolic disease burden will be discussed.

### DECREASED MUSCLE PROTEIN CONTENT IS ASSOCIATED WITH INCREASED AMPKα1 AND CLEAVED SREBP1 IN AGED SKELETAL MUSCLE

D.A. Rivas, E. Morris, R. Fielding, *Nutrition, Exercise Physiology and Sarcopenia Laboratory, Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University, Boston, Massachusetts*

Increased intramuscular lipid content has been noted in lean and obese elderly persons and is thought to be associated with insulin resistance and decreased muscle quality. Furthermore, the impaired anabolic response of aged skeletal muscle to muscle contraction may also be related to excess lipid infiltration. However, it is still unknown if dysfunctional lipid metabolism has a mechanistic role in the age-associated loss of muscle mass. We have determined the effect of 28 days of overload via bilateral surgical ablation (SA) on markers of hypertrophy (total protein content) and aerobic capacity (citrate synthase) in young and old rats. Furthermore, data will be presented showing impairments in the expression of lipid metabolism regulators (SREBP1, AMPK) and their gene targets and that they do not change in response to mechanical overload in aged skeletal muscle.

## SESSION 1755 (POSTER)

### CROSS-NATIONAL GERONTOLOGY

### FACTORIAL INVARIANCE OF THE GDS-15 IN HAVANA, CUBA: THE GERIATRIC DEPRESSION SCALE SHORT FORM

O.S. Rostant, *Office of Medical Education Research and Development, Michigan State University, East Lansing, Michigan*

The Geriatric Depression Scale Short Form (GDS-15) has been widely used internationally; however rigorous invariance testing has not always been conducted when using this instrument cross-culturally, specifically in the Caribbean. Previous confirmatory factor analyses (Rostant, 2009) on the factor structure of the GDS-15 among older adults in Cuba, revealed a two factor structure which reflected a life satisfaction factor and a general depressive affect factor. The purpose of this study was to investigate the factorial invariance of the GDS-15 across gender. Participants included 1905 community dwelling cognitively intact older adults (Women n=1197) (Men n=708) from Havana, Cuba, adults aged 60-102 years (M=72, SD=8.916). Results: Invariance testing involved a hierarchical sequence of successively stringent models (Vandenberg & Lance, 2000). A comparison of the configural invariance model to the metric invariance model was non-significant, with a change in Chi-Square of (11, N=1905) = 10.735, p=.4657, CFI=.986, TLI=.991, RMSEA=.035, which indicates that factor loadings for the GDS-15 were equal across gender. Scalar invariance and residual error invariance were both non-significant indicating equal intercepts and errors across gender, with Chi-Square results of (12, N=1905) =20.115 p=.0649 CFI=.986, TLI=.991, RMSEA=.035 and (2, N=1905) = .127, p=.9385 CFI = .981, TLI = .989 RMSEA = .038 respectively. With all levels of invariance obtained, valid comparisons of scores on the GDS-15 can be made across men and women.

### PERSONALITY, MENTAL AND PHYSICAL HEALTH DIFFERENCES IN GERMAN AND NORTH AMERICAN CENTENARIANS

W. Hsieh[1], P. Martin[1], M. MacDonald[2], L. Poon[3], *1. Wen-Hua Hsieh, Iowa State University, Ames, Iowa, 2. Kansas State University, Manhattan, Kansas, 3. University of Georgia, Athens, Georgia*

The purpose of this study was to assess similarities and differences between North American and German centenarians with the focus on personality, mental and physical health. The sample included 239 centenarians from the Georgia Centenarian Study and 91 centenarians from the Heidelberg Centenarian Study with the mean age of 100.15 and 100.20, respectively. Personality was assessed by the Extraversion and Neuroticism dimensions from NEO Five-Factor Inventory, mental health was assessed by the Life Satisfaction Index and the short form of Geriatric Depression Scale, and subjective health was assessed by a single item of self-rated overall health. Independent samples $t$-test were used to examine the differences between the two groups. No significant differences were reported in subjective health, $t(265) = 1.52$, $p > .05$, and life satisfaction, $t(204) = 1.14$, $p > .05$. Significant differences in activities of daily living (ADLs), $t(266) = 3.92$, $p < .01$, Extraversion, $t(202) = -3.66$, $p < .01$, Neuroticism, $t(201) = -2.76$, $p < .01$, and depression, $t(265) = -3.68$, $p < .01$, were found. North American centenarians reported higher ability on performing ADLs, were less extraverted, less neurotic and less depressed than their German counterparts. Possible factors for the differences and commonalities between the two centenarian groups will be discussed.

### PREDICTORS OF COGNITIVE IMPAIRMENT IN OLDER VIETNAMESE ADULTS

A.N. Leggett[1], S.H. Zarit[1], N. Ngoc[2], H. Chuong[2], H. Nguyen[3], *1. Human Development and Family Studies, The Pennsylvania State University, State College, Pennsylvania, 2. National Technical College of Medicine No.II, Da Nang, Viet Nam, 3. Wake Forest University, Winston-Salem, North Carolina*

Vietnam has a growing older adult population, many of whom have experienced war and social turmoil, and care has been left to that traditionally provided by the nuclear family. As a developing country, Vietnamese health authorities are just now striving to provide services that supplement family care. To be successful, they need information on the functional status and difficulties faced by the older population. The current study focuses on predictors of cognitive impairment among older adults living in Da Nang and surrounding rural areas. The representative sample consists of 600 adults 55 and older stratified by gender, age, and rural/urban. The sample was 50% rural, 50% women, with a mean age of 70.33. Interviews were conducted in individuals' homes by trained interviewers. The dependent variable was a Vietnamese version of the MMSE. 34% of the sample scored 23 or below. Multiple linear regressions were run with age, gender, education, and rural/urban as controls and measures of material hardship, depression (CES-D), health behavior, and physical measurements as predictors. More cognitive impairment was significantly associated with being a woman, older, and completing less years of education, but not with rural/urban status. Material hardship, higher depression scores, and lower blood oxygen levels were also significant predictors of cognitive impairment above the significant demographic controls. These results show that demographic indicators, but also current functioning, are highly associated with cognitive impairment. New services implemented for older adults in Vietnam need to consider the high rates of cognitive impairment and those factors that exacerbate it.

### PREDICTORS OF DISABILITY IN OLDER HISPANIC AMERICANS AND ADULTS IN VIETNAM: A CROSS-CULTURAL STUDY

H. Nguyen[1], J. Acuna[2], N. Ngoc[3], C. Hoang[3], S.H. Zarit[4], *1. Department of Family and Community Medicine, Wake Forest University School of Medicine, Winston-Salem, North Carolina, 2. Tulane University, New Orleans, Louisiana, 3. Technical College of Medicine No. 2, Da Nang, Viet Nam, 4. Pennsylvania State University, University Park, Pennsylvania*

As life expectancy across countries continues to rise, disability has become a major health and social issue. While our knowledge about the disability process has grown markedly, what we know about disability and racial/ethnic groups has not kept pace. The goal of this study is to identify risk factors of disability that are similar or different across cultures and racial/ethnic groups. This study includes 300 individuals from the Hispanic Aging Survey (HAS) and 600 participants from the Vietnam Aging Survey (VAS). The two studies were designed to overlap to identify factors that affect health and disability across cultures. The mean age for the HAS sample was 67.6, and 70.3 for VAS. Disability was assessed using participants' self-reported ability to perform 7 common activities of daily living (ADL). ADL items were summed to create weighted disability scores, with higher scores indicating poorer function. Separate multiple linear regressions were run for HAS and VAS samples to confirm results. Predictors included age, gender, education, marital status, depressive symptoms, cognitive function (MMSE), grip strength, lower-extremity performance, and self-reported diabetes, heart disease, stroke, bone fracture, lung disease, cancer, hypertension, and arthritis. Results of both analyses showed that increased age, lower education, higher depressive symptoms, lower cognitive function, poorer lower-extremity performance, diabetes, stroke, and hypertension were risk factors of disability. These findings are similar to previous general population studies in the U.S. Our study suggests several risk factors of disability that are generally consistent across geographic regions and in different racial/ethnic groups.

### THE LIVING ARRANGEMENTS OF OLDER RUSSIAN IMMIGRANTS: COMPARING ISRAEL AND THE UNITED STATES

J.A. Burr[1], A. Lowenstein[2], J. Tavaras[1], C. Coyle[1], J. Mutchler[1], *1. Gerontology, University of Massachusetts Boston, Boston, Massachusetts, 2. University of Haifa, Haifa, Israel*

The late 20th century witnessed significant out-migration streams from Russia and other former Soviet Union (FSU) countries into Israel and the US. These immigrants were welcomed in both countries. However, each country's policies regarding absorption and settlement were different throughout this period. We assume the cultural, political, economic, and social systems of each country along with individual and family characteristics played a role in the selectivity of migration. We argue that decisions about living arrangements represent one strategy for coping with the migration process. We use census data to compare the living arrangements of older immigrants, demonstrating how duration of residence and other factors influence household composition decisions. After controlling age, gender, education, home ownership, automobile ownership, work behavior and geographic residential location, we find that married FSU immigrants to Israel are more likely than their native-born counterparts to be head of household living with others versus living in a couple only household. The results for US FSU immigrants show no such difference. In both countries, married FSU immigrants are less likely than their native-born counterparts to live in a couple only household than to live with others without household headship. Unmarried immigrants to each country are more likely to live alone than to live with others without headship. Finally, duration of residence in each country has unique, but different impacts on living arrangements among older FSU immigrants. We posit that immigrant policy differences in Israel and the US impacted to some extent the living arrangement options of these immigrants.

### SOCIAL SUPPORT AND DEPRESSIVE SYMPTOMS AMONG OLDER ADULTS IN TAIWAN: A LONGITUDINAL STUDY

Z. Zimmer, F. Chen, M. Caserta, S. Wright, *University of Utah, Salt Lake City, Utah*

Changing demographics in Taiwan, including low fertility and population aging, is leading to dramatic decreases in availability of children who are traditional providers of social support. This is generating concern regarding the potential impact of declining support on psychological health. While there are ample prior studies that have shown that social support is associated with many facets of well-being, studies able to observe causal impacts between support and depression in

Taiwan are sorely lacking. The current study seeks to fill this void by investigating the relationship of social support on depression. Data come from the 1996 and 1999 waves of "The Health and Living Status of the Elderly in Taiwan." A sample of 3686 individuals is divided into those that do and do not exhibit depressive symptoms at baseline based on a Taiwanese version of the CES-D scale. Two support indicators, received instrumental and perceived emotional, and a series of demographic and social control variables, are measured at baseline. Logistic regression equations determine whether support predicts changes in depression, which of the two support indicators are most predictive of changes in depression, and whether support is a stronger predictor of change among those with or without depressive symptoms at baseline. The evidence will indicate robust associations, particularly between emotional support and change in depression and among those not depressed at baseline. This suggests that support in Taiwan is more likely to act as a preventive measure, maintaining psychological health, as opposed to a treatment for those already depressed.

## MEASURING DISABILITY IN DEVELOPING CONTEXT: THE CASE OF NEPAL

J. Subedi[1], J. Brown[1], K. Basnyat[1], S. Subedi[1], M. Tausig[2], *1. Sociology &Gerontology, Miami University, Oxford, Ohio, 2. The University of Akron, Akron, Ohio*

Activities of daily living (ADL) have been standard measures of disability in developed nations for more than four decades, but considerable literature has demonstrated that these measures do not translate well to the developing world. This finding has led to a great deal of work adapting culturally appropriate disability measures to substitute for ADL in several developing nations. However, this research generally ignores one aspect of ADL measures used in developed countries—that ADL measures are a scale. In this study, we examine the question of whether culturally adapted disability measures scale comparably to ADL measures using data from a sample of 3,014 randomly selected individuals aged 18 to 97 years old from Kathmandu, Nepal. Specifically, we examine the scalability of seven culturally adapted disability items including measures of mobility, endurance, self care, and the ability to complete household chores using exploratory factor analysis and reliability tests. We find that all seven items scale well with each having a factor loading of 0.5 or higher in the EFA and with a Cronbach's Alpha reliability coefficient of 0.88. We discuss implications of our findings both for Nepal and for research on disability across developing contexts.

## MULTICULTURAL LIFELONG EDUCATIONAL INTERVENTION FOR JAPANESE OLDER ADULTS

K. Hoshino[1], M. Nakayama[2], H. Iwasa[3], S.H. Zarit[4], *1. Sociology, Shizuoka University, Shizuoka, Japan, 2. Nagoya University, Nagoya, Japan, 3. University of Tokyo, Tokyo, Japan, 4. Pennsylvania State University, State College, Pennsylvania*

1. Puposes: We examined the effects of a lifelong educational intervention, in which community dwelling Japanese older adults could promote psychosocial development by examining their cultural identity and improving thier itergeneraional relationships. 2. Methods: The intervention consisted of three international lectures regarding successful aging in the U.S., Sweden, and Japan. The intervention group inculded 32 community dwelling older adults who participated in the lectures more than two times, and completed the questionnaire for the pretest and posttest(Male=17, Female=15, Mean Age=69.59 years old,SD=4.47). The control group had 87 older adults who participated in the questionnaire survey only(Male=47, Female=40, Mean Age=69.45, SD=4.63). The Japanese questionnaire included the Gerotranscendence Scale Type2(GST2), the Scale to Measure Banks's Stages of Cultural Identity(SBCI), the Multi-group Ethnic Identity Measure-Revised(MEIM-R), Erikson's Psychological Stage Inventory(EPSI), Social Support Scale, and so on. 3. Results and Discussion: The intervention group showed a significant increase of the total scale of the GST2 between the pretest and posttest. However, the Coherence Dimension, Identity, Generativity, Integrity, the Commitment of the MEIM-R, and social support significantly decreased. The control group significantly increased the Cosmic Dimension and Integrity, although it showed a siginificant decrease of social support. We found the intervention group could promote their psychosocial development of gerotranscendence. The decreases of cultural identity scores meant that older adults had started to explore their cultural identity in Japan, which is an ethnocentric country.

## THREE METHODS OF MEASURING CROSS-CULTURAL VARIATION IN MINORITY GROUPS' BELIEFS ABOUT DEMENTIA

R.W. Schrauf[1], M. Iris[2], *1. Applied Linguistics, Pennsylvania State University, University Park, Pennsylvania, 2. Leonard Schanfield Research Institute, Chicago, Illinois*

In cross-cultural gerontology and in multiethnic studies of aging, researchers make comparisons on some variable of interest (e.g. beliefs about aging, symptom sets for particular illnesses, dietary practices, and so on) with the aim of characterizing how much is shared between-groups and how much is unique to each group. For example, groups may wholly overlap or share some core set of beliefs while differing significantly on others. Documenting and measuring this variation is a first step in rigorous cross-cultural research. This poster presents compares three methods of measuring between-group and within-group agreement (Weller & Baer, 2002). These are: free-marginal kappa, average within- and between-group agreement, and Spearman's method. These measures are applied to beliefs about Alzheimer's disease among three minority groups in the U.S.: African Americans, Mexican Americans, and refugees/immigrants from the former Soviet Union (FSU). (1) Kappa coefficients function like correlation coefficients. In these data, the pairwise agreement on statements about Alzheimer's disease was: African-Americans & Mexican Americans (.521), African Americans & FSU (.581), Mexican-Americans and FSU (.685). (2) A more complex calculation involves finding the average proportion of within-group agreement across all three groups (.484) and the average between-group (shared) shared agreement (.478). (3) Finally, Spearman's method estimates the shared knowledge across groups at .48 as well. Each method accents different values. Kappa correlations emphasize shared beliefs across pairs of groups, while the 'Average' and Spearman's methods emphasize the overlap across groups. The presentation demonstrates the comparison of critical shared and unique beliefs about the etiology of AD.

## WITHIN-GROUP DIFFERENCES IN HEALTH STATUS AMONG ASIAN AMERICAN ELDERS

G. Kim[1], D.A. Chiriboga[2], Y. Jang[2], S. Lee[3], C. Huang[1], P. Parmelee[1], *1. The University of Alabama, Tuscaloosa, Alabama, 2. University of South Florida, Tampa, Florida, 3. University of Massachusetts Boston, Boston, Massachusetts*

Given the paucity of research on differences between older adults representing the many Asian American subgroups, the present study explored physical and mental health status in five groups of Asian American elders: Chinese, Japanese, Koreans, Vietnamese, and Filipinos. Data, drawn from the 2007 California Health Interview Survey (CHIS, N = 51,048), included 1,244 Asian Americans aged 60 or older. Background characteristics and physical and mental health conditions were compared, with results showing apparent within-group differences among Asian elders. Aside from the prevalence of diabetes, the five Asian groups differed significantly on all background characteristics and physical and mental health conditions. Specific patterns were identified in chronic diseases, disease comorbidity, and disability rates. Vietnamese and Filipinos tended to have poorer physical health than did Chinese, Japanese, and Koreans. The Korean elders had the fewest self-reported chronic diseases and least evidence of disease comorbidity. On the other hand, they had the poorest mental health status of any group;

the best mental health status was found among Japanese elders. Findings suggest that generalizing findings from one particular Asian group or from an aggregate Asian group may be problematic and may not reflect an accurate picture of the burden of health in specific Asian groups. Being aware of these differences in background and health characteristics may help providers to better serve Asian elderly clients.

# SESSION 1760 (SYMPOSIUM)

## CURRENT DEVELOPMENTS IN LONELINESS RESEARCH: CULTURE, ONSET AND TRAJECTORIES

Chair: *M. Aartsen, Faculty of Social Sciences, VU-University Amsterdam, Amsterdam, Netherlands*
Co-Chair: *T. Van Tilburg, Faculty of Social Sciences, VU-University Amsterdam, Amsterdam, Netherlands*

Loneliness is experienced in many cultures. Due to the adverse health consequences such as increased depression and increased likelihood of nursing home admissions, loneliness is a relevant public health issue. Insight into factors that lead to an increased risk of loneliness may reveal important information to our understanding of loneliness and to the design of interventions to prevent or reduce loneliness. In aiming to expand upon previous efforts in loneliness research among older adults, this symposium brings together recent findings of two large prospective studies, the TamELSA study in Finland and the Longitudinal Aging Study Amsterdam, with long follow up. The first presentation shows first evidence of the causal effect on loneliness of factors that are known to be associated with loneliness. The second presentation however shows distinctive clusters of individual trajectories within the population can be indentified, suggesting that covariates shaping the trajectories may have differential effect across the sub groups of people. The final presentation seeks to explain differences in loneliness from a cultural perspective and hypothesizes that loneliness may be lower in more individualized countries where people have lower standards for their social contacts and consequently have a lower likelihood of being lonely than people in less individualized countries. By utilizing the richness of the longitudinal datasets new conclusions can be drawn and new steps towards a better understanding of loneliness can be taken.

## LATENT TRAJECTORIES IN LONELINESS

M. Aartsen[1,2], M. Jylha[2], T. Van Tilburg[1], *1. Faculty of Social Sciences, VU-University Amsterdam, Amsterdam, Netherlands, 2. Tampere School of Public Health, University of Tampere, Tampere, Finland*

This study aims to contribute to discussions about longitudinal trajectories of loneliness and factors that may shape these trajectories. The acknowledgement of different trajectories of loneliness is important for the theoretical and conceptual understanding of loneliness as well as for the development of intervention strategies. Data came from the Longitudinal Aging Study Amsterdam, with observations between 1992 and 2009 among 3946 respondents. With a Latent Class Growth Analysis (LCGA) that was analyzed with Mplus we were able to identify four different trajectories in loneliness, suggesting the existence of four different subgroups. 65% of the respondents did not develop loneliness during the 18 years of follow-up, and 7% stayed at a constant high level of loneliness, 11% developed loneliness and 16% of the cases recovered from loneliness. Factors that are related to differences in loneliness trajectories will be discussed.

## LONELINESS CONSIDERED FROM A CULTURAL PERSPECTIVE

T. Van Tilburg[1], M. Aartsen[1,2], M. Jylha[2], *1. Faculty of Social Sciences, VU-University Amsterdam, Amsterdam, Netherlands, 2. Tampere School of Public Health, University of Tampere, Tampere, Finland*

Due to the relatively strong emphasis on individualism in the Netherlands, Dutch older adults might have lower standards for social contacts and consequently have lower changes of being lonely than adults in Finland. However, with aging the need for support will increase and the likelihood of fulfillment of this need is relatively low within a culture emphasizing individualism. We expect that among the oldest loneliness will be high in the Netherlands compared to Finland. This hypothesis is tested with data from the Longitudinal Aging Study Amsterdam and data from the TamELSA study. Results show an increase of loneliness prevalence with increasing age among Dutch older adults. After controlling for gender and partner status the prevalence increases from 16% among young old adults to 27% among the oldest. For Finnish older people there was no age-related increase in loneliness. The stronger individualism in the Netherlands might explain these country differences.

## ONSET OF LONELINESS IN OLDER ADULTS: RESULTS OF A 28 YEAR PROSPECTIVE STUDY

M. Jylha[1], M. Aartsen[2,1], *1. Tampere School of Public Health, University of Tampere, Tampere, Finland, 2. Faculty of Social Sciences, VU-University Amsterdam, Amsterdam, Netherlands*

The goal of this paper is to test whether often observed correlates of loneliness in older age also predict onset of loneliness longitudinally. So far, rigid tests of the causal sequence between correlates of loneliness and loneliness itself are very limited despite the increasing number of longitudinal studies. Analyses are based on data of the TamELSA study, which is a population-based prospective study in Tampere, Finland. For the present study 480 older adults aged between 60 and 86 years at baseline, who were not lonely at baseline, were selected and followed-up in 1989, 1999 and 2006. During the 28 years of follow-up approximately one third (N=178) of the study population developed feelings of loneliness. Logistic regression analyses indicated that losing a partner, reduced social activities, increased physical disabilities, increased feelings of low mood, uselessness and nervousness, rather than baseline characteristics, lead to enhanced feelings of loneliness.

# SESSION 1765 (POSTER)

## DEATH AND GRIEF

### PRE-DEATH DUAL PROCESS COPING IN HOSPICE NURSE-CAREGIVER COMMUNICATION – A CASE STUDY

K. Wright[1,2], L. Ellington[1], M.F. Clayton[1], P.H. Berry[1], M. Caserta[1], *1. The University of Utah College of Nursing, Salt Lake City, Utah, 2. Summa Health System, Akron, Ohio*

The dual process model (DPM) of coping with bereavement (Stroebe & Schut, 1999) posits that adaptation is an outcome of the dynamic oscillation between loss- and restoration-oriented (LO/RO) coping processes. In an anticipated death, such as for those in-home hospice, it is assumed that caregivers engage in both LO and RO processes prior to their partners' death. It has not been explored in what ways, if any, a hospice nurse case manager (HNCM) facilitates caregiver pre-death DPM coping. The purpose of this case study is to identify components of pre-death DPM coping processes in caregiver-HNCM communication during home visits. Five HNCM visits between an 80 year old cancer patient and spouse were audio recorded. These visits were transcribed and a directed content analysis of 116 pages (38,443 words) was completed. Codes/categories originated from the constructs of the DPM and frame the analysis. The caregiver displayed RO strategies incorporating humor and LO tasks in the form of reminiscence. The HNCM facilitated both humor and reminiscence through reflective questioning and opened ended questioning. This nurse also facilitated communication surrounding LO and RO processes between the couple. However, the dynamic nature of oscillation was difficult to capture in this case study. Future studies in hospice are needed to understand the potential role of the DPM pre-death and how HNCMs can better facilitate caregiver coping with imminent loss.

### LONGITUDINAL ANALYSIS OF BEREAVEMENT OUTCOMES: EXAMINING AGE-RELATED DYNAMICS OF DEPRESSION AND ANXIETY

J. Kellough[1], B.G. Knight[2], S. Nolen-Hoeksema[3], *1. Department of Psychology, University of Southern California, Los Angeles, California, 2. University of Southern California, Los Angeles, California, 3. Yale University, New Haven, Connecticut*

We examined the influence of age on change in symptoms of depression and anxiety over the course of the bereavement process by fitting a series of dynamic latent change score models with coupling to a longitudinal data set 313 bereaved individuals. These models revealed a coupling effect such that higher anxiety scores were associated with less increase in depression scores at the next occasion of measurement. However, there was no effect of depression scores on change in anxiety scores over time. Adding age significantly improved the fit of the model to the data and demonstrated that older individuals have lower initial levels of depression and anxiety than younger individuals in this sample. Furthermore, older age is associated with greater decreases in anxiety over time, whereas age had no significant effect on the slope of depression over time. These results suggest that in the absence of symptoms of anxiety, symptoms of depression will increase from the time period of approximately 3 months prior to the loss of a loved one to 13-months post-loss. However, anxiety symptoms appear to attenuate the change in depression over this bereavement period. The inclusion of age in these models revealed a protective effect on negative mental health outcomes in bereavement, consistent with previous notions that older adults are better able to cope with bereavement.

### ATTITUDES TOWARDS DYING AND DEATH IN VERY OLD AGE: ACCEPTANCE RATHER THAN ANXIETY?

O. Reidick[1], O.K. Schilling[1], H. Wahl[1], F. Oswald[2], *1. Department of Psychological Aging Research, Institute of Psychology, University of Heidelberg, Heidelberg, Baden-Württemberg, Germany, 2. Interdisciplinary Aging Research, Goethe University Frankfurt, Frankfurt am Main, Hessen, Germany*

In empirical studies of very old age, attitudes towards dying and death have found rare attention so far, such that little is known about how approaching the end of life is perceived among the oldest-old. Our study aimed to narrow this research gap by applying standardized measurement of death anxiety as well as acceptance based on the project LateLine, which is the German longitudinal follow-up of the European ENABLE-AGE study. In 2009, the third measurement wave was completed with N=115 participants aged 87 to 97 years. Regarding death anxiety and acceptance, the Multidimensional Orientation Toward Dying and Death Inventory (MODDI-F, Wittkowski, 1996, 2001) was assessed. Our findings confirm the multidimensional nature of death anxiety in very old age. Further, we found anxiety of one's own dying being located in the medium range, while anxiety of one's own death and rejection of one's own death was low and acceptance of one's own dying and death was high. We observed, however, substantial inter-individual variation in anxiety of one's own dying. For the latter, significant positive relations with anxiety of one's own death, rejection of one's own death, depression, negative affect as well as the amount of reported symptoms and diseases were demonstrated. Religiosity, sex and age revealed no linkage with attitudes towards dying and death. Our findings support the notion that quantitative empirical research into the still tabooed area of dying and death in very old age is needed and should be considered a crucial aspect of well-being in very old age.

### DEATH WITH DIGNITY ACT: IMPLICATIONS FOR LONG TERM CARE AND ASSISTED LIVING STAFF

K.S. Feldt, G. Bond, A. Jablonski, *Seattle University, Seattle, Washington*

In 2008, citizens of Washington state voted in favor of Initiative 1000, the Death with Dignity Act (WDDA). This study explored the level of knowledge of the new law and decisions made by directors of nursing in long term care (LTCF) and assisted living (ALF) facilities. Preliminary results from almost 200 DONs or Administrators contacted yielded 24 returned surveys (12%). Subjects were predominantly white (88.2%), female (94.1%), DONs (86.6% were RN's) who had worked in a LTCF approximately 22 years. Two thirds of respondents represented skilled facilities and 94% were employed full time. Fifty two percent favored the new law. A majority of respondents (64%) indicated their facility had opted out of participation in the WDDA and 83% had no input regarding that decision. Almost half had provided no education to their nursing staff regarding the new law, although two thirds had developed or had plans to develop policies/procedures regarding how staff should handle resident requests. Over half the respondents believed the WDDA required patients to be evaluated by an interdisciplinary team, even though it does not mention any interdisciplinary approaches. Most respondents understood that the patient needed to be competent, terminal and able to self-administer medications. One quarter of respondents indicated that residents in their facility had asked questions about the WDDA. Some respondents indicated they would refer resident inquires to a physician, provide further information, or help the resident find a facility that had chosen to participate in WDDA. Implications of our findings will be discussed.

### THE EFFECT OF LATE-LIFE WIDOWHOOD ON CHANGES IN SOCIAL SUPPORT: DO PERSONALITY TRAITS MATTER?

M. Pai, J. Ha, *Sociology, Kent State University, Kent, Ohio*

The purpose of this study was twofold: (1) to examine whether the effect of late-life widowhood on social support is moderated by five different personality traits: agreeableness, conscientiousness, emotional stability, extraversion, and openness to experience; and (2) to evaluate whether the distinguishing aspects of personality moderate the link between widowhood and social support differently for widows versus widowers. These questions were examined using data from the Changing Lives of Older Couples (CLOC) study, a multiwave prospective study of widowhood in later life. Results indicate that individuals scoring higher on openness and agreeableness experienced greater social support from children upon spousal loss relative to their peers scoring lower on these traits. Agreeableness also was found to moderate the link between widowhood and support from friends and relatives yet the effect was in the opposite direction. Individuals scoring higher on agreeableness experienced less support from friends and relatives compared to their peers scoring lower on this trait. Further, findings reveal gender differences with higher levels of extraversion predicting greater support from children for widows yet not for widowers. Finally, while being more conscientious predicts less support from children for widowers, results reveal no effect of this trait for widows. Overall findings highlight the importance of assessing in addition to structural contexts, individual-level factors conditioning the effects of late-life widowhood on social support.

### MENTAL HEALTH, PERSONALITY, AND DEATH ATTITUDES AND ANXIETY PROFILE

E.J. Bergman, *Gerontology Institute, Ithaca College, Ithaca, New York*

Purpose: This study examines the death attitude profile and relationship between mental health, personality, and death anxiety among young adults. Design and Methods: Surveys were administered to a sample of 391 students at a northeastern comprehensive college. Using grounded theory, major themes were identified and thematic analysis organized content regarding death attitudes. Descriptive and univariate analyses were used to assess the relationships between depressive symptoms, mastery, optimism, and death anxiety. Results: Death attitudes frequently cited by participants in this study included fear; concern over separation from loved ones; curiosity regarding noncorporeal continuity; and an appreciation for the need to live life to the fullest. Higher levels of depressive symptoms and lower mastery and optimism were associated with higher death anxiety and expressions of fear and other negative death attitudes. Implications: Mental health and personality characteristics may place some young adults at risk for disruptions associated with death anxieties. Results of this study suggest the importance of considering both mental health and personality influences in predicting death attitudes and reveal the potential for death educators to provide opportunities for the discussion and examination of personal death attitudes and beliefs.

### THE RELATIONSHIP BETWEEN LONELINESS AND DEATH ANXIETY IN LATER LIFE: ONE-YEAR LONGITUDINAL FINDINGS

B. Hayslip, M. Ward Pinson, C. Neumann, *Psychology, University of North Texas, Denton, Texas*

Previous cross sectional research, as well data derived from both Terror Management Theory and Socioemotional Selectivity Theory suggests that there might be a relationship between death anxiety and loneliness in older adults, taking into consideration the multidimensional nature of death anxiety and the distinction between social and emotional loneliness. Based upon a one-year longitudinal study of 173 community –residing older participants (M age = 72.00, SD = 7.2; 68% female), drawn from the original cross sectional sample of 355 older persons. A hypothesized longitudinal causal model was derived from the above theoretical perspectives, wherein it was predicted that both social and emotional loneliness, as assessed via the UCLA and SELSA-S measures at Time 1 would predict death anxiety (MDFODS, RDAS, CLFD measures) at Time 2, mediated by one's cultural world (depression, locus of control, social support, resiliency, spirituality, openness to experience, self-esteem). One-year longitudinal data was analyzed using Structural Equation Modeling (EQS). While results of a hypothesized structural model fitting the data supported a loneliness-death anxiety relationship over time as mediated by one's cultural world view were supported, the differential contribution of social versus emotional loneliness as a mediator was not supported. These findings that suggest older individuals who report being more lonely and are consequently more death anxious are buffered via the internalization of a cultural world view insulting them from their mortality. Thus, interventions to for example, lessen social isolation and/or providing more support from others can help alleviate older adults' fears about death and dying.

### THE SOCIAL SUPPORT FOR GRIEF IN HEALTHCARE (SSGH) SCALE: DEVELOPMENT AND TESTING

K.A. Anderson[1], H. Ewen[2], E.A. Miles[1], *1. College of Social Work, The Ohio State University, Columbus, Ohio, 2. Miami University, Oxford, Ohio*

Social support can be a critical mediating factor in grief. Unfortunately, current measures of social support fail to account for the special characteristics of grief in healthcare environments. The purpose of this study was to develop a social support scale for grief specific to healthcare workers. The 15-item Social Support for Grief in Healthcare Scale (SSGH) was developed based upon Doka's (1989, 2002) typology of disenfranchised grief. The SSGH was tested using exploratory factor analysis with a convenience sample of 380 nursing assistants (N = 380) working in the nursing home setting. Reflective of the supporting theory, all items of the SSGH loaded onto three distinct factors: recognition of the relationship between the healthcare professional and the resident/patient; acknowledgement of the loss; and inclusion of the griever in rituals and grief-related activities. Reliability was found to range from acceptable to high across these three factors. In sum, it appears that the SSGH may be a useful and reliable tool in understanding the role of social support for grief in healthcare workers. Additional testing is needed to determine whether the SSGH is a reliable tool for measure grief support for healthcare workers in other roles and settings.

### LONGITUDINAL STUDY OF AGE DIFFERENCES IN THE EFFECTS OF LENGTH OF ILLNESS BEFORE DEATH ON ADJUSTMENT TO LOSS

N.E. Pisca[1], B.G. Knight[1], S. Nolen-Hoeksema[2], *1. Davis School of Gerontology, University of Southern California, Los Angeles, California, 2. Yale University, New Haven, Connecticut*

Theoretical models of coping with bereavement along with empirical evidence suggest that individuals who deal with the loss of a loved one experience a variety of negative outcomes (e.g., depression, anxiety, etc.). However, there is a dearth of research investigating the effects of age and length of illness before death on adaptation to such stressful life events as losing a loved one. The current study explores the role age and length of illness plays on adaptation to loss. Regression analysis was performed on 154 participants from the Stanford Bereavement Project, a longitudinal prospective study that included 5 waves of data from 1989 to 1992. Participants were assessed before the death of their loved one and then at 1, 6, 13, and 18 months post-loss. Compared to older participants (over age 50), younger individuals experienced a higher level of anxiety and a lower level of calmness across the 4 time points post-loss. Furthermore, findings indicate that older adults do the same regardless of length of illness, whereas younger adults do worse with more time prior to death. The results may provide evidence of older individuals' resiliency when it comes to bereavement.

## SESSION 1770 (POSTER)

## DRIVING, TRANSPORTATION, MOBILITY

### THE EFFECT OF PASSENGERS ON OLDER DRIVER SAFETY

L. Morrison[1], S. Dubois[2], O. Marks[1], N.W. Mullen[1], M. Bedard[1,2], *1. Lakehead University, Thunder Bay, Ontario, Canada, 2. St. Joseph's Care Group, Thunder Bay, Ontario, Canada*

We examined the effect of passenger-types on older driver safety (drivers aged >65) using data from the Fatality Analysis Reporting System (1975-2008). Using a case control design, we calculated adjusted odds ratios (OR) of commonly committed unsafe driver actions (UDAs) based on passenger-type. Cases had an UDA recorded, controls did not. We controlled for driver age, sex, driving record, crash time-of-day, and passenger-type. Passenger-type was coded as follows: single adult passenger (age >18) in the front seat (adult passenger condition); at least one child (age <13) passenger with no adult passengers (child/children passenger condition); or no passenger present (reference condition). Two-thirds (63.5%) of older drivers committed at least one UDA. The top five UDAs committed were: Failure to yield right-of-way (28%); failure to keep in proper lane (17%); failure to obey traffic control devices (10.5%); driving too fast for the conditions (6.2%); and operating the vehicle in an erratic manner (4.7%). Overall, an adult passenger decreased odds of any UDA (OR: 0.91;99%CI:0.88;0.94) whereas a child passenger was equivalent to driving alone (OR: 1.03;99%CI:0.81;1.30). However, older drivers had increased odds of failing to keep in the proper lane when either an adult (OR:1.31;99% CI: 1.26;1.36) or child (OR:1.35;99% CI: 1.05;1.73) passenger was present. The general benefit of adult passengers may result from their ability to detect hazardous situations and bring them to the attention of drivers. Employing passengers to reduce risky behaviours and alert of possible danger may be useful in crash prevention for older drivers.

### A TRANSPORTATION RESOURCE GUIDE: DESCRIPTION, PROCESS, AND EVALUATION OF USE

A. Dickerson, L.N. Evans, L. Webster, S. Faircloth, M. Colcord, J. Wilkerson, *Occupational Therapy, East Carolina University, Greenville, North Carolina*

The 2005 White House Conference on Aging identified transportation as a top issues for elders. Driving is not only viewed as a source of independence, but in most areas, as the only means of maintaining participation in the community. Unfortunately, there comes a time when the elder must give up the keys. Although there may be information in one's community, it is often not easily accessible for the elder or caregiver or coordinated through one source. This poster will explain the process of developing a Transportation Resource Guide that will be used by therapists with their clients. The purpose of the Guide is to provide practitioners with a clear algorithm that will help their clients understand why it is unsafe for them to continue driving and to provide them with alternative modes of transportation that will be specific for that client based on their needs. The guide has been drafted, based on multiple interviews with clients, therapists, and transportation experts. The methods of development will be highlighted. The guide has been reviewed with occupational therapists and clients. Results indicate the guide is not readily used by occupational therapists. It appeared that some therapists feel transportation should be addressed by other professionals. The implications of this evaluation are discussed.

## EVALUATING DISPLAY CONFIGURATIONS OF A DRIVING SIMULATOR DESIGNED FOR AGING PATIENTS IN CLINICAL SETTINGS

R. Goodenough[1], J.O. Brooks[1], D. Evans[2], K. Duckworth[1], *1. Clemson University, Clemson, South Carolina, 2. DriveSafety, Inc., Salt Lake City, Utah*

Although large high-fidelity driving simulators are optimal for reproducing realistic driving experiences, they are often too expensive and require too much space to be practical outside of research environments. In response, DriveSafety has developed the CDS-250 specifically designed to be a small footprint simulator for clinical applications. However, there are limitations inherent to such smaller simulators, such as reduced display size. In order for driving situations involving maneuvers such as merging, intersection negotiation, and sharp turns, a field-of-view larger than that afforded by the display size is often necessary. A technique known as scene minification can be employed to fit large field-of-views onto a smaller display. A usability study was conducted investigating older driver comfort and performance while using different display configurations. Twenty-four licensed drivers drove through several different environments such as neighborhoods, rural roads, commercial areas, and freeways. Drivers were presented with two different display configurations consisting of either a single 47" screen or three 19" screens. Each drove through the driving environments using four different field-of-views: 65o, 80o, 95o, and 110o. Nearly all drivers tested preferred the three-screen configuration, mainly for its larger horizontal extent. For a majority of the drivers 110o was the preferred field of view of the four tested. This finding was surprising because it was hypothesized that few drivers would be comfortable with a 110o field-of-view compressed to fit a screen subtending a much smaller visual angle (65 o). This will allow therapists to work with patients on tasks including intersections.

## STEREOTYPES OF THE OLDER DRIVER: A FIRST PROMISING STEP

M. Joanisse, S. Gagnon, M. Voloaca, *School of Psychology, University of Ottawa, Ottawa, Ontario, Canada*

Historically the driving literature on older adults has been mainly focused on their higher involvement in on-road crashes. Furthermore, in the general population, negative comments in regards to the competency of older drivers are frequently heard. However, recent studies have shown that older drivers are safe drivers. While negative stereotypes in regards to older drivers seem to be present, their existence has yet to be empirically validated. We conducted an experiment to determine the presence of older driver stereotypes. Fifty-six young adults viewed 12 simulated clips of three categories of driving behaviours (i.e., risky younger drivers' behaviours, risky older drivers' behaviours and neutral driving behaviours). Results showed that risky older drivers' behaviours were rated as significantly more representative of older drivers in general, than young and middle-aged drivers. Risky young drivers' behaviours were evaluated as significantly more representative of young drivers than older drivers and middle-aged drivers. The neutral safe driving behaviours were rated as more representative of middle-aged drivers compared to the older and younger groups. The implication of these results on the decision-making process of older adults in regards to driving cessation is discussed as well as the potential consequences of these perceptions on driving performance.

## COGNITIVE SPEED OF PROCESSING AND VISION ARE ASSOCIATED WITH MOBILITY ACROSS THREE YEARS

M. O'Connor, J. Edwards, *University of South Florida, Tampa, Florida*

Mobility, or the ability to move through the environment, is critical for older adults' quality of life (e.g., Webber, Porter, & Menec, in press). Sensory, physical, and cognitive declines are associated with mobility limitations. However, cognition may be an especially salient predictor of mobility (e.g., Edwards, Bart, O'Connor, & Cissell, in press). Further research is needed to examine predictors of different mobility indicators in a longitudinal context. The current project utilized data from the Staying Keen in Later Life (SKILL) study (N=370; mean age=72.75) to longitudinally investigate mobility as defined by life space and driving behaviors (frequency and avoidance) across three years. First, hierarchical regression analyses were used to examine baseline relationships between the mobility variables and age, vision (acuity and contrast sensitivity), physical performance (Turn 360 Test), speed of processing (Useful Field of View Test [UFOV]), and mental status. UFOV emerged as a significant and independent indicator of baseline driving avoidance ($ps<0.05$). Additionally, vision was a significant indicator of driving avoidance and frequency. Next, latent change models were used to examine changes in driving and life space between baseline and follow-up. There were significant decreases in life space and driving frequency, and significant increases in driving avoidance across three years ($ps<0.05$). Vision was significantly correlated with changes in all outcomes ($ps<0.05$), while UFOV was correlated with changes in driving avoidance ($r=-0.17$, $p<0.01$), and frequency ($r=0.15$, $p<0.01$). The current study illustrates the importance of speed of processing for maintenance of driving and vision for both driving and life space.

## SELECTION, OPTIMIZATION, AND COMPENSATION IN THE SELF-REGULATORY DRIVING BEHAVIORS OF OLDER ADULTS

E. Lea, T. McCallum, *Psychology, Case Western Reserve University, Cleveland, Ohio*

To combat declines in functioning, older drivers engage in selection, optimization, and compensation (SOC). Previous research has investigated the use of the SOC model as a means of understanding how older adults balance and optimize resources to maintain mobility. Often, behaviors associated with selection and optimization are either ineffective at reducing accidents or associated with negative outcomes, such as depressed mood. This study examined older drivers' qualitative descriptions of their safety-oriented behaviors and the impetuses for those behaviors. Participants for the study ranged in age from 60-97(M=73.09, SD=8.92). Older drivers reported a number of self-regulatory driving behaviors including avoidance of challenging situations (34.0%), increased attention and caution (21.6%), and increased adherence to the laws (17.5%). The most frequently cited reasons for altering driving behavior were changes in the body (17.9%), safety (16.7%), age (14.3%), and changes in attitude or perception (14.3%). The majority of driving research has focused on avoidant driving behaviors as methods of self-regulation in elders' driving; however, only 34.0% of responses indicated avoidance was a method of increasing safety. Therefore, this study expands on research of self-regulatory behaviors by describing additional methods older drivers employ to increase perceived safety. This is notable as 53.6% of the sample reported that the self-regulatory driving behaviors they employ are effective to extremely effective at improving driving safety. A re-conceptualization of the SOC model, focused on independence through driving rather than mobility, follows.

### RACIAL AND ETHNIC DIFFERENCES IN DRIVING TRANSITIONS: DATA FROM THE HEALTH AND RETIREMENT STUDY

C. Lee, F. Porell, E. Dugan, *University of Massachusetts Boston, Boston, Massachusetts*

We explored racial and ethnic differences in biomedical, social, and psychological risk factors for driving cessation. This research identifies and compares risk factors in older (age>65) African American (N=5,872), Caucasian (N=36,866), Hispanic (N=3,386), and Other (N=661)race adults. We analyzed pooled data from waves 1998-2008 of the Health and Retirement Study. Variables included age, gender, education, marital status, income, functional status, ADL, IADL, vision, and health conditions (hypertension, diabetes, cancer, cardiovascular disease, stroke, lung disease, arthritis, falls, hip fracture, depression, and psychiatric illness). We utilized multivariate logistic regression to estimate consequences between reported future driving cessation and risk factors. Results of logistic regression analysis showed that overall, older age and low income adults had a greater risk of driving cessation in all of the race groups. However, for African American adults risk factors for driving cessation were IADL limitation, stroke, fall, hip fracture, fair/poor vision, while male gender, more education, and higher income were protective (pseudo R2=.31). For Hispanic adults never married, IADL, stroke, fall, fair/poor vision were risk factors for driving cessation, while male gender and more education were protective (pseudo R2=.33). Adults categorized as "other" race were at risk if they were functional limitation, and more likely to keep driving if they were male, had more education, had cancer, heart conditions or falls (pseudo R2=.48). Given the small size of the "other" category we report this with caution. Nonetheless, this information may guide tailored interventions to promote mobility in at-risk adults. *Research supported by a National Center for Senior Transportation student scholar award.

### WHY WOULD THEY STOP? REPORTS OF CONDITIONS THAT WOULD LEAD TO DRIVING CESSATION AMONG VISUALLY IMPAIRED OLDER ADULTS

M.T. Guzzardo, B.E. Gibson, A. Horowitz, J.P. Reinhardt, K. Boerner, *Research Institute on Aging, Jewish Home Lifecare, New York, New York*

Empirical evidence is limited with respect to how older adults make decisions about driving cessation as their driving abilities change. An important component of this process is the indicators older adults use to determine when driving cessation is warranted. Data from a larger NIA-funded study were used to describe older adults' reports of the conditions that would lead them to stop driving and compare them to the reports of a family member or friend (Contact). The sample includes 214 Participants age 55+ who were visually impaired drivers, as well as 214 of their Contacts. Approximately half of the Participants (51%) and Contacts (46%) reported Participants' vision getting worse as a condition that would lead them to stop driving. However, relatively few provided specific indicators of worsening vision (13% of Participants and 11% of Contacts said the Participant would stop if he/she couldn't see objects, people, or signs on the road). In addition, more Contacts (21%) than Participants (11%) believed that an accident would lead the Participant to stop driving. For Participants, 42% reported that being a danger to themselves or others would cause them to stop, and 23% of Contacts reported this. Less than one-fifth of each group reported that driving cessation was inevitable (15%; 13%). Findings underscore the need for older drivers with vision impairment to work together with their families, friends, and doctors to plan for future driving cessation, including the identification of specific indicators of increased risk in order to make safe decisions before an accident.

### RISK FACTORS FOR DRIVING TRANSITIONS: DATA FROM THE HEALTH AND RETIREMENT STUDY

E. Dugan, C. Lee, F. Porell, *Gerontology Dept, University of Massachusetts Boston, Boston, Massachusetts*

Driving a personal vehicle is the preferred means of mobility for most Americans, especially older adults. Transitioning from driver to passenger may lead to social isolation, less access to health care, loss of independence, and diminished quality of life. With increasing age threats to medical fitness to drive increase. This research identifies social, psychological, and biomedical risk factors for self-reported driving cessation in older (age>65) adults. We analyzed pooled data from waves 1998-2008 of the Health and Retirement Study (African American N=5,872; Caucasian N=36,866; Hispanic N=3,386; Other N=661). Variables included age, gender, education, race, marital status, income, functional status, ADL, IADL, vision, and health conditions (hypertension, diabetes, cancer, cardiovascular disease, stroke, lung disease, arthritis, falls, hip fracture, depression, and psychiatric illness). We utilized multivariate logistic regression to estimate consequences between reported future driving cessation and risk factors. Results of logistic regression analysis showed that drivers who were male, highly educated, married, wealthier, and had excellent vision and arthritis were more likely to continue driving. Minority race, never married, lowest income, functional limitation, ADL, IADL, diabetes, stroke, falls, hip fracture, fair/poor vision, and psychiatric problems were all risk factors for driving cessation (pseudo R2=.39, SE adjusted for 15,256 clusters). Identifying potential threats to future driving fitness should benefit older drivers, their families, health care providers, and licensing authorities. Knowing that a sometimes symptomless chronic disease (diabetes) can pose a threat to driving fitness may help motivate some older patients to more actively manage their condition to prolong their driving fitness.

### PAIN KILLERS AND SAFE DRIVING: AN EXAMINATION OF THE ASSOCIATION BETWEEN OPIOID ANALGESICS AND UNSAFE DRIVING ACTIONS PRECEDING FATAL CRASHES

S. Dubois[1,2], M. Bedard[1,2,3], B. Weaver[2,3], *1. Research Department, St Joseph's Care Group, Thunder Bay, Ontario, Canada, 2. Centre for Research on Safe Driving, Lakehead University, Thunder Bay, Ontario, Canada, 3. Northern Ontario School of Medicine, Lakehead University, Thunder Bay, Ontario, Canada*

In the USA, opioid analgesic (pain killer) consumption is increasing. Common side effects such as sedation, dizziness, and memory impairment have the potential to influence the central nervous system impairing a person's ability to drive safely. Most epidemiological research into the impact of opioid analgesics on road safety has focused on the association between opioid use and traffic crash occurrence. Yet, the role of opioid analgesics on crash responsibility is still not properly understood. We examined the impact of opioid analgesics on drivers (with a confirmed BAC=0) involved in fatal crashes (1993-2008) using a case-control design based on data from the National Highway Traffic Safety Administration Fatality Analysis Reporting System. Cases had one or more crash-related unsafe driving actions (UDA) recorded; controls had none. We calculated adjusted odds ratios (ORs) of any UDA by medication exposure after controlling for age, sex, other medications, and driving record. Compared to drivers who tested negative for opioid analgesics, drivers who tested positive demonstrated increased odds of performing an UDA from ages 25 (Female OR: 1.44; 95%: 1.15, 1.78; Male OR: 1.64; 95% CI: 1.34; 2.00) thru 65 (Female OR: 1.24; 95% CI: 1.04; 1.48; Male OR: 1.41; 95% CI: 1.20;1.65). The detection of opioid analgesics was not associated with greater risk of an UDA for drivers aged 75. Research is necessary to examine why these age differences exist, and if possible, to ensure that opioid analgesics do no contribute to crashes.

### WHAT ARE THEY TALKING ABOUT? CONVERSATIONS ABOUT DRIVING REPORTED BY VISUALLY IMPAIRED OLDER ADULTS

B.E. Gibson[1], A. Horowitz[1,2], J.P. Reinhardt[1,2], K. Boerner[1,2], *1. Research Institute on Aging, Jewish Home Lifecare, New York, New York, 2. Mount Sinai School of Medicine, New York, New York*

To understand how older adults with vision problems make decisions about driving and driving cessation, it is important to consider the influences of other significant persons. In particular, are suggestions by others to stop driving related to subsequent driving cessation? This study examines those influences by using baseline and year 1 follow-up data from a larger NIA-funded study of driving transitions and mental health. The baseline sample included 381 adults age 55+ with vision impairments who reported driving at baseline. Participants were asked to report the content of conversations they had with family, friends, doctors, and others. The content of each conversation was coded and data were entered using qualitative data management software. In total, 299 participants reported at least one conversation about driving. The three most common topics brought up by participants in the conversations were 1) discussing a driving difficulty (24%), 2) accepting the other's help or advice (23%), and 3) mentioning self-regulation of driving behaviors (21%). The three most common topics brought up by others in the conversations were: 1) offering rides (28%), 2) suggesting the participant regulate driving behaviors (26%), and 3) suggesting the participant stop driving (26%). At year 1, the sample consisted of 251 participants, including 45 ex-drivers. Driving cessation at year 1 was significantly related to having been told to stop by at least one person (family, friend, and/or doctor) at baseline ($r = .20$, $p < .01$). Implications for practice with visually impaired drivers and their families will be discussed.

## SESSION 1775 (SYMPOSIUM)

### SURVIVING THE CLINICAL GEROPSYCHOLOGY PREDOCTORAL INTERNSHIP PROCESS

Chair: *A. Shah, University of Alabama, Tuscaloosa, Alabama*

This section of the symposium focuses on the process of obtaining a clinical geropsychology internship, the first transitional step towards a career in geropsychology. Over time, obtaining a predoctoral internship in clinical psychology has become more challenging and enigmatic. An effort will made to demystify this process through a brief presentation on applying to, interviewing for, securing, and completing an internship in geropsychology. An overview will be provided on the available clinical geropsychology internship sites and how to choose the best fitting program.

### TIPS, TRICKS, AND ADVICE FOR LANDING A POSTDOCTORAL FELLOWSHIP IN GEROPSYCHOLOGY

K.L. Payne, *1. Milwaukee VA, Milwaukee, Wisconsin, 2. Portland VAMC, Portland, Oregon, 3. The University of Alabama, Tuscaloosa, Alabama*

This presentation will give audience members a chance to learn about the process of applying to geropsychology postdoctoral fellowships in a variety of settings including VAs, medical hospitals, academic settings, and private practice. The benefits and drawbacks for completing a fellowship in each of these settings will be explored. Differentiation of the process for applying to internships and fellowships will be discussed with a focus on tips and tricks for locating open fellowship positions, putting together a successful application, interviewing, and navigation of acceptance procedures. Examples from the presenter's recent experience with this process will be used to highlight possible challenges and successes. Audience members will have the opportunity to ask questions and to discuss particular issues or challenges they may be facing.

### HOW TO FIND THE RIGHT CLINCAL JOB FOR YOU IN GERONTOLOGY: APPLYING, INTERVIEWING, AND NEGOTIATING

M. Snarski, *Bath VA Medical Center, Painted Post, New York*

This presentation will discuss the process of obtaining a clinical position in geropsychology, starting with where to look for such position openings. Examples will be provided from presenter's recent personal experience in applying for VA hospital jobs. This session will address the processes of applying, interviewing, negotiating, and balancing personal and professional needs when choosing an appropriate geropsychology clinical position. More specifically, this session will discuss how to better equip your application package for success and guide the applicant to appropriate interview questions to raise with potential employers. The successes and challenges of this process will be presented, with time for questions and discussion to follow.

### NAVIGATING THE ACADEMIC GEROPSYCHOLOGY JOB SEARCH PROCESS: ANTICIPATION, CONSIDERATION, PERSPIRATION, AND NEGOTIATION

A. Snow, *Cntr for Mental Health & Aging/Psychology, University of Alabama/Tuscaloosa VAMC, Tuscaloosa, Alabama*

Academic geropsychology can be a high-reward career choice; even in recession, current demographic trends ensure that this area of specialization will continue to yield job opportunities. However, success in the academic geropsychology job market requires long-range planning, honest self-reflection, some hard work, and savvy negotiation. This presentation will review planning for the academic career that should begin in graduate school and continue through internship and particularly through a geropsychology research post-doctoral fellowship; this is the best way to ensure that the requisite research products and skills are in place. The successful applicant should engage in careful reflection with self, family, and friends so that one's personal and professional values are clear and can serve as guidance in reviewing potential job opportunities and offers. Careful preparation for job applications, job talks, and offer negotiations will lead to success and the beginning of the next step in an exciting career.

## SESSION 1780 (POSTER)

### HOUSING AND NURSING HOMES

### LONGITUDINAL SELF-RATED NURSING HOME USE EXPECTATIONS AMONG OLDER ADULTS IN THE HEALTH AND RETIREMENT STUDY

P.P. Haley, M. Beidleman, J. DeCoster, R.S. Allen, *Department of Psychology/Center for Mental Health and Aging, The University of Alabama, Tuscaloosa, Alabama*

Few studies have investigated the influence of cognitive status on self-rated nursing home use expectations. We examined the relation of cognitive status (i.e., a diagnosis of dementia, cognitive impairment without dementia, or no cognitive impairment) to subjective memory performance, objective cognitive performance, demographics (e.g., gender, race, Hispanicity), and self-rated nursing home use expectation using data from the 2002-2008 waves of the Health and Retirement Study (HRS) and waves A-C of the Aging, Demographics and Memory Study (ADAMS) ($N = 1770$). Respondents were asked, "What is the percent chance that you will ever have to move to a nursing home?" Repeated measures analysis of variance revealed significant individual change in nursing home use expectation, $F(3, 279) = 3.17$, $p = .025$, with expectation of nursing home use increasing from 12.9% to 19.8% from 2002 to 2008. Respondents with cognitive impairment without dementia reported poorer subjective cognitive performance, $F(18,1401) = 1.81$, $p = .02$. Hierarchical linear modeling revealed a significant level one random effect for objective cognitive performance and significant level two effects of Hispanicity and age. For some individuals, cognitive performance predicted nursing home use expectation. Older individuals and White-non-Hispanics had greater expectations of using nursing home care in the future. Future research should explore the impact of emotional health and other variables on self-rated nursing home use expectations.

### TRANSITIONS TO ASSISTED LIVING: THE ROLE OF SOCIAL WORKERS

N. Fields, H. Dabelko-Schoeny, *The Ohio State University, Columbus, Ohio*

Successful transition and adjustment to assisted living is of growing interest as policy makers search for cost effective ways of providing long-term care, and consumers demand care options which maximize choice and autonomy. Past research has suggested a growing need for social workers in assisted living, yet social workers currently have little presence in these settings and their potential role in supporting consumer transitions has not been clearly defined. This pilot study explored the factors related to the successful transition to assisted living by consumers enrolled in a Medicaid waiver program, including the role of a social worker. A written survey was administered to a state wide, purposive sample of Medicaid Assistant Living Waiver providers in facilities with the highest census of Medicaid Waiver consumers in each designated aging service area (N = 28). The importance of the availability of a licensed social worker within the assisted living facility was the one indicator that providers perceived as having little importance for transition success. However, the data also suggested a positive relationship between the availability of a social worker and the frequency and importance of education around service tier assignment and the importance of education around the resident care plan. Finally, providers suggested consumers transitioning to assisted living may benefit from the psychosocial support, a service social workers can provide. Future studies should examine the role of social workers in addressing the needs of residents relocating to residential care settings including assisted living.

### ANTIDEPRESSANT PRESCRIBING PATTERNS IN THE NURSING HOME: SECOND-GENERATION ISSUES REVISITED

S. Shah[1], B. Schoenbachler[2], S. Meeks[1], *1. University of Louisville, Department of Psychological & Brain Sciences, Louisville, Kentucky, 2. University of Louisvlle, Department of Psychiatry & Behavioral Sciences, Louisville, Kentucky*

Since implementation of the Omnibus Reconciliation Act of 1987 (OBRA), nursing homes are required to provide detailed records and regular assessments regarding the use of psychoactive drugs. Once considered an under-diagnosed and under-treated phenomenon ("first generation concerns"), depression diagnosis and antidepressant use in the nursing home have become increasingly common since OBRA. Now, second-generation issues regarding the monitoring and management of psychotropic drugs may be more critical than lack of diagnosis or treatment. The aim of this study was to assess the quality of documentation regarding the antidepressant prescribing patterns in the nursing home. We randomly selected 119 medical records from 6 nursing homes and used a standardized rating scale to review them. Results showed that 57.1% of the sample was taking antidepressants during the 6-month review period, and that 59.1% had a documented depression diagnosis. However, frequency statistics revealed that the documentation related to changes in dosing, side effects, and reason(s) for continuation was suboptimal. Differences in prescribing patterns were examined across nursing homes, and results showed relative consistency with regard to proportions of residents taking antidepressants and frequencies of dosage changes, but differences among facilities with regard to which antidepressants were prescribed, and documentation for side effects, depressive symptoms, and reasons for continuation were found. Overall, the quality of antidepressant documentation in nursing home charts appears to be inadequate. Future research should explore possible solutions to these second-generation issues.

### RACE, POWER, & WORKFORCE DIVERSITY: AWARENESS, PERCEPTIONS, & EXPERIENCES AMONG NURSING HOME LEADERS

L.D. Vinson[1,2], A. Snow[2,1], M.R. Crowther[1], A. James[1], J. Wong[1], *1. Department of Psychology, The University of Alabama, Tuscaloosa, Alabama, 2. Center for Mental Health & Aging, The University of Alabama, Tuscaloosa, Alabama*

In response to the changing demographic profile of the US, there is an increasing presence of minorities in the workforce. Nursing homes, in particular, are facing issues on how to manage such a diverse workforce. Furthermore, nursing homes have a hierarchal environment with limited diversity at the administrative level, yet significant diversity at the direct care levels. The present study is an ongoing project exploring nursing home leaders' understanding of workforce diversity (WD), race, power, and how diversity is managed in the nursing home. Semi-structured interviews were conducted with 10 administrators at a community nursing home using guiding questions to explore the leaders' own experiences. Interviews explored the following concepts: diversity and leadership experiences, perceptions of WD and diversity management, and influences of WD on work process. Using the grounded theory approach to qualitative data analysis, preliminary results reveal several common themes. First, the leaders explained how they thought others perceived them. One administrator stated that the staff would "perceive me very differently from the way I perceive myself… they will probably perceive me as being distant." They also discussed their role in "doing the right thing" as a leader. Finally, the leaders described their personal experiences with racial discrimination and how these experiences affect their current situations. A theory of WD will be discussed based on the leaders' values, experiences and perceptions of race, power, and WD. Such a theory will aid in developing diversity promotion strategies and improve work-life in nursing homes.

### AGING INDIVIDUALS' PREFERENCES FOR AN AUTOMATED NIGHTSTAND

L. Smolentzov[1], J.O. Brooks[1,2], L. Mayweather[1], R. Beeco[1], J. Manganelli[1], K.E. Green[1], I. Walker[1], *1. Clemson University, Clemson, South Carolina, 2. Greenville Hospital System University Medical Center, Greenville, South Carolina*

'Smart' furniture is furniture that employs user-centered design principles and computer-aided assistive technologies. 'Smart' furniture might help older adults with self-care tasks and encourage aging-in-place. While our previous research has shown that seniors are accepting of the concept of 'smart' furniture, the current study assessed the desired characteristics, specifically the wants and needs, of 32 community dwelling older adults (M = 68.9 years) in terms of a 'smart' nightstand to help propel future designs. The volunteers were shown 'smart' nightstand prototypes through the use of 3D models using Google Sketch Up© prior to completing a survey including 36 potential items to be located in or on the nightstand as well as 21 functions the nightstand may perform (such as moving up and down). The participants ranked their like and need for each item and function. Results indicate that having a telephone, lamp, and glasses were three of the five highest rated like and need items while light control, communication regarding safety, the ability to move up / down, and medicine storage were four of the five highest rated like and need functions. Overall, participants' scores reflected a need and liking of incorporating a variety of items and automated functions into a nightstand. Creating a user-centered nightstand could potentially aid aging in place individuals by fulfilling not only what the user needs, but also what they want. This is valuable for potentially creating a nightstand that can aid future generations to age in place.

### ASSOCIATION BETWEEN MEDICAID-FUNDED HCBS WAIVERS AND THE PROPORTION OF LOW-CARE NURSING HOME RESIDENTS IN FLORIDA

E. Hahn, K.S. Thomas, K. Hyer, R. Andel, *University of South Florida, Tampa, Florida*

Up to 12% of nursing home (NH) residents are considered to have light care needs (i.e., low-care residents). We reported the county-level prevalence of low-care NH residents in Florida and examined whether the availability of Medicaid-funded home- and community-based service (HCBS) waivers may be associated with the proportion of low-care NH residents. This study utilized facility- and county-level data from the national registry of NH resident assessments from the Minimum Data Set, the Online, Survey, Certification and Reporting Data Set, the Area Resource File, and the Department of Elder Affairs to examine the association between the availability of Medicaid HCBS waivers and the proportion of low-care residents in 57 counties in Florida. We used Hierarchical linear models (HLM) with facility-specific information (age, gender, percent Medicaid/Medicare, occupancy, chain membership, profit status, and facility size) as level 1 variables and county-level information (market competition, hospital beds per 1000 adults aged 65+ and number of waivers) as level 2. Between 3.4%-23.1% of residents residing in 264 NHs were low-care (mean=12.3%, SD=7.23). In addition to the 2 statewide waivers, counties, on average, offer 1 waiver and range from 0-3 additional waivers. In a fully adjusted model, each additional waiver in the county was associated with a 1% decrease in the proportion of low-care residents (Est.=-1.04, SE=.45, p<.05). Smaller, for-profit facilities with a higher percent Medicaid residents had a higher proportion of low-care residents. NH-eligible Medicaid recipients may be sustained in the community when there is a greater availability of Medicaid-funded HCBS waivers.

### PATTERNS WITHIN CULTURE CHANGE HOUSEHOLDS: OUTCOMES FROM A PILOT STUDY

M.L. Kaup, *ATID, Kansas State University, Manhattan, Kansas*

Many skilled care facilities are investing in remodeling and new construction, testing new organizational models; adopting some of the principles from the culture change while still holding onto their previous institutional frameworks. Central to culture change in long-term care is the expression of desired patterns of behavior through features of the built environment. The implications for the setting, and the spatial composition of the household, are beginning to be addressed as an important factor in supporting these new behavioral expectations. Outcomes from a pilot study demonstrate emerging patterns in culture change households based on both the spatial arrangement of the setting as well as organizational structures that implicate how staffing is assigned to the households and what roles they assume. A qualitative research design using a mixed-method, multi-site strategy was employed that included ethnographic tactics to document the composition of the household features that are integral to four targeted routines. This presentation will demonstrate how each location was documented to reveal the staffing configuration as well as the architectural/ spatial parameters that define identifiable boundaries. Data will be presented graphically (plans and diagrams) as well as tabular and narrative form to demonstrate the organizational and environmental characteristics of each facility. After reviewing this analysis, participants will be able to identify the emerging patterns of the physical environment and the organizational structures that result in a multi-household context versus a "stand-alone" household and be able to discuss the implications for staffing roles that may have relevance to resident quality of life.

### POSITIVE EXPERIENCES FROM CARE-WORK AND THEIR EFFECTS ON BURNOUT SYNDROMES: RESULTS FROM A NATIONAL CROSS-SECTIONAL SURVEY IN JAPAN

K. Abe, *National Center for Geriatrics and Gerontology, Aichi, Japan*

Objectives: Positive experiences from daily care-work are important factors for stress reductions and retention rates. However, there is little study about the positive experiences and their effects on the stress of care-worker. The aim of this study is to examine the effects of the positive experiences on the burnout syndromes in Japan. Methods: The data analyzed in this study is from the 2007 Working Conditions Survey in Long-term Care, a nationally representative cross-sectional survey in Japan. Results: Results of the multiple regression analysis examined significant effects of the positive experiences from daily care-work on the burnout syndrome. In particular, personal accomplishments; a sub-scale of the Maslach burnout inventory, were strongly influenced by the positive experiences. Discussion: Positive experiences from daily care-work had a reductive effect on the stress of care-worker in Japan. This study highlights the importance of positive experiences and positive feelings of care-workers as well as their stressful working environment.

### LONGEVITY RULES: TENURE STATUS AS A STRUCTURAL INFLUENCE ON WELL-BEING IN A RETIREMENT COMMUNITY

S.A. Eisenhandler, *Sociology, University of Connecticut, Waterbury, Connecticut*

2010 is the five year benchmark for qualitative research on the cultural milieu and daily life of older adults and staff in a Connecticut retirement community called Kahehtiyo. This presentation delineates a clear pattern of longevity or tenure status for residents and staff alike that eases many transitions associated with aging in place. Regular interaction between residents and staff affects well-being reported by both groups: Longevity or tenure status makes this possible. Interviews and systematic participant observation of interaction between residents and staff disclose three significant structural factors associated with well-being. A key sociological element is stability in the population of residents and staff. A second factor is the size of the group; and, a third is the limited disruption of community when residents or staff have been replaced. Joint participation has been sustained here. This does not mean that Kahehtiyo is a utopia. It does mean that the resulting social cohesion reinforces a commitment to work through difficulties rather than to move to another retirement complex or to work for another community. Organizational research typically finds multiple benefits from low staff turnover. Yet that is only part of what makes for well-being among older adults—the longevity or tenure of residents themselves is equally important. Small retirement communities demonstrate that size, scale, and stability (even with replacement of members) build a social foundation for well-being. Disadvantages are also noted particularly the function of stability as social inertia.

### HOUSING QUALITY AMONG OLDER ASIANS: COMPARING IMMIGRANTS AND NON-IMMIGRANTS

J.A. Burr, J. Mutchler, *Gerontology, University of Massachusetts Boston, Boston, Massachusetts*

Housing quality has been demonstrated to impact a person's well-being. While some research exists on the quality of older persons' housing for the general population, our knowledge of the housing characteristics of older Asians is scarce. We develop a conceptual framework for analyzing housing outcomes among older Asians derived from stratification and assimilation theories. We analyze samples from the 2000 US Census PUMS (5%) for non-Hispanic Whites, Chinese, Japanese, Korean, Asian Indian, Filipino, and Vietnamese elders. Three dimensions of housing are examined: (1) home ownership, (2) residential crowding, and (3) home values and rents. Our models include both individual level and housing market characteristics. After controlling for demographic and economic characteristics, as well as housing market characteristics, including Asian-White residential segregation and size of the Asian population, we find older Asians from all six groups are more likely to live in crowded households and all but the Japanese elders are less likely to live in an owned home than their non-Hispanic White counterparts. We find that older Asian immigrants live in homes where the rents and value of owned homes is lower compared to non-immigrants. These results show that conceptual frameworks applied to younger minority populations and to other ethnic groups, such as Hispanics, apply to older Asians as well. The results also show a hierarchy of advantage whereby Japanese elders' housing quality is among the highest and Vietnamese elder's housing quality is among the lowest for the Asian groups examined here.

### WHAT ARE THE BARRIERS TO PROVIDING NON-PHARMACOLOGICAL INTERVENTIONS FOR AGITATION IN NURSING HOMES?

J. Cohen-Mansfield, K. Thein, M. Dakheel-Ali, M.S. Marx, *Research Institute on Aging, Rockville, Maryland*

Agitated behaviors are common in nursing home residents with dementia and often reflect unmet needs. While the most common treatment approach is pharmacological, in recent years there has been a growing movement to use non-pharmacological approaches that address the unmet needs. In our research of agitated nursing home residents with dementia, we use a systematic methodology for individualizing non-pharmacological interventions (TREA – 'Treatment Routes for Exploring Agitation'). Trained research assistants deliver the interventions, bypassing barriers related to staff noncompliance. Still, we encounter barriers to intervention delivery. Using the Barriers to Intervention Delivery Assessment (BIDA), which we developed after multiple group discussions of our experiences on the units and literature review, research assistants documented reasons for failure to deliver interventions in a group of 89 agitated residents from 9 different nursing homes. Barrier categories included: staff-related barriers (e.g., staff refusal to remove restraints); resident barriers (e.g., unresponsive, combative); environmental barriers (e.g., too much noise); resident not available (e.g., eating); and, family-related barriers (e.g., family photos were not provided for the intervention). Barriers were encountered for almost all participants. The most frequently occurring barrier was that of the resident being asleep (category: resident not available), followed by resident refusal (resident barriers), resident visiting with family, and resident showering (in both cases, resident not available). Data from all barrier categories will be presented. Knowledge of potential barriers gives us a tool by which to tailor interventions so as to anticipate or circumvent barriers, thereby maximizing intervention delivery. This study was supported by grant #5R01AG010172-14

### SERVICE STRUCTURE OF SHARED-HOUSING ARRANGEMENTS COMPARED TO SCU FOR PERSONS WITH DEMENTIA

I. Wulff[1], J. Gräske[1,2], A. Worch[2,3], T.W. Fischer[4], J. Nordheim[3], S. Meye[2], A. Pannasch[2], K. Wolf-Ostermann[2], *1. Graduate School "Multimobidity in Old Age", Charité-Universitätsmedizin Berlin, Inst. of Med. Sociology, Berlin, Germany, 2. Alice Salomon Hochschule Berlin, Berlin, Germany, 3. Charité-Universitätsmedizin, Inst.Med. Sociology, Berlin, Germany, 4. Technopolis Group, Berlin, Germany*

Objectives Shared-Housing Arrangements (SHA) Are a Specific German Kind of Small-Scale Living Facility for Care-dependent Persons, Being Served by Community Care Services and Detached from Special Care Units (SCU) for People with Dementia. Methods In a Cross-sectional Study 163 Community Care Services Responsible for 331 SHA Were Asked among Others to Provide Information on Their Service Structure, Involvement of Relatives and Volunteers, Consultation of General Practitioners, Medical Specialists and Therapists, and Resident Characteristics. Results Were Compared with Data of 32 SCU. Measures Include Demographical Attributes, Diagnoses, Type of Services According to Social Security Statutes, Staffing Conditions, and Collaboration with Therapists. Results There Is No Proportional Distribution in Terms of Gender. Residents in SCU (82.7 Years) Are Significantly Older than Residents of SHA (79.4 Years). Relatives of SCU Residents and Volunteers Are More Often Present and Involved in the Care in Comparison to SHA. Need-driven Behaviours Occurred More Times in Residents of SCU. While Approximately 85% of Residents in Both Groups Alike Had an Appointment with Their General Practitioner, Medical Specialist Care Varies. Residents of SHA (53.3%) Attend Significantly More Often to Therapies like Physiotherapy, Occupational Therapy or Logopedics than Residents of SCU (37.9%). Conclusion Data Indicate that Both Types of Facility Provide Slightly Different Services Due to the Attracted Population. The Study Results Contribute to Elucidation of Appropriateness and Quality of Service Structure in SHA.

### RESIDENTIAL TRANSITIONS OF ADULTS WITH DEMENTIA: COMPARING VIEWS OF ADMINISTRATORS AND FAMILIES

S.G. Kelsey, S.B. Laditka, J.N. Laditka, *University of North Carolina at Charlotte, Charlotte, North Carolina*

Transitioning family members with dementia to an assisted living facility (ALF) from the community challenges family caregivers. Families are also typically unprepared for the later transition from the ALF to a memory care unit (MCU), often required by behavioral problems that can accompany advancing dementia. We studied transitioning from ALFs to MCUs from the perspectives of ALF administrators and family caregivers who had experienced both the transition from home to the ALF and the later transition from the ALF to the MCU. We conducted in-depth telephone surveys with 37 ALF administrators and 15 family caregivers. Grounded theory identified themes. Thematic analysis organized content. Constant comparison methods compared themes among administrators and caregivers. Both groups said there was a need to help caregivers learn about dementia, discuss transfer policies on admission, show respect and maintain on-going dialog, and address financial concerns about greater MCU costs. Caregivers described ways to improve transitions, including mentoring programs for caregivers, support groups at the ALF, allowing caregivers to observe the MCU for a day, and having ALF staff help with the physical move to the MCU when it is at the same location. Administrators suggested increasing awareness of MCU benefits to reduce stigma, and employing social workers. Administrators can reduce the stress of transitioning by being more understanding of family caregiver emotions, supporting caregivers by helping organize the move, and encouraging guidance from a neutral third party such as a social worker or geriatric care manager.

### RECOGNITION AND TREATMENT OF DEMENTIA AMONG TWO COHORTS OF ASSISTED LIVING RESIDENTS IN MARYLAND

A.R. Vavilikolanu, Q. Samus, C.U. Onyike, M. McNabney, P. Rabins, C. Lyketsos, A. Rosenblatt, *Psychiatry, The Johns Hopkins University, Baltimore, Maryland*

BACKGROUND: Treatment of dementia in AL has been associated with increased length of stay and other important outcomes. In 2003, Maryland passed regulations that required direct care staff to undergo increased dementia care training. The effect of this policy on dementia care in AL has not been empirically examined. OBJECTIVE: To compare differences in dementia recognition and treatment, prior to and following the 2003 dementia-care policies, between two cohorts of AL residents with dementia using secondary data from the Maryland Assisted Living study. METHODS: Demographic and clinical variables of 248 residents with dementia, enrolled in either Phase I (2001-2003) or Phase II (2004-2006) of the MDAL study were compared. Dementia treatment was rated by a multidisciplinary consensus panel of experts. RESULTS: Cohort I residents had been in AL longer ($p<0.001$), were more cognitively impaired ($p=0.045$), and had greater neuropsychiatric symptomatology ($p<0.001$). Staff- recognition of dementia was better in Cohort I (77% vs. 63%, $p=0.011$), with no significant differences in family-recognition (86% vs. 85%, $p=0.680$), or complete treatment ratings (52% vs. 64%, $p=0.060$). In multiple logistic regression, cognitive impairment and neuropsychiatric symptomatology were associated with higher odds of staff-recognition, after controlling for covariates.

Increased age and neuropsychiatric symptoms contributed to incomplete treatment ratings. Cohort did not interact with other significant variables. CONCLUSION: This secondary analysis did not provide evidence that Cohort II had higher dementia recognition or treatment rates than Cohort I, as hypothesized. The effect of dementia training regulations and facility adherence to regulations bear more direct and comprehensive investigation.

### NURSING AIDE REPORTS OF PHYSICAL ASSAULT BY LONG-TERM CARE RESIDENTS WITH DEMENTIA: THEORETICAL AND METHODOLOGICAL IMPLICATIONS

D.G. Morgan[1], N.J. Stewart[2], M. Crossley[3], C. D'Arcy[4], D.A. Forbes[5], A. Cammer[1], *1. University of Saskatchewan, Canadian Centre for Health & Safety in Agriculture, Saskatoon, Saskatchewan, Canada, 2. University of Saskatchewan, College of Nursing, Saskatoon, Saskatchewan, Canada, 3. University of Saskatchewan, Psychology, Saskatoon, Saskatchewan, Canada, 4. University of Saskatchewan, Applied Research/Psychiatry, Saskatoon, Saskatchewan, Canada, 5. University of Western Ontario, School of Nursing, Saskatoon, Saskatchewan, Canada*

Physically aggressive behaviors are common among long-term care residents with dementia. This paper describes nursing aide (NA) reports of assault from residents, and methodological and theoretical implications. The conceptual framework, attribution theory, proposes that beliefs about the causes of events influence emotional reactions, distress, expectations for the future, and behavioural responses. NAs used a structured prospective event-reporting "log" or diary to document incidents over 144 consecutive work hours, noting time of occurrence, place, activity, emotional and behavioural responses, perceptions of cause(s), ability to control or change the cause and to prevent similar behaviour in the future, and residents' ability to control their behaviours. Eight-three NAs in 11 rural long-term care facilities in Saskatchewan, Canada, reported a total of 411 incidents. Most occurred in residents' rooms during dressing, transferring, and toileting, and were attributed to resident-level factors (not wanting care, cognitive impairment). A serendipitous finding was that NAs were reluctant to document incidents for fear of being blamed. In subsequent focus groups NAs reported many organizational level factors (e.g., lack of staff, work routines) that influenced their care practices (e.g., rushing residents despite knowing that this often leads to aggression). Organizational-level factors, and NAs' beliefs about their professional role (e.g., to help residents and protect their safety and dignity), had more impact on their behaviour than their causal attributions. Knowledge translation theory, which examines the impact of broader contextual factors on use of best practices, better describes these events than attribution theory, which focuses on the staff-resident dyad.

## SESSION 1785 (PAPER)

### INNOVATIVE INTERVENTIONS FOR PERSONS WITH DEMENTIA

### I'LL SHOW YOU THE WAY: RESIDENTS HELPING OTHERS WITH DEMENTIA

A.D. Peeples[1,2], A. Frankowski[2], E. Roth[2], *1. Doctoral Program in Gerontology, UMBC/UMB, Baltimore, Maryland, 2. Center for Aging Studies, UMBC, Baltimore, Maryland*

In many residential settings for older adults there is a mix of residents with and without dementia or other cognitive declines. This paper examines the ways in which residents free of cognitive decline guide, assist, advocate for, and otherwise help residents living with dementia. Data for our analysis was drawn from over 450 reflexive interviews and fieldnotes compiled during 30 months of conducting ethnography at five multi-level senior housing settings (comprised of an active adult neighborhood, a continuing care retirement community, independent living apartments, assisted living suites including dementia specific units, and/or nursing homes). Our findings suggest that the stigma associated with dementia is often mediated by the desire to help those who are in need, which in some cases results in friendships. Although the examples and case studies focus primarily on residents, data is also drawn from narratives of family members, managers, support staff, and direct care aides. In this presentation the interpersonal and social dynamics of these relationships are discussed, as are the environmental influences of each discrete setting on the potentially stigmatizing aspects of dementia. We also explore the ways in which people with dementia are stigmatized, offering some insight into the varying responses of residents. Support for this paper comes from a multi-year, qualitative NIA-funded study, Stigma and the Cultural Context of Residential Settings for the Elderly (P.I., J. Kevin Eckert).

### A RESTRAINT FREE TRAINING PROGRAM: DEVELOPMENT, OBJECTIVES AND PRELIMINARY DATA

C. Rummel, C. Garrison-Diehn, J. Fisher, C. Drossel, C. Catlin, *University of Nevada - Reno, Reno, Nevada*

Dementia currently affects over 50% of residents in long-term care facilities. Prevalence rates of behavioral challenges (e.g. agitation, delusional speech) in individuals with dementia have been reported at over 60%. A growing body of research indicates that conceptualizing behavioral challenges as "non-cognitive psychiatric symptoms of the dementia" leads to under-treatment of reversible causes of behavior change (e.g., pain, medication side effects, infection, delirium, fear). The practice of administering psychotropic medications as the first line of treatment for behavior challenges is one of the most serious consequences of misattributing challenging behaviors to dementia. Psychotropic medications used for behavioral management in persons with dementia have been found to increase excess disability and mortality. This paper will describe a state-wide restraint-free training program based on the functional analytic model of dementia that is being implemented within facilities across Nevada. The goal of this program is to reduce chemical restraint and increase effective care for residents with dementia. The development, aims and preliminary data of the training program will be discussed.

### TRANSITIONING RESEARCH INTO THE COMMUNITY: MAINTAINING FIDELITY, IMPLEMENTATION STRATEGIES, AND EVALUATION OF PARTICIPANT RESPONSE

S. Bollin[1], C. Conley[1], H. Menne[2], *1. Alzheimer's Association, Northwest Ohio Chapter, Toledo, Ohio, 2. Benjamin Rose Institute Margaret Blenkner Research Institute, Cleveland, Ohio*

The transition of an evidenced-based research program into the community can be a challenging yet rewarding benefit to a service organization. Research and evidenced-based programs enhance organizations and provide viable methods for measuring program impact. Organizations struggle with implementing evidence-based programs, in particular, in relationship to determining methods for maintaining fidelity, evaluating participant response to the program, and managing program implementation that is relevant and impacts the organizational mission. As evidenced-based programs are integrated into organizations, trends for adoption, integration and evaluation must be identified and explored. The evidenced-based program Reducing Disabilities in Alzheimer's Disease (RDAD), is being implemented in a community-based setting in the state of Ohio with support from the Administration on Aging. As the program transitions from an evidenced-based research project to a replication site, it is important to retain integrity while measuring ability to replicate and program impact. This presentation will a) identify strategies utilized in the replication of an evidenced-based research program, and b) present evaluation data demonstrating the broader impact of the program implementation, effectiveness, and adoption. For example, thirty families have completed the first 3 months of the evidence-based program, and average satisfaction scores (which were asked on a scale of 1=very dissatisfied to 4=very satisfied) range from 3.80-3.97, suggesting that participating families are responding well to the program. The solutions achieved in order to address evaluator and organizational struggles demonstrate the importance of a collaborative approach to the replication of evidence-based programs which may be applicable in various community settings.

## SESSION 1790 (PAPER)

## INTERVENTION STRATEGIES FOR IMPROVING COGNITION

### GIST-BASED REASONING TRAINING IN COGNITIVELY NORMAL SENIORS

R. Anand, S.B. Chapman, A. Rackley, M.W. Keebler, J.E. Zientz, J. Hart, *The University of Texas at Dallas, Dallas, Texas*

Cognitive impairment is a key factor that threatens functionality and quality of life in seniors. Given the projection that the population of individuals 65 years of age and older will double within the next 25 years, there is a critical need to examine the benefits of cognitive training programs that target higher order cognitive skills such as gist-based reasoning to maximize cognitive capacity in later life. This study examined the effects of eight hours of gist-based reasoning training in 26 cognitively normal seniors between the ages of 64-85 years (M = 74.23, SD = 6.67). Participants received cognitive training in groups of no more than five individuals. The focus of the training was to teach cognitive strategies including inhibition, organization, inference, and generalization to construct gist-based abstract meanings from the details using a wide variety of information sources such as articles, short stories, and audio clips. Findings suggest that top-down strategy-based gist reasoning training significantly improved abstraction ability (p = .02) as well as generalized to untrained measures of executive function including cognitive switching (p = .03) and verbal fluency (p = .005). Individuals with lower baseline ability to abstract gist showed the greatest gain in the target domain trained. These findings highlight the potential value of engaging in cognitively challenging activities that target gist-based reasoning to strengthen cognitive potential with aging.

### THE EFFECT OF VISUAL SPEED OF PROCESSING TRAINING ON MIDDLE-AGED AND OLDER ADULTS WITH HIV

D. Vance, P.L. Fazeli, L.A. Ross, M.L. Ackerman, *School of Nursing, University of Alabama at Birmingham, Birmingham, Alabama*

By 2015, half of the U.S. HIV population will be 50 and older. Unfortunately, those aging with HIV are more vulnerable to cognitive and functional deficits. In this study, 52 middle-aged and older adults (Mage = 51.5 years; range 40.7 – 70.6 years) with HIV were randomly assigned to a visual speed of processing training condition or a no-contact control condition. In the visual speed of processing training condition, participants received 10 hours of computerized visuo-cognitive exercises. At baseline and posttest, the following measures were administered: Useful Field of View (UFOV®) Test, Wisconsin Card Sorting Test, Finger Tapping Test, and the Timed Instrumental Activities of Daily Living (TIADL) Test. Controlling for baseline performance, ANCOVAs were used to examine treatment effects on these measures between the two groups at posttest. Treatment effects were detected on UFOV®, F(2,40) = 5.61, p = .022; the visual speed of processing training group improved on their UFOV® performance. Furthermore, transfer of training was observed on the TIADL Test, F(2, 37) = 4.104, p = .05; the visual speed of processing group improved their speed and accuracy in performing these laboratory instrumental activities of daily living. Next, we examined the relationship between the cognitive measures and performance on the TIADL Test; only baseline (r = .52, p = .001) and posttest (r = .48, p = .001) UFOV® scores were significantly related to baseline and posttest TIADL performance, respectively. This study emphasizes that computerized cognitive remediation therapy may benefit cognitive and everyday functioning in this growing population.

### CUE COLOR AND FAMILIARITY AS ENVIRONMENTAL AIDS IN WAYFINDING FOR OLDER ADULTS

R. Davis, *Kirkhof College of Nursing, Grand Valley State University, Grand Rapids, Michigan*

Older adults often have problems wayfinding in unfamiliar environments. We examined the contributions of specific properties of cues (landmarks) – color, familiarly, and the number of cues - in wayfinding in community dwelling older adults. Using a virtual reality program, 133 subjects in 3 age groups (55-64, 65-74, and > 75) were asked to find a hidden target. The test required the subjects to learn and remember the location of the hidden target only using environmental cues. Subjects were tested in four cue conditions repeatedly over three days. Each cue condition varied with respect to the color and familiarity of the cues. Place learning performance included latency (time it took to find the target) and distance traveled to the target. Other measures were included in the analysis, including age group, cognitive ability, and computer experience. Subjects found the hidden target the fastest (F(3,2922)=13.16, p<.0001) and with the shortest distance traveled (F(3, 3100)=5.173, p=.002) when cues were both colorful and familiar. The youngest age group outperformed the oldest age group overall. There was a group by day interaction for latency (F(4, 2950)=3.61, p=.006) and distance traveled (F(4,3111)=2.70, p=.030) with the older adults showing worse performance than the younger and not showing learning until day 3 of testing. MMSE also interacted with day of testing for latency (F(2, 2925)=5.86 p=.003) and distance traveled (F(2, 3111)=6.45, p=.002) showing that those with higher MMSE scores (better cognition) performed better than those with lower MMSE scores.

### SUBJECTIVELY APPRECIATED BENEFITS FROM COGNITIVE FITNESS INTERVENTIONS IN OLDER WOMEN

V. Klusmann[1,2], A. Evers[1], R. Schwarzer[2], I. Heuser[1], *1. Psychiatry and Psychotherapy, Charité Universitätsmedizin Berlin CBF, Berlin, Berlin, Germany, 2. Freie Universität Berlin, Berlin, Berlin, Germany*

In a recent randomized controlled trial we showed that a mental and a physical activity program were effective to enhance or maintain cognitive fitness. A positive perception of one's own cognitive fitness is an important condition for high self-efficacy beliefs and, thus, can sustain independence in old age. Here, we pose the question whether objective cognitive benefits are reflected in subjective perceptions of memory and concentration. Healthy women (*N* = 259), aged 70 to 93 years, were randomized to participate for six months in either computer lessons or physical exercises or as controls. In addition to pre-post-tests of memory and executive function, perceived changes in memory and concentration were captured at baseline, at four and at six months and at a ten-month follow-up. Multilevel linear modelling was used to compare trends over time. Despite comparable objective cognitive benefits from the mental and the physical interventions (in contrast to the control group), only the women in the computer course perceived benefits in memory, *F*(2, 707.9) = 4.31, *p* = .01, and concentration, *F*(2, 714.2) = 4.75, *p* = .009. The exercise group, in contrast, rated only physical health as having improved, *F*(2, 562.0) = 4.63, *p*= .01. The perception of cognitive benefits seems to be biased towards the obvious type of interventions, i.e., gains are perceived in the corresponding activity domain only. A sensitization for transfer effects could enhance motivation and satisfaction with the outcomes in participants of intervention programs and may also be beneficial in terms of practical relevance.

## SESSION 1795 (SYMPOSIUM)

### LESBIAN, GAY, BISEXUAL, AND TRANSGENDER AGING: RELATIONSHIPS, REPRESENTATIONS, AND RESILIENCY

Chair: *B.R. Grossman, Health Science, San Jose State University, San José, CA, California*

The trajectories of lesbian, gay, bisexual, and trans (LGBT) people are unique from those of their heterosexual counterparts. Heterosexism and homohpobia (as well as bi- and trans- phobia) shape the lives and experiences of LGBT people, not only in young adulthood but also in middle and old age. Across the lifecourse, LGBT people (re)negotiate their relationships, especially intergenerational familial relationships, and identities in the context of these institutionally supported forms of discrimination. LGBT people also demonstrate resiliency in the new forms of community, civic engagement, and family they create as means of survival. This symposium brings together members from the Rainbow Research Group, an informal Interest Group of GSA, to explore the role of relationships, representations, and resiliency for LGBT older people. The papers in the symposium highlight the ways in which LGBT identity can: influence relationships with biological family members, be (re)presented through digital media in ways that both fight and reproduce stereotypes for older adults, and serve as an important starting point for theorizing strategies to promote resilience and visibility.

### DECREASING VULNERABILITY AMONG LESBIAN, GAY, BISEXUAL, AND TRANSGENDER ELDERS: A CRITICAL INTERACTIONIST APPROACH

P. Burbank, D. Martins, *Nursing, University of Rhode Island, Kingston, Rhode Island*

Lesbian, gay, bisexual, and transgender (LGBT) elders are an invisible, vulnerable minority with unique needs. They face marginalization and reduced social power on several fronts – because of their age, sexual orientation, and gender as most are women. This paper describes a new theoretical perspective, critical interactionism, and its application to research and practice to help decrease vulnerability and improve health of LGBT elders. Critical interactionism combines symbolic interactionism and critical theory, typically viewed as divergent theoretical perspectives, so that both micro and macro levels of issues facing LGBT elders come into focus and strategies for change across individual and societal levels can be developed and applied. New research questions emerge from this perspective with expanded possibilities for theory development and the potential for innovative practice strategies that can address individual client and larger system problems through empowerment of LGBT clients and health care professionals who care for them.

### HOW THE DISCOVERY OF A GRANDCHILD'S GLBQ SEXUALITY IMPACTS GRANDPARENT-GRANDCHILD RELATIONSHIPS

K. Scherrer, *University of Michigan, Ann Arbor, Michigan*

Sexual orientation is an under-examined aspect of U.S. families that has emerging relevance to contemporary family life as younger adults are increasingly likely to "come out" as gay, lesbian, bisexual and queer (GLBQ) and insist on inclusion in their families of origin. Extant research on GLBQ family relationships has been largely myopic in its focus on parent-GLBQ child relationships, leaving a noticeable absence in the literature of the perspectives and experiences of grandparents themselves, and to a lesser extent of GLBQ grandchildren. This research project examines: How does the discovery of a GLBQ grandchild's sexual identity shape the relationship between grandparents and their adult grandchild? To respond to this question, I utilize 24 in depth qualitative interviews with 13 grandparents and 11 GLBQ adult grandchildren from the same family to better understand their changing relationship after a grandchild has "come out." I attend particularly to how these relationships have changed over time within in a family context. Findings indicate that "coming out" may have less salience for grandparent-grandchild relationships than other family relationships. Findings also indicate that "coming out" may facilitate closeness in grandparent-grandchild relationships, while at the same time may also reveal sexuality specific intergenerational differences in family expectations, such as with marriage or geographical proximity. After attending this session, participants will be able to describe how sexual orientation may impact grandparent- GLBQ adult grandchild relationships.

### IN THE SHADOW OF SEXUALITY: OLDER AFRICAN AMERICAN SEXUAL MINORITIES, HEALTH AND SOCIAL SUPPORT

M.R. Moore, *1. Sociology and Resource Centers for Minority Aging Research, University of California, Los Angeles, Los Angeles, California, 2. UCLA Resource Centers for Minority Aging Research, Los Angeles, California*

This work examines the interaction of racial group membership and sexual orientation as it relates to dimensions of social support. It analyzes participant-observation, focus group and interview data from a pilot study of 25 African-Americans born before 1955 who self-identify as lesbian, gay, bisexual or same-gender-loving. Despite sexual minority status, many older gay racial minorities report close relationships with family members but remain distant in the types of information they are willing to share about their lives. They provide substantial instrumental support to kin but may not receive sufficient emotional support to mitigate experiences of loneliness and social isolation that increase with age. These findings have implications for how we conceptualize "open" and "hidden" expressions of gay sexuality in older cohorts, the relationships aging sexual minorities have with others in their families and racial communities, and the development of interventions to address health inequities for this population.

### METHODOLOGICAL CHALLENGES IN STUDYING RARE, INVISIBLE AND MARGINALLY VISIBLE GERIATRIC POPULATIONS: EXAMPLES FROM TRANSGENDER AGING RESEARCH

T.M. Witten, *Center for the Study of Biological Complexity, Virginia Commonwealth University, Richmond, Virginia*

With the increasing interest in studying the GLBTI-identified populations, there is a concurrently growing interest in exploring the aging experience of GLBTI elders. While the literature in this area has been growing over the past few decades, little has been written about methodological challenges surrounding research with these populations and in particular methodological issues around aging-related studies. In this presentation we discuss some of the important methodological challenges that arise when studying rare, invisible or marginally visible geriatric populations with a special focus on how to work with transgender-identified populations.

### "WELL-EXPERIENCED DADDIES" AND "MATURE WOMEN" - REPRESENTATIONS OF OLD AGE AND AGEING BODIES IN WEB-BASED GLBTQ COMMUNITIES

A. Siverskog, *National Institute for the Study of Ageing and Later Life, Linköping University, Norrköping, Sweden*

Old persons are often considered asexual while simultaneously the concept of successful aging includes ideal of an active sex life in old age. These contradictory discourses surrounding old age and sexuality raise questions of old people's possibilities to express desires and wishes for intimacy, sexuality and sex. These questions are even more relevant considering sexual minorities whose sexuality often caused feelings of shame and stigma during their life course. This paper explores how persons aged 60 and over, who are identifying as homo-, bi-, transsexual or queer, present themselves and their ageing bodies through personal profiles in two different web-based GLBTQ communities. The paper focuses the self presentations and how what is sought – friends, partners, and sexual contacts – is described. It also explores how social positions as class, gender, ableness and age are interconnected and accentuated when presenting the self.

# SESSION 1800 (PAPER)

## LIVING WITH CHRONIC ILLNESS

### GENDER VARIABILITY OF PSYCHOLOGICAL DISTRESS AND PAIN: EXAMINING THEIR INFLUENCE ON SEXUAL ACTIVITY AND BODY IMAGE IN OLDER CANCER PATIENTS

J. Krok[1], T. Baker[1], S. McMillan[2], *1. School of Aging Studies, University of South Florida, Tampa, Florida, 2. Moffitt Cancer Center, Tampa, Florida*

Psychological distress is common symptom often reported by patients experiencing a chronic medical illness. This is relevant particularly among older adults reporting cancer-related pain. This prospective study examined the impact of cancer pain and psychological distress (i.e., worry, body image) in a sample of older adults (N=232) receiving outpatient services from a large comprehensive cancer center. Preliminary data indicated that 79% of the participants reported pain (83% of the women), and that women were also more likely to report their pain as cancer-related (61%). In examining psychological distress, we found that sexual inactivity, sleep problems, and body image were the most severe and distressing symptoms related to cancer treatment for men and women. Analyses further indicated that severity and distress of sexual problems and body image issues were moderately correlated with reports of sadness (r=.50, p<.001), worry (r=.54, p<.001) and nervousness (r=.51, p<.001) Being older (b=.046, p<.01) and white (b=1.17, p<.01) were found to be associated with the severity of sexual problems among this sample of adults (F6,43 =2.84, p<0.05). Pain severity, however was not a significant indicator (p = .071). This finding warrants further study. Our results emphasize the need for further studies examining psychological indicators, and the impact they have on body image perceptions and sexual activity in older cancer patients.

### WATCHFUL WAITING OR ACTIVE SURVEILLANCE: LABEL AFFECTS ON ACCEPTANCE OF MONITORING PROSTATE CANCER

D. Bailey[1], A. Cooper[2], M. Luce[3], K. Weinfurt[4], M. Wallace[5], *1. Duke University School of Nursing, Durham, North Carolina, 2. Duke University Social Science Research Institute, Durham, North Carolina, 3. Duke University The Fuqua School of Business, Durham, North Carolina, 4. Duke University Department of Psychiatry and Behavioral Sciences, Durham, North Carolina, 5. Fairfield University School of Nursing, Fairfield, Connecticut*

The value of prostate-cancer screening remains an open question and has recently been called a public health disaster. Many men diagnosed with disease as a result of such screening pursue aggressive treatments that have significant, deleterious effects on their quality of life (QoL) but do not necessarily prevent problems or prolong life. Close observation for appropriately selected patients may maintain QoL without increasing the chance of the cancer spreading. Yet few men who are eligible for this non-invasive approach to early-stage, localized prostate cancer pursue monitoring instead of invasive treatment. We used a randomized experimental exposure administered via an online questionnaire to examine the way in which a variety of labels made monitoring (rather than invasive treatments) more appealing to 600 men at risk for prostate cancer. In this paper we present our findings, which include a relatively high level of acceptance for monitoring among our subject population, and relatively little variation across the different labels whose impact we explore. We will discuss the implications of these findings for further research and clinical practice.

### THE BENEFITS OF AGE ON DEPRESSION AND ANXIETY SYMPTOMS AMONG END-STAGE LIVER DISEASE PATIENTS

A. Eshelman[2], M. Abouljoud[2], T. Meyer[2], D. Fischer[2], D. Moonka[2], D. Paulson[1,2], K. Brown[2], *1. Institute of Gerontology/Dept. of Psychology, Wayne State University, Detroit, Michigan, 2. Henry Ford Hospital, Detroit, Michigan*

Declines in frequency of depression through age 75 have been reported by Teachman and others. Evaluating this trend among patients with end-stage liver disease (ESLD), this longitudinal study compares older and younger, men and women anticipating liver transplant on the Hospital Anxiety and Depression Scale depression and anxiety indices (HADS-D and HADS-A, respectively) and the SF-36 mental health component summary measure (MHCS). The sample included 257 liver transplant surgery candidates ranging in age (18-74 years), with available post-transplant data for 74 participants. In cross-sectional analysis of baseline data, the sample was grouped into tertiles by age. Results of a two-way MANOVA indicated that older participants reported fewer anxiety symptoms than those in either the first (p<.01) or second (p=.01) tertiles, and fewer depression symptoms (p=.05) and better MHCS scores (p=.01) than those in the youngest tertile. Female participants endorsed more symptoms on the HADS-A (F=6.06, p=.02), but not on other measures. Differences between patients based on median split by age, and gender before and after liver transplant on mood, anxiety and global health were evaluated using repeated-measures two-way ANOVAs. Results indicate improvements across all measures following transplant (p<.01) and no significant interaction by age. Between-subjects, older participants reported fewer symptoms on the HAD-A (F=7.03, p=.01) and HAD-D (F=3.87, p=.05), and better functioning on the MHCS (F=4.77, p=.03). These results suggest that the normative decline of depression and anxiety symptoms throughout adulthood is robust despite ESLD and liver transplant. These findings contribute to the literature regarding emotional development in late adulthood.

### JUST TRYING TO FIND MY WAY: A LONGITUDINAL STUDY OF AGING WITH HIV AMONG OLDER AFRICAN AMERICANS IN DETROIT

A.L. Nevedal, *Wayne State University, Detroit, Michigan*

Older adults represent approximately 25% of all HIV/AIDS cases, but research estimates that the percentage will increase to 50% by the end of 2015. This increase is due to advancements in Highly Active Anti-retroviral Therapy (HAART) allowing people to live longer with HIV and improved awareness and HIV testing of older adults. People with HIV are living longer and into old age, yet little is known about the long-term socio-cultural consequences of aging with a stigmatizing and chronic illness or how HIV alters the aging experience. Findings are reported from dissertation research building on a longitudinal study of African Americans with HIV [RO1AI49113-01]. Semi-structured, in-depth, interviews were conducted among older African Americans with HIV (N=14). Drawing from a longitudinal data-set, the experience of living with HIV is analyzed at three time points (project beginning/end, dissertation follow-up), providing up to seven years of information on HIV experience for each participant. Becker's framework of life course disruption and reorganization were utilized to discover and describe the socio-cultural consequences of aging with HIV. Qualitative analyses reveal how HIV disrupts the life course and the ways older adults learn to live with HIV despite major disruptions to intimate and sexual relationships. Anthropological inquiry into this population can provide insight into the influence of stigma on normative life course transitions, possible sources of resilience, and insights into aging provided by HIV experience.

## SESSION 1805 (SYMPOSIUM)

### QUALITATIVE DATA: UNCOVERING MEANINGS AND SUBJECTIVE EXPERIENCES IN AGING RESEARCH

Chair: *A. Kydd, Health Nursing and Midwifery, university of the west of scotland, Hamilton, Lanarkshire, United Kingdom*
Discussant: *C. Brown, Seasons of Life LLC, Parker, Colorado*

Qualitative researchers observe people in their natural settings and attempt to interpret or make sense of phenomena in terms of the meanings people bring to them (Denzin and Lincoln, 2003). Qualitative data embraces the uniqueness of the individual and seeks to explore and uncover meanings and subjective experiences as perceived by the individuals participating in the research. Brett Davies(2007) states that qualitative research is a situated activity that locates the observer in the world. The debate between quantitative research and qualitative research continues, with advocates of the two methodologies entrenched in arguments on scientific rigour and the search for 'truth'. This symposium is not concerned with arguing which methodology is best; it acknowledges that the best method is that which serves to address the answer to the research question (Robson, 2002). It is however concerned with illustrating how each author has used a qualitative methodology in a rigorous manner in order to look at meanings and subjective experiences from the participants involved in studies on aging research. Each paper will address the qualitative methods used and outline the strengths and limitations of the approach. The symposium hopes to attract both qualitative and quantitative researchers, plus new researchers and experienced researchers, to listen to the papers presented and participate in the discussion on the research approaches used by each author.

### SOCIAL NETWORKING FOR THE ELDERLY: SUSTAINING COMMUNICATIONS IN TRANSITIONS

M.D. Williams, *CaringFamily, LLC, Boulder, Colorado*

Elders transitioning to assisted living and skilled nursing environments often lose connection to their social networks. CaringFamily has created an Internet service (the Family Connections Service) that re-establishes, enhances and influences the communications of an elder and their Social Support Network. Each member of the network uses mechanisms already tuned to their personal skills, knowledge and inclinations. Most elders use pen & paper. Family members use common digital tools (e.g. email, Internet, camera-phones). Staff use computers, pen & paper and artifacts made available at the facilities (e.g. binders, kiosks filled with colorful cards, instant cameras). The volume of data automatically collected is huge. We are observing an explosion of communications phenomena. A research workbench has been created to support online consenting and collection of survey data. The survey response rate has been, surprisingly, running about 90% across different studies. The phenomena we are observing demand a wide array of mix methods study.

### USING ETHNOGRAPHIC ANALYSIS TO IDENTIFY CONFLICT BETWEEN QUALITY OF LIFE AND QUALITY OF CARE IN THE NURSING HOME

T.A. Allison, *Medicine, UCSF/Jewish Home, San Francisco, California*

This research utilizes participant-observation methodology and ethnographic analysis in order to examine the tension between social and medical models of care in the nursing home. Ethnomusicology research methods provide insight into larger quality of life (QOL) and quality of care (QOC) issues in institutional care. The data includes two years' worth of observations of and participation in songwriting and sing-along groups. Ethnographic analysis reveals disruptions in nursing home residents' attempts to learn and to create a sense of community within the institution. Nursing home residents encounter routine, often painful, interruptions to scheduled activities programs because of medical orders for medications and blood sugar checks. If we are to develop humane models of institutional care for our elders, we can utilize ethnographic methods in order to better understand the human desires of elders (QOL), and the disruptions that arise in the process of providing quality medical and nursing care (QOC).

### HOW COUPLES COPE WITH HEARING LOSS IN LATER LIFE: LESSONS LEARNED FROM A QUALITATIVE PILOT STUDY

T.A. LaPierre[1], M.C. Jiregna[2], S.H. Ferguson[2], *1. The Gerontology Center, University of Kansas, Lawrence, Kansas, 2. University of Kansas, Lawrence, Kansas*

Research suggests that hearing loss in one or both partners can have a significant impact on marriage. This pilot study used semi-structured interviews with questions targeting problems couples might face in their marital relationship due to hearing loss. Participants were seven couples aged 69-85, interviewed separately. Prior to the interview, each spouse completed a questionnaire in which they reported their hearing status, their assessment of their spouses hearing status, length of marriage, and marital satisfaction. Participants' hearing assessment results were also examined. Although participants reported that hearing loss did not have a direct impact on their marital relationship a number of communication challenges were reported. The meaning attributed to the experience of hearing loss emerged as a potential link between hearing loss and marital satisfaction. Lessons learned during the course of the pilot study will be discussed in light of their personal application to future qualitative and quantitative research projects.

## SESSION 1810 (POSTER)

## RESEARCH METHODS

### DEVELOPING A PREDICTIVE MODEL FOR ELDERLY DEPRESSION: DOES NEIGHBORHOOD MATTER: RESULTS FROM A REGRESSION ANALYSIS USING THE NYC HEALTHY INDICATORS PROJECT

W.D. Cabin, *Stockton College, Glen Rock, New Jersey*

Depression occurs at significant rates in the United States and New York City among the general population, adult population, and elderly population. Depression has negative physical and mental health, psychological, and financial consequences for the person experiencing depression, as well as their friends, family, and caregivers. 90% of American and New York City elderly are community-dwelling, non-institutionalized, living in neighborhoods. An extensive literature review indicates there is some consensus on individual-level characteristics which are risks for depression. However, there is limited research, with mixed results, on the influence of neighborhood characteristics on depression in the general population and the adult population. The research indicates some limited, mixed support for the influence of neighborhood characteristics, with study limitations. There are only a few studies which address the inter-relationship of multiple individual and neighborhood level characteristics on a path to depression. The literature is even more limited, in fact understudied, on the influence of neighborhood-level characteristics on elderly depression and the inter-relationship of individual and neighborhood-level characteristics on the path to depression among the elderly. This paper explores the ability of data analysis of the Healthy Indicators Project (HIP) to better inform knowledge on the issue, resulting in a predictive model of eight variables which are statistically significant predictors of elderly depression. The model finds depression is highest with: visual impairment, frequent falling, lower income, little leisure-time physical activity, low neighborhood satisfaction, trouble hearing, arthritis/rheumatoid arthritis, and being disabled. Limitations and implications for future research, policy and practice are discussed.

### TRANSDISCIPLINARY TRANSLATIONAL RESEARCH ON AGING: THE CORNELL-COLUMBIA EDWARD R. ROYBAL CENTER

E. Wethington[1], C. Reid[2], R. Meador[1], K. Pillemer[1,2], *1. Human Development, Cornell University, Ithaca, New York, 2. Weill Cornell Medical College, New York, New York*

Transdisciplinary research has emerged as a national priority in health research. The aims of the Cornell-Columbia Edward R. Roybal Center, the Translational Research Institute on Pain in Later Life (TRIPLL, 2009-2014), are to foster transdisciplinary translational scientific research on pain in older people through an innovative pilot studies program and investigator development infrastructure and to evaluate the impacts of Roybal Center programs on investigator development, institutional change, and community capacity for supporting research. Community translation is a particular focus, and community partnerships are encouraged. This presentation reports on an ongoing evaluation of outcomes produced by the Cornell Roybal Center (1993-present) as it has transformed in response to the federal mandate for translational research. Evaluated outcomes included: 1) implementation of trans- or multi-disciplinary perspectives in research; 2) investigator productivity and other indicators of strategic career development; 3) investigator adoption of methods outside of their disciplinary base; 4) participation in Roybal investigator development events; 5) institutionalization of Roybal seminars in university programs; 6) reports produced and disseminated for practice audiences; 7) incorporation of community stakeholders in research proposals and publications; and 8) adoption of research-based policy and practice change in services for older people. Outcomes were analyzed in relationship to Roybal program development, investigator characteristics, and institutional changes. Investigator productivity increased after the adoption of formal transdisciplinary mentoring. Institutional support for translational research increased in response to federal initiatives, with the Roybal Center serving as a base for translation to the community. A state-wide translational research infrastructure is in the planning stages.

### USE OF THE CALIFORNIA OLDER ADULT STROOP TEST IN A LONGITUDINAL STUDY

M. Currell[1], K. Thompson[1], G. Byrne[1,2], N.A. Pachana[1], *1. University of Queensland, Psychology, Brisbane, Queensland, Australia, 2. University of Queensland, Psychiatry, Brisbane, Queensland, Australia*

Background: The California Older Adult Stroop Test (COAST) is a version of the Golden Stroop designed specifically for older adults, with a number of features that make it more suitable for an aging population. These include a reduced number of items to limit the effects of fatigue on performance scores and larger type to take account of normal loss of visual acuity. Additionally, the COAST utilizes red, yellow and green colors to limit reduced performance due to blue green color confusion that frequently occurs with advancing age. The COAST has demonstrated excellent psychometric properties in a wide range of healthy and clinical populations, including individuals with mild to moderate dementia. Method: The COAST has recently been used as part of the well-characterized Longitudinal study of Aging in Women (LAW). The LAW study was established to investigate physical and cognitive changes of women aged 40 to 80 years. A broad neuropsychological test battery, including the COAST, has been administered at 2 year intervals. Results: COAST has shown good convergent validity with the DKEFS Trial Making Test Number Letter Sequencing (completion time), $r = .560$, $n = 352$, $p < .01$ and the DKEFS Tower of London total achievement score, $r = -.356$, $n = 374$, $p < .01$. Divergent validity and reliability are also excellent. Conclusions: The COAST offers a design and psychometric advantage over more traditional versions of the Stroop not designed for older adults. These results support the use of the COAST for assessing executive dysfunction in later life.

### A FACTOR ANALYSIS OF THE EXECUTIVE INTERVIEW (EXIT) UTILIZING A NURSING HOME SAMPLE

L.A. Gerolimatos, M.R. Nadorff, M. Smith, B. Edelstein, *Department of Psychology, West Virginia University, Morgantown, West Virginia*

The current study examined the reliability and factor structure of The Executive Interview (EXIT), a 25-item measure that tests executive functioning (Royall, Mahurin, & Gray, 1992). The EXIT can be used in a variety of settings, and has been validated on individuals with mild cognitive impairment (Stockholm, Vogel, Gade, & Waldemar, 2005). Scores on the EXIT are significantly related to scores on other measures of executive functioning, including the Stroop test (Stockholm et al., 2005), and the Frontal Assessment Battery (Moorhouse, Gorman, & Rockwood, 2009). It has also been shown to predict behavioral and functional impairment (Royall, Palmer, Chiodo, & Polk, 2005). To date, there has been no research examining the factor structure of the EXIT. The EXIT was examined in a sample of 79 residents ($M = 67$ years old, 53% female) of a state-operated nursing home in West Virginia. Little's MCAR test was not significant, $\chi2 (334, N = 79) = 324.6$, $p = .634$, indicating that the data may be assumed to be missing at random. Missing data were imputed using expectation maximization, which is an appropriate method for exploratory factor analysis (Tabachnick & Fidell, 2007, p. 68). The cronbach's alpha for the EXIT was 0.77, demonstrating acceptable internal consistency. An exploratory factor analysis using maximum likelihood extraction and promax rotation found a nine factor solution that explained 67% of the variance in the measure. The utility of this nine factor solution, as well as their conceptual relation with executive functioning, will be discussed.

### RELIABILITY AND CONSTRUCT VALIDITY OF THE PERCEIVED ENACTMENT OF AUTONOMY IN JAPANESE OLDER ADULTS

M. Matsui, *Nagasaki University, Nagasaki, Japan*

Background:Perceived Enactment of Autonomy (PEA) recognizes that people can sense their own ability act autonomously in meeting needs for both dependence and independence. Little is known about PEA among Japanese people, who are experiencing rapid aging society. The aim of this study was to assess psychometric properties of PEA among community-dwelling older adults in Japan. Method:PEA developed by Hertz (1991) contains 31 positively and negatively worded statements and total scores can range from 31 to 124, with higher scores indicating a higher level of PEA. There are 3 subscales: Voluntariness, Individuality and Self-Direction. Analyzed was internal reliability among 220 older adults. Construct validity was obtained by testing theoretical relationship between PEA and Locus of Control which has two subscales of Internal and External Control. Higher point of External Control indicates less controlled by external factors. The researchers obtained institutional review board approval from Nagasaki University. Results:Cronbach's alpha of PEA was .933 and for subscales were .745 for Voluntariness, .864 for Individuality, and .780 for Self-Direction. Construct validity was shown that PEA and Locus of Control was significant related ($r=.255$, $p=0.003$), especially PEA and External Control ($r=.408$, $p=0.003$), and Individuality and External Control ($r=.415$, $p<0.001$). Conclusions:PEA had satisfactory psychometric properties. It can be used to measure autonomy in the Japanese older adults.

### STORIES FROM OLDER PERSONS EXPERIENCING HOMELESSNESS IN A MODERN SKID ROW NEIGHBORHOOD

P. Carder, J. Mandle, *Institute on Aging, Portland State University, Portland, Oregon*

This poster presents analysis from a qualitative study of individuals who were experiencing homelessness or residing in transitional housing in Portland, Oregon. The project, conducted by a non-profit service organization, was designed to learn how homeless individuals accessed housing and social service programs. The data, based on over 500 interviews, are available for secondary analysis through a public-access website. Secondary analysis is relatively uncommon in qualitative research, and so this paper describes some of the pros and cons of using such a data source. For example, the data had been coded and themes developed by the individuals who conducted interviews, but applied by a set of volunteers who lacked qualitative data training. Thus, we largely ignored the existing code categories and instead started from un-coded data, using grounded theory methods to analyze the 26 interviews that were conducted with individuals who were between the ages 55 and 74 at the time of their interview. Findings indicate that older persons experience problems specific to their age as well as those common to younger adults. Age-specific themes include: being old but not "old enough" for housing and services, work-based job discrimination, and age-related health decline. Themes common to younger individuals included negative societal responses, feelings of stigma, and substance abuse. The poster provides suggestions for addressing the particular concerns of individuals who are not traditionally viewed as "old" but are old for street life. It also offers insights on how to access and use a secondary source of qualitative data.

## DYNAMIC ANALYSES OF THE INTERRELATIONSHIP BETWEEN MOTHERS AND DAUGHTERS ON A MEASURE OF DEPRESSIVE SYMPTOMS

R. Reyes, *University of Southern California, Los Angeles, California*

Much prior research has attempted to analyze a reciprocal dynamic relationship between older parents and their adult children. Mothers are generally more invested in their children's lives and the relationship between mother and adult daughter has been shown to have more emotional ties than that between a mother and her adult son. The goals of this study are to explore the dynamic interrelationship between mother and daughter on depressive symptomatology using longitudinal data. The focal data are based on mothers (mean age = 56) and their biological daughters (mean age = 32) from the University of Southern California's Longitudinal Study of Generations (LSOG). Four kinds of structural equation model (SEM) analyses are presented in order of complexity and each are designed to develop and test specific dynamic structural equation model hypotheses. The model fits of varying dynamic cross-lagged SEMs are compared for goodness-of-fit to various forms of the LSOG data. An initial two-time point regression based model suggests an adult daughter's depressive affect to be a leading indicator of her older mother's depressive symptoms. However, more complex models using more of the available data and advances in measurement models suggest the directionality of such developmental processes are not so simple or uniform. Substantive results are discussed as they pertain to all the models.

## PREDICTORS OF ATTRITION IN A LONGITUDINAL STUDY OF OLDER ADULTS

J. Socha, J.E. Calamari, *Rosalind Franklin University of Medicine and Science, North Chicago, Illinois*

Selective attrition in longitudinal studies poses a serious threat to the validity of conclusions. Relatively little is known about predictors of non-participation in surveys of older adults. The current study examined demographic and functional predictors of attrition in a 2-year longitudinal study of late-life anxiety (N=204). Emotional, cognitive, and physical functioning were assessed via self-report and clinical interview at four six-month intervals. The percent of remaining baseline participants were as follows: 75% (Time 2); 56% (Time 3), and 49% (Time 4). Attrition was classified as loss to follow up, refusal, and mortality/morbidity. Reasons for non-participation could not be ascertained for 28 subjects, who were subsequently excluded from analyses. Multinomial logistic regression revealed age, education, and gender did not significantly influence attrition status. Race (non-white) increased odds of mortality/morbidity attrition (OR= 1.86; p<.043). Unadjusted analyses revealed problematic emotional, cognitive, and physical functioning significantly increased the odds of mortality/morbidity attrition, as reflected by scores on the following self-report measures: Positive Affect Negative Affect Scale (PANAS), State Trait Anxiety Inventory (STAI), Anxiety Sensitivity Inventory (ASI), Short Form Health Survey – 36 (SF-36), and the Memory Functioning Questionnaire. Problematic mental health functioning, as measured by the SF-36, significantly increased the odds of attrition due to refusal. After adjusting for the significant influence of race, only the MFQ, SF-36, and ASI remained significant predictors of mortality/morbidity. Findings suggest emotional, cognitive, and physical functioning are important predictors of mortality/morbidity attrition. Furthermore, self-reports may be more informative in predicting nonresponse among older adults compared to clinical interviews.

## RELIABILITY OF THE QUALITY OF CARE MEASURE FOR DEMENTIA CAREGIVERS

M. Stephens, K. Vo, F. Moise, V. Samarina, E. Rogers, R. Gomez, *Palo Alto University, Palo Alto, California*

This study proposes to examine one of the self-report survey's that has been distributed to caregivers in the Resources for Enhancing Alzheimer's Caregiver Health II (Schulz et al., 2001), a nationwide initiative to help understand the impact of Alzheimer's Disease on caregivers. As part of a larger study, the caregivers were given the 42-item Quality of Care Measure created by the principle investigators of the REACH II initiative (Schulz et al., 2001). In order to examine the internal consistency of the Quality of Care Measure, Chronbach's alpha was calculated for the total sum and four subscales, which include: positive aspects of environment (five questions), hazards in environment (eleven questions), frustrations of caregiving (eight questions), and exemplary caregiving (eighteen questions). Reliability analyses indicated that the total score consisting of 42 items had a moderate reliability of 72.5%. The Positive aspects of environment had relatively poor reliability of 44.8%. The Hazards in Environment had the worst reliability 39.6%. The Frustrations of Caregiving had moderate reliability of 73.5%. The exemplary Caregiving had the best reliability 82.7%.The findings of this study suggests that only the Quality of Care total score and 2 of the 4 subscales (Frustrations of Caregiving and Exemplary Caregiving) are appropriate to measure the quality of care. Positive Aspects of Environment and Hazards in the Environment were unreliable subscales and should not be used in data analyses. This study indicated that researchers should take care in selecting measures with reliable psychometric properties to maintain internal consistency.

## COGNITION IN OLDER ADULTS: A COMPARISON OF RAW AND NORMATIVE DATA

C. Flynn Longmire, J. Mintzer, *Medical University of South Carolina, Charleston, South Carolina*

Cognition in older adults can be characterized by normal age-related changes, mild impairment or dementia. Knowledge is increasing, yet much is unknown about cognitive changes in older adults especially as it relates to Alzheimer's disease, the most common type of dementia. Understanding of changes within various cognitive domains, related risk factors, and possible differences depending on group membership is incomplete. Analysis of such questions often includes many background and medical history variables. Normative data, pre-adjusted for demographics, may be useful in these kinds of analysis. Purpose: This project considered the effectiveness of using demographically-adjusted normative data as compared to analytically adjusting raw data for demographic variables. Methods: 102 older adults from 5 study sites across South Carolina were tested on attention and executive functioning. Linear regressions using raw scores or normative scores were compared to see if the normative scores effectively controlled for the effects of age, education, gender and race. Results: The normative scores controlled for race in all analyses and for the other variables at least once in the sets of models. Variables not completely adjusted for showed inconsistent significance and seemed to interact with other variables, both signs that these effects may be due to sample traits not ineffectiveness of the normative data. Conclusion: Sample effects notwithstanding, normative data can control for the demographic variables for which they are pre-adjusted in older samples, and may serve as analytic tools in the effort to understand the effects of various factors on the cognition of older adults.

### RETROSPECTIVE PILOT STUDY TO VALIDATE A HIGH RISK DISCHARGE SCREENING TOOL

A. Lathia[1], M. Costigan[2], A. Powers[2], L. Benedict[2], S. Fosnight[2], S. Hazelett[2], E. Baum[2], *1. Cleveland Clinic, Cleveland, Ohio, 2. Summa Health System, Akron, Ohio*

The purpose of this study was to test a screening tool designed to identify elderly patients at high risk for hospital readmission and determine its sensitivity. We tested the tool on 20 patients admitted to our Acute Care for the Elderly (ACE) unit who were hospitalized within the last 30 days. A quality improvement committee developed the screening tool to identify patients at high risk for readmission. To test this tool, we reviewed the charts of the current and previous admissions of 20 patients who had been re-hospitalized within 30 days. A score of ≥ 7 was considered positive for identifying a patient at moderate risk for readmission and a score ≥ 15 was considered high risk for readmission. The sensitivity of the screening tool was 80%. Of the 20 readmissions screened, 16 (80%) patients had a positive screen, with 8 (40%) at moderate risk and 8 (40%) at high risk for readmission. Only 4 (20%) patients screened negative. The majority of the patients were readmitted from home (independent living or assisting living). Early identification of high risk patients can facilitate more efficient direction of extra resources for discharge planning. This readmission screening tool appears to be sensitive for identifying patients at high risk for readmission. We are planning to trial this screening tool on patients who were discharged from the hospital and not readmitted, to determine its specificity.

## SESSION 1815 (SYMPOSIUM)

### POSITIVE AND NEGATIVE RELIGIOUS COPING AND MENTAL HEALTH IN VETERAN CANCER SURVIVORS

Chair: *K. Trevino, VA Boston Healthcare System, Brockton, Massachusetts, Harvard Medical School, Department of Psychiatry, Boston, Massachusetts*

Religious/spiritual beliefs are important to the process of coping with cancer. However, researchers have not explored positive and negative religious coping in cancer survivors. Interviews were completed with 48 veterans treated for cancer. The interview assessed experiences with cancer diagnosis and treatment, PTSD, depression, and patterns of positive (PRC) and negative (NRC) religious coping. 27% of participants reported using NRC to deal with their cancer. NRC was associated with lower levels of emotional support, higher levels of PTSD and depression, and greater likelihood of meeting DSM criteria A for PTSD. NRC was also associated with higher levels of posttraumatic growth. 69% of participants reported using PRC to deal with their cancer. No significant relationships emerged for PTSD or depression. However, PRC was associated with higher levels of posttraumatic growth. Certain religious coping strategies are associated with greater psychological distress. Cancer survivors using these strategies may benefit from mental health treatment.

### IS NON-DISCLOSURE TO RELIGIOUS CONGREGATIONS A BARRIER TO SUPPORT FOR OLDER ADULTS WITH HIV?

M. Brennan[1,2], S.M. Strauss[2], S.E. Karpiak[1,2], *1. Center on HIV and Aging, AIDS Community Research Initiative of America, New York, New York, 2. New York University College of Nursing, New York, New York*

By 2015, half of those in the US with HIV will be over age 50. This group has a high level of unmet needs and lacks effective social support. As they age, they will need to access community services, perhaps including those provided by religious congregations. However, HIV stigma inhibits many older people with HIV/AIDS (OPLWHA) from disclosing their status. We examined whether disclosure to the congregation would prevent OPLWHA (n=819) from accessing congregational services. Of those who attended religious services (54% attended at least monthly), 47% had not disclosed their HIV status. No significant differences in religious service attendance patterns following HIV diagnosis emerged between those who did and did not disclose. While non-disclosers were somewhat less likely to report congregational support, findings suggest that congregations, despite some inherent stigma, can be a feasible source of community support for older adults with HIV.

### PASTORAL CARE: TALKING ABOUT DEATH AND DYING

E. MacKinlay, *1. School of Theology, Charles Sturt University, Barton, ACT, Australian Capital Territory, Australia, 2. Centre for Ageing and Pastoral Studies, Canberra, Australian Capital Territory, Australia*

This paper reports on one component, (pastoral care), in a mixed study using weekly sessions over 18 weeks for people with dementia who were also depressed. The overall study aimed to evaluate effectiveness of four different programs in lowering depression levels among participants. The twenty-four participants in the pastoral care program were all in residential aged care. Sessions were led by a trained facilitator in five groups, were audio recorded and transcribed and a journal of non-verbal behaviours recorded by a research assistant. Qualitative analysis was conducted using NVivo8 with themes being compared with the format of spirituality in ageing based on a model developed by MacKinlay (2001). One important theme was attitudes to death and dying. The people with dementia freely shared both recent and older loss and grief experiences. The ability of the group facilitator to explore and support the participants was important in supporting the discussion.

## SESSION 1820 (SYMPOSIUM)

### THE INFLUENCE OF PLACE, SPACE AND SOCIAL SUPPORT ON THE HEALTH OF OLDER ADULTS

Chair: *B. Sellars, University of Pittsburgh, Pittsburgh, Pennsylvania*
Discussant: *T.C. Antonucci, University of Michigan, Ann Arbor, Michigan*

Among older adults, health and well-being is not simply influenced by one single context, but rather by the interaction between individual, and the personal and environmental resources that are available. The panel provides four research studies that all underscore the importance of recognizing social support as a factor in the aging process. First, a paper discussing how social support and geographic region (Pittsburgh vs. Memphis) are associated with mortality outcomes among adults will be presented. This study highlights the need to understand both the distal and proximal contexts in which aging occurs. The next presentation will address the role of social support in the diffusion of information among older adults residing in La Crosse, WI who had received knowledge about advanced care programs, as compared to older adults in surrounding areas who had not. This study underscores the need to understand how informational social support is spread within communities of older adults. The next paper addresses the role of social support in the disease specific context of the diabetes illness experience. This study discusses how social support positively impacts disease management in a proximal setting, with implications for future disease-related health problems. In the same vein, the final presentation will address how social capital (e.g., perception that neighbors are willing to help) is associated with self-rated health and ADL performance. This study is an example of how perceptions of social support may aid older adults functioning on daily tasks. A discussant will provide perspectives from psychology.

### EVALUATING THE RESPECTING CHOICES® ADVANCE CARE PLANNING PROGRAM

S.M. Moorman[1], D. Carr[2], K.T. Kirchhoff[3], B.J. Hammes[4], *1. Sociology, Boston College, Chestnut Hill, Massachusetts, 2. Rutgers University, New Brunswick, New Jersey, 3. University of Wisconsin, Madison, Wisconsin, 4. Gundersen Lutheran Medical Foundation, La Crosse, Wisconsin*

Diffusion of information through a social network is an important mechanism by which social support affects health, illness, and mortality (Smith and Christakis 2008). This study examines the potential diffusion effects of the Respecting Choices® advance care planning program that has been administered in La Crosse, WI since 1991. Participants in Respecting Choices® receive help from trained facilitators in discussing and documenting their end-of-life medical care preferences. We use data from a survey of over 5,000 white Wisconsin high school graduates in their mid-60s to assess whether survey respondents who reported having social ties in the greater La Crosse area were more likely than those reporting no ties to the region to have engaged in advance care planning. We find no evidence that the effects of the intervention have extended beyond its direct recipients to persons socially connected to La Crosse. We discuss implications for policy and practice.

### THE RELATIONSHIP BETWEEN SOCIAL CAPITAL AND HEALTH: DOES GENDER PLAY A ROLE?

J. Norstrand[1], S.M. Moorman[2], *1. Philadelphia Corporation for Aging, Philadelphia, Pennsylvania, 2. Boston College, Newton, Massachusetts*

Social capital (SC), including trust, networks and civic engagement, has been linked to better health and lower mortality among older adults. This study examined whether 6 indicators of individual level SC were associated with self-rated health and activities of daily living (ADLs) for men and for women. A sample of 2,329 adults aged 65 and older from Southeastern Pennsylvania were obtained from the Public Health Management Corporation 2008 dataset. Multiple regression analyses revealed that several SC indicators (trust neighbors, sense of belonging, perception that neighbors are willing to help, participation in community groups) were significantly associated with better self-rated health. Only participation in community groups was associated with better ADL performance. These relationships were stronger for women than for men. This differential impact of SC on health has important implications for community based interventions.

### THE INFLUENCE OF SOCIAL SUPPORT AND REGION ON CO-MORBIDITY AND MORTALITY: AN EXAMPLE OF THE BIOECOLOGICAL MODEL OF HUMAN DEVELOPMENT

B. Sellars[1], N.L. Watson[1], S. Spencer[2], R.N. Rooks[3], S. Rubin[4], S. Satterfield[5], T.B. Harris[6], A.B. Newman[1], *1. University of Pittsburgh, Pittsburgh, Pennsylvania, 2. University of South Carolina, Columbia, South Carolina, 3. University of Colorado-Denver, Denver, Colorado, 4. University of California-San Francisco, San Francisco, California, 5. University of Tennessee, Memphis, Tennessee, 6. National Institute on Aging, Bethesda, Maryland*

Using the bioecological model of human development as a framework, this study investigates the influences of the microsystem (social support) and macrosystem (Northern vs. Southern U.S. region) on mortality among older adults. The population consisted of 3,075 older adults from the Health, Aging, and Body Composition Study, living in Memphis, TN and Pittsburgh, PA (M= 73.6, SD= 2.9 years; 52% women; 42% Black. Nine hundred and seventy-five deaths (38.8/1,000 p-yr) occurred over approximately 8 years. In a Cox proportional hazards model of all-cause mortality, U.S. region and social support scores were each associated with mortality after adjustment for risk factors and chronic conditions: HR (95% CI) = 1.24 (1.09 - 1.41) for Memphis; 0.82 (0.76 - 0.86) per 10-point higher LSNS score. The association between social support and mortality did not vary by region. These data suggest independent contributions of microsystem and macrosystem environments to mortality risk in older adulthood.

### THE MULTIFACETED ROLE OF SOCIAL SUPPORT IN SHAPING THE DIABETES ILLNESS EXPERIENCE

N.J. Webster, *Case Western Reserve University, Cleveland, Ohio*

Poorly managed diabetes can lead to disease-related complications (i.e, amputations, blindness, and heart disease) and subsequent rapid declines in health. Using a U.S. national sample of adults aged 40-99 with type-II diabetes (N=26,002) this paper examines how social support influences the diabetes illness experience (complications, general health, activity limitations, and self-management). Controlling for demographic characteristics and duration of diabetes, respondents with more social support reported fewer diabetes-related complications. Also, independent of the number of complications, receiving more support was significantly related to better reports of health, fewer health-related activity limitations, and increased self-management (i.e., physical activity, daily servings of fruits and vegetables, and monitoring of blood sugar levels). Findings suggest social support can play a vital role in improving the health of older adults living with type-II diabetes and can foster better management of the condition and therefore has potential to prevent or delay future disease-related health problems.

## SESSION 1825 (PAPER)

## THE QUALITY OF SLEEP

### SOCIO-ECONOMIC PATTERNING OF SLEEP PROBLEMS IN MIDLIFE AND LATER LIFE: THE CONTRIBUTION OF SOCIODEMOGRAPHIC AND HEALTH-RELATED CHARACTERISTICS

S. Arber[1], T. Lallukka[2,1], R. Meadows[1], *1. University of Surrey, Guildford, United Kingdom, 2. University of Helsinki, Helsinki, Finland*

Sleep has been little researched within social gerontology, especially the social patterning of sleep. This paper aims to compare people in midlife (45-64) and later life (65+) in terms of (i) sociodemographic and socio-economic patterning of reported sleep problems; and (ii) health-related explanations for observed socio-economic differences. Methods: Over 4000 people (age 45-64, men=1068, women=1341; age 65+, men=831, women=1047) from the nationally representative UK Psychiatric Morbidity Survey, 2007 were analysed. The interviews included self-reported sleep problems on four or more nights per week. Separate nested logistic regression models for age 45-64 and age 65+ were fitted to examine how sleep problems varied with gender, marital status, worries, smoking, physical/mental health and measures of socio-economic circumstances. Results: In midlife and later life, strong links were found between socio-economic circumstances and sleep problems, particularly low household income, living in public housing, and low educational qualifications. Women reported significantly more sleep problems than men, as did the divorced and widowed compared with married respondents, particularly in midlife. Sleep problems of the divorced/widowed, especially among men, were linked to their more disadvantaged socio-economic circumstances. Reported worries, smoking, and measures of health did not explain the identified associations of disadvantaged material circumstances with sleep problems. Conclusions: Efforts to improve the socio-economic circumstances of older people might help reduce sleep problems, especially among the widowed and divorced. This research is part of 'SOMNIA, Sleep in Ageing', New Dynamics of Ageing initiative, supported by AHRC, BBSRC, EPSRC, ESRC and MRC (RES-339-25-0009).

### MARITAL QUALITY, SLEEP BEHAVIOR, AND OLDER ADULTS' PSYCHOLOGICAL WELLBEING

J. Bookwala, *Psychology, Lafayette College, Easton, Pennsylvania*

Data from 1,485 older adults (mean age=67.8) who participated in the National Social Life, Health, and Aging Project were used to test the indirect effects of marital quality via sleep behaviors on older adults' psychological wellbeing. Measures included marital quality (positive spousal exchanges, negative spousal exchanges, and marital happiness), sleep behaviors (frequency of sharing the same bed with one's spouse, typical number of hours of sleep per night, and restlessness of sleep in the previous week), and psychological wellbeing (depressive symptoms, loneliness, and anxiety). Path analysis testing the mediating role of sleep behaviors in the link between marital quality and psychological wellbeing indicated an excellent fit of the model to the data ($\chi 2[11, N=1485]=12.6, p>.32$; NNFI=.996; CFI=.999; RMSEA=.01). The model explained 26.3%, 21.3%, and 17.1% of the variability in depressive symptoms, loneliness, and anxiety, respectively. Overall, better marital quality was associated with a higher frequency of a shared bed, more hours of sleep at night, and less restless sleep. In addition, more frequently sharing a bed with one's spouse, more hours of sleep, and less restless sleep generally were linked with better psychological wellbeing. The indirect effects of the marital quality indicators on psychological wellbeing via sleep behaviors were statistically significant; the link between marital quality and psychological wellbeing was partially mediated by less frequently sharing a bed with one's spouse and greater sleep restlessness. These results show that among married older adults, sleep behaviors may serve as a mechanism by which poor marital quality explains lower psychological wellbeing.

### SOCIAL AND HEALTH INFLUENCES ON THE SLEEP QUALITY OF OLDER ADULTS LIVING IN THE UK

R. Luff, S. Venn, S. Arber, *Sociology, University of Surrey, Guildford, Surrey, United Kingdom*

The Pittsburgh Sleep Quality Index (PSQI) was designed to measure subjective sleep quality over the previous month and to discriminate between poor and good sleepers. The PSQI includes indicators of sleep latency, sleep duration, sleep disturbances, use of sleep medication, subjective sleep quality and daytime dysfunction. This paper examines how health and social factors influence the quality of sleep of older adults. A self-completion questionnaire which included the PSQI was completed by 1085 older people (575 males and 583 females), from South East England, aged over 65 who were living in their own homes. It was found that about half of older adults scored 6 and above on the PSQI, indicating they experience poor quality sleep. Logistic regression using a range of socio-demographic and health predictor variables was undertaken. Gender, social economic status (SES) and health problems were all significant predictors of poor sleep. In particular, older women reported poorer sleep than men, and those who had been in professional occupations reported better sleep than those in most other SES groups. Greater numbers of health problems were associated with poorer sleep, with cancer and muscular/skeletal conditions specifically relating to higher PSQI scores. There was no effect of age once health problems were entered into the model, suggesting poor sleep amongst older people is not purely age related, but is influenced by more specific health and social factors. We acknowledge support from the New Dynamics of Ageing initiative, a programme supported by AHRC, BBSRC, EPSRC, ESRC and MRC (RES-339-25-0009).

### SLEEP DISTURBANCE IN LATER LIFE: THE IMPACT OF WORRIES AND ANXIETY

S. Venn, S. Arber, *Department of Sociology, University of Surrey, Guildford, United Kingdom*

Background It is widely reported by older people that their sleep patterns have changed with increasing age. Older people report difficulty getting to sleep, problems maintaining sleep, and waking early. Factors that impinge on sleep in later life include poor health, medications, and worries and anxiety. Aims and Methods This paper focuses on the impact of worrying and anxiety on quality of sleep through qualitative interviews (n=62) with men and women aged 65-95, with poor sleep, living in SE England. Results Results indicate a gender difference in the types of worries that disturb older people at night. Women most often reported worrying about family members, whilst men's sleep was disturbed by concerns for their own health, or by general non-specific anxiety. Both men and women also reported worrying at night about the future in terms of financial security and health. Disturbed sleep and reduced sleep quantity were also a cause of anxiety. Strategies to cope with sleep disturbance because of worrying ranged from practical approaches, such as making lists of problems and using relaxation and meditation techniques, to distraction techniques, such as doing household chores or watching television. Conclusions Sleep disturbance caused by worrying is commonly reported by older people and a variety of coping mechanisms are employed to deal with worries, some of which facilitate sleep, such as relaxation techniques, but some delay sleep, such as watching television. Research supported by the New Dynamics of Ageing initiative, a multidisciplinary research programme supported by AHRC, BBSRC, EPSRC, ESRC, MRC (RES-339-25-0009).

### THE CONTRIBUTION OF SLEEP QUALITY TO SELF-RATED HEALTH IN OLDER ADULTS

K.A. Marx[1,2], J. Gaines[1], K.L. Burke[1], J.M. Parrish[1], *1. Erickson Foundation, Catonsville, Maryland, 2. University of Maryland, Baltimore Co., Baltimore, Maryland*

Sleep complaints are common in older adults. Prior research has found poor sleep to be associated with problems in physical, social and mental health domains. The purpose of this study is to examine the contribution of sleep quality on overall self-rated health status in older adults. A cross sectional analysis of 171 older adults participating in the VIVA! study was done (mean age 84.1 years, 76% female). The mean score on the Pittsburgh Sleep Quality Index (PSQI) was 6.3 (sd = 4.0) with a score of five or above indicating poor sleep quality. The PSQI score was significantly correlated with depression (r=.319, p<.001), self-rated health (r=.297, p<.001), life satisfaction (r=.250, p=.001), physical functioning (r=.176, p=.021), and mastery (r=.173, p=.024). A stepwise multiple regression was done to find the contribution of sleep quality, physical functioning, depression, life satisfaction and mastery to self-rated health. The final model found that depression, physical functioning and sleep quality contributed significantly to the individual's self-rating of health (adj. $R2 = .312$, $F(3,159) = 25.44$, $p=.036$). The individual contribution of sleep quality to the final model was 2.7%. An older adult's sleep quality is an area that researchers and clinicians need to be aware of when assessing the older adult for health related issues.

## SESSION 1830 (PAPER)

## TRAINING FACULTY AND PROVIDERS IN GERIATRIC CARE

### EVALUATING EFFECTIVENESS OF THE FACULTY LEARNING ABOUT GERIATRICS (FLAG) PROGRAM

K. Krichbaum, M.J. Kaas, J.F. Wyman, C. Mueller, *School of Nursing, University of Minnesota, Minneapolis, Minnesota*

A primary goal of the Minnesota Hartford Center for Geriatric Nursing Excellence is to increase the number of faculty who are able to provide effective education to nursing students at associate and higher degree programs in the Upper Midwest region, including Tribal Colleges, that develops knowledge and abilities to care for older adults. The FLAG program is designed to achieve that goal by developing FLAG Fellows' knowledge of geriatrics, teaching effectiveness, and leadership in implementing curricular change in their home institutions. The programs' components include an intensive Summer Institute (SI), mentorship of Fellows throughout the year to support education project development and implementation, and participation in an online learning network. FLAG's content areas include: geriatrics and nursing care of older adults; teaching-learning theory and methods to improve learning outcomes; health care informatics; and leadership for curriculum change. Fellows apply learnings from FLAG to design and implement an education project that enhances student learning in geriatrics. Evaluation of effectiveness of the program to achieve its goals is based on Fellows' assessment of goal achievement, their self-evaluations of teaching effectiveness before and after the SI, assessment of the impact of the Fellows' education projects by the Fellow and his/her dean, and satisfaction with the FLAG experience. Data from these assessments for two years have been analyzed; findings include high levels of satisfaction, and effectiveness of the program in meeting stated objectives. Presentation and discussion of findings will include strengths of the program and methods used for continuous quality improvement.

### HEALTH CARE OF OLDER ADULTS: ADAPTING A FACULTY DEVELOPMENT CURRICULUM INTO A GRADUATE ACADEMIC COURSE

C. Ford[1], P. Sawyer[1], A.G. Rothrock[1], C. Ritchie[1,2], *1. Gerontology, Geriatrics & Palliative Care, University of Alabama at Birmingham, Birmingham, Alabama, 2. Birmingham/Atlanta GRECC, Birmingham, Alabama*

The University of Alabama at Birmingham (UAB) Geriatric Education Center (GEC) focuses on improving the health care quality of older adults through the development of interdisciplinary training for health care professionals. In 2008, the UAB GEC Faculty Scholars Program (FSP) was developed to train faculty from seven disciplines (dentistry, medicine, nursing, occupational therapy, physical therapy, psychology, and social work). The 36-hour program focuses on Institute of Medicine priority areas (advanced illness, care coordination, frailty, symptom and medication management, ethnogeriatrics and health literacy). Classroom contact was supplemented by educational modules delivered through an online platform. These modules were adapted by GEC leadership and combined with supplementary material to create an online graduate-level academic course. This presentation will describe the development and implementation of Health Care of Older Adults, the online course for graduate students adapted from the GEC FSP. Planned as a bi-annual course offering, the course was first offered in 2009 for a nine-week summer session. Ten graduate students from nursing, psychology, and sociology participated. The course was divided into three segments: introduction, health, and health care delivery. A course-master coordinated the material and was the main contact for students. The faculty who developed the original modules were available for consultation. Following completion of each component, students provided feedback regarding the module content. This presentation will discuss the similarities and differences of using the modules to train graduate students versus faculty. After this presentation, attendees will be able to discuss the advantages/challenges of adapting educational products for various learning levels.

### TRAINING INTERDISCIPLINARY TEAMS OF HEALTH PROFESSIONALS ON CARING FOR VULNERABLE OLDER ADULTS

C. Luz[1,2], M. Ensberg[1,2], J. Ilardo[1,2], J. Yonker[1,2], *1. Michigan State University, East Lansing, Michigan, 2. Geriatric Education Center of Michigan, East Lansing, Michigan*

The session will describe the process used to develop and implement a train-the-trainer program for regional interdisciplinary teams of health professionals by the Geriatric Education Center of Michigan (GECM). The purpose of the regional teams is to train health care workers in their own communities on a wide range of topics related to functional health and the importance of early assessment, interdisciplinary care planning, and use of community resources. The train-the-trainer curriculum focuses on these topics as well as how to teach team members about an incremental, interdisciplinary approach to functional assessment that facilitates optimal aging in the home environment. Methods used by GECM faculty to develop the curriculum, train teams, and provide them with support as they organized trainings in their own communities will be discussed. In addition, valuable lessons learned that can inform others interested in replicating this model will be presented including challenges encountered, how these were addressed, and the current status of the teams, types of training models used by teams, their recruiting methods, target audiences, and accomplishments. Modifications to the train-the-trainer program based on these initial experiences will be described.

### A FACULTY SCHOLARS PROGRAM: EXPANSION TO A STATE-WIDE INITIATIVE

A.G. Rothrock[1], C. Ford[1], P. Sawyer[1], E. Kvale[1,2], P. Bosworth[1], C. Ritchie[1,2], *1. University of Alabama at Birmingham, Birmingham, Alabama, 2. Birmingham/Atlanta VA GRECC, Birmingham, Alabama*

The UAB Geriatric Education Center Faculty Scholars Program (FSP) is an interdisciplinary training program aimed at improving health care quality for older adults by providing geriatric training in priority areas identified by the Institute of Medicine (advanced illness, care coordination, frailty, symptom management, medication management, ethnogeriatrics, health literacy). Faculty scholars learn to 1) Recognize and manage geriatric syndromes associated with advanced illness, 2) Utilize behavioral interventions and pharmacological treatments to minimize disabling symptoms, 3) Provide culturally and linguistically appropriate geriatric care, 4) Arrange care so that those facing advanced illness can participate in treatment preferences and experience optimal quality of life, and 5) Develop a patient-centered plan of care in an integrated clinical environment with proactive delivery of evidence-based care and follow-up. The 36-hour training program includes an orientation session (2 hours), 10 web-based modules (1 hour each), and 3 in-person sessions (8 hours each). This presentation will focus on Year 3 of the FSP, which expanded from UAB faculty only to a state-wide initiative including 21 faculty representing eight universities and one college. Disciplines represented include Communications, Gross Anatomy, Medicine (Emergency, Family, and Internal), Nutrition Sciences, Pharmacy, Physical Therapy, Psychology, and Social Work. We will share lessons learned from the first two years of the FSP that resulted in significant changes to the structure of Year 3 curriculum. After attending this presentation, participants will be able to discuss the opportunities and challenges associated with recruitment, curriculum, implementation and evaluation of interdisciplinary professional training programs.

## SESSION 1835 (SYMPOSIUM)

### TRANSITIONS IN OLDER MEN'S SOCIAL AND FAMILIAL RELATIONSHIPS: THE INFLUENCE OF LIFE EVENTS

Chair: *K.M. Bennett, Psychology, University of Liverpool, Liverpool, United Kingdom*
Discussant: *L. Kaye, UMaine School of Social Work, Bangor, Maine*

Men face a number of important life events as they age. Sometimes these events involve gaining a new role, such as becoming a grandparent or a carer. Others concern the loss of a role whether it be as an offspring, a spouse, or as a partner in an established marital relationship. When these transitions in role occur, men are faced with challenges to their social and familial relationships. In this symposium we bring together papers on four major role changes that address the changing nature of their social and familial relationships. Stelle examines the roles of grandfathers in older families, and the varied ways in which familial relationships influence that role. Moss and Moss examine the changes in personal identity of middle-aged sons that occur as a result of the deaths of their fathers, and the ways in which their relationships with the deceased influence their post-bereavement identities. Soulsby and Bennett examine transitions to both widowhood and divorce of older men, and the influences that these have on social and familial relationships. Finally, Russell addresses one of the most challenging transitions faced by older men: that of becoming a caregiver to wives with dementia, and the potential loss of a previously established marital relationship. This loss too influences the surrounding familial and social relationships. This exciting presentation will be discussed by Kaye, who will pull together the common themes and highlight the challenges faced by older men in the context of familial and social relationships.

### SUPPORT NETWORKS AND SOCIAL INTERACTION: CHANGES IN THE FACE OF WIDOWHOOD AND DIVORCE

L.K. Soulsby, K.M. Bennett, *University of Liverpool, Liverpool, Merseyside, United Kingdom*

Research recognises that both widowhood and divorce removes the primary source of health and support, the spouse (Glaser et al. 2006). Through qualitative interviewing, this research aimed to uncover the specific impact of widowhood and divorce on men's social relationships and social interaction. While women tended to engage in new social activities and form fresh social contacts following widowhood and divorce, men noted that they would intentionally avoid group social interaction. Men reported a loss of both social and kin ties, and often felt isolated by their social network and by married couples in particular. Divorce appeared to have a more negative effect on social network size and availability of social support compared to widowhood. Finding a new female companion following widowhood and divorce provided a platform for developing new relationships and increase the men's social interaction. Support services should work with the aim of minimising the negative social outcomes of transitions out of marriage, including separation, divorce and widowhood.

### PERSONAL IDENTITY OF MIDDLE AGED SONS AS INFLUENCED BY THE DEATH OF THEIR ELDERLY FATHER

S. Moss, M.S. Moss, *Arcadia University, Glenside, Pennsylvania*

This paper explores shifts in the personal identity of middle aged sons as they are affected by the death of their elderly father. As part of a study of family bereavement, ten bereaved adult sons participated in lengthy qualitative interviews, 6 to 10 months after their father's death. Four themes associated with the son's personal identity emerged: (1) Shift in son's relationship with and caregiving responsibilities toward his widowed mother. (2) Re-evaluation of similarities and differences in personal characteristics of the son and of the father. (3) Renewed awareness of the meaning of work in the son's life. (4) Revision of the son's calculus of personal life expectancy. Discussion explores the implications of these themes for understanding the meaning of the father's death for the adult son. (Funded by NIH Grant 1R01AG031806 –ARRA)

### A LIFE COURSE PERSPECTIVE ON GRANDFATHERHOOD: THE EXPERIENCES OF MEN AS GRANDFATHERS IN AGING FAMILIES

C. Stelle, *Bowling Green State University, Bowling Green, Ohio*

While research on grandparenting highlights that grandparenthood is a gendered familial role, there is an inconsistency between the recognition of the salience of gender and the lack of attention to grandfathers and their experiences within the family. This paper describes a life course perspective and the examination of the experience and meaning of grandfatherhood. The life course themes explored include issues of temporality, social context and men's development, heterogeneity, dialectics of continuity and change, and the possibility for dynamic and multidirectional change. Findings on the experience of grandfathers in aging families suggest considerable variability in role expectations, enactment, satisfaction, and challenges. Conclusions suggest a need for a closer examination of the gendered nature of grandparenthood, the lived experiences of older men as grandfathers, and an understanding of how this role builds on previous roles and meanings of being an older man and issues of masculinity across the life course.

### THE SOCIAL NETWORKS OF ELDERLY MEN CAREGIVERS

R. Russell, *GRCMSW Program, SUNY Brockport, Rochester, New York*

More than one elderly million men care for spouses with cognitive impairment, and the number is projected to increase well into the future. In their roles as caregivers, their social networks change radically as their work shifts from the world of market economy to the domestic world of spousal care. How do their social networks change and what roles do social networks play in their lives as caregivers? Data for this presentation are taken from a 12 year ongoing qualitative study of elderly men caregivers in Rochester, New York. From the study, two overarching themes have consistently emerged: 1) pre-retirement social relationships were more beneficial than previously thought, and 2) multiple and varied social networks, especially with other men, are beneficial in mitigating caregiver burden. Implications for future research and provision of services are also discussed.

# SESSION 1840 (PAPER)

## TRENDS AND POLICY IN HEALTH CARE

### UNDERSTANDING COHORT DIFFERENCES IN APPRAISALS OF RECONSTRUCTION PRIORITIES OF MENTAL HEALTH SYSTEMS IN POST-CONFLICT LIBERIA

D.A. Gray[1,2], D.C. Henderson[2], B.L. Harris[3], R. Boxill[2], J.R. Carney[2], C. Borba[2], *1. University of Massachusetts Boston, Boston, Massachusetts, 2. Massachusetts General Hospital, Boston, Massachusetts, 3. University of Liberia, Monrovia, Liberia*

The traumatic events and stress of societal conflict on individuals can be quite severe. The United Nations, The World Bank, and other agencies have focused efforts on peace building. However, attempts by the international community to end war and establish peace frequently fail on two fronts; low prioritization of rebuilding local institutions and a lack of understanding of local and regional conditions (Brahimi, 2007). An integral part of rebuilding societies is the establishment of reconstruction priorities. Needs Assessment Surveys are often used to prioritize the many tasks required to rebuild a society after devastating conflict (Saxena, et al., 2007). These tools have been criticized for failing to call for inclusion of elders as respondents (WHO-AIMS, 2005; Kievelitz et al., 2004; DfID, 2002), not collecting relevant data, failure to adequately sample key informants, and lack of evidence based responses (Darcy & Hoffman, 2003). The study design is cross sectional and used individuals as the unit of analysis. The data was collected during a 2 week period in March 2009 in Liberia by a team from Massachusetts General Hospital Division of International Psychiatry, Harvard Medical School and the Harvard Program for Refugee Trauma. It was restricted to Native Liberian respondents, leaving 162 individuals eligible for analysis. Using a series of one-way and two-way ANOVAs, results suggest there is a relationship between informants' age and their assessment of mental health needs in post-conflict society.

### TRENDS IN USE OF INPATIENT PROCEDURES AMONG THE ELDERLY BY RACE AND POVERTY

Y. Gorina, J.D. Weeks, M.F. Owings, *Aging and Chronic Disease Statistics, National Center for Health Statistics, Hyattsville, Maryland*

The rates of the medical procedures among Americans aged 65 and over have changed from 4,934 per 100,000 population in 1999 to 5,300 per 100,000 i 2007. The trends are evident in increasing rates of knee and hip replacements performed, and in expanded use for the very old

(85+). The rates for other procedures, such as mastectomy, amputation of lower limb, and some heart procedures decreased. We will review the disparities in the procedures by race of the patient available from the Medicare records. The data from the HRSA' Area Resource File linked to Medicare claims data allowed us to present the trends in procedures by the characteristics of patient's residential area, such as level of poverty. In 2007, the rates of procedures among patients living in the areas with the lowest level of poverty among older white and black patients were 5,069 and 6,688 per 100,000 respectively. The rates of procedures among patients living in the areas with the highest level of poverty among older white and black patients were 5,726 and 7,007 per 100,000. Because Medicare claims represent multiple services provided to beneficiaries and can be considered as a longitudinal database, it is possible to obtain a more complete characteristics of the patients' health status. We will present the trends in the rates of procedures among patients with selected chronic condition using indicators available from the CMS' Chronic Conditions Warehouse. The benefits and drawbacks of the methodology used will be discussed.

### RETHINKING INFLUENZA VACCINATION POLICY: THE POTENTIAL TO INDUCE HERD IMMUNITY AGAINST INFLUENZA IN OLDER ADULTS BY VACCINATING CHILDREN—EVIDENCE FROM THE STATE AND COUNTY LEVELS

S.A. Cohen, K.K. Chui, E.N. Naumova, *Public Health and Community Medicine, Tufts School of Medicine, Boston, Massachusetts*

Growing evidence suggests that children play an important role in the transmission of influenza to other children, adults, and seniors, who are particularly vulnerable to influenza-associated morbidity. Building upon prior research, we hypothesized that vaccinating children against influenza may have indirect benefits for seniors (age 65+) to reduce influenza-associated morbidity. We conducted an analysis on two geographic levels—state and county. For the state-level analysis, we abstracted all US influenza-associated (ICD-9CM codes 480-487) Medicare hospitalization records for four "influenza years" (2002-06), defined as July-June. We abstracted all influenza-associated hospitalizations for Florida counties for two influenza years in which complementary exposure data were available, 2002-03 and 2006-07, for the county-level analysis. Influenza-associated hospitalization rates increased exponentially with age in seniors, and this acceleration rate was used as the outcome variable. One exposure variable, influenza vaccination in children, was obtained from the National Immunization Survey, while influenza vaccination coverage in seniors was obtained from the Behavioral Risk Factor Surveillance System. Season-specific acceleration rates were regressed against the percentage of vaccinated children or seniors, or both. Child influenza vaccination coverage was negatively associated with influenza-associated hospitalizations in seniors, and was most pronounced in the 2003-04 season (beta = -0.096, p = 0.027). Influenza vaccination of seniors was not significantly associated with influenza-associated hospitalization rates in any of the models on either geographic level. These results suggest that the prevailing strategy to vaccinate seniors may be less effective than inducing herd immunity through vaccinating children against influenza to reduce influenza-associated diseases in seniors.

### MEDICAID LONG TERM CARE HOME AND COMMUNITY BASED SERVICES FOR THE ELDERLY: TRENDS IN PROGRAMS AND POLICIES, 1999-2007

C. Harrington, T. Ng, *University of California, San Francisco, California*

In response to consumer demand, the Supreme Court decision in the Olmstead case and the New Freedom Initiative of 2001, states have unevenly expanded combinations of three Medicaid home and community based services (HCBS) : home health, state plan personal care services (PCS), and 1915(c) waivers. By 2007, the federal-state Medicaid program paid for 42 percent of the nation's estimated $190 billion total long-term care (LTC) expenditures while institutional care (e.g., nursing homes) consumed 58 percent of those expenditures. As states struggle with budget deficits in FY 2010 and beyond, the Deficit Reduction Act (2005) and the debate around health insurance reform reflects growing concerns about the need to preserve and expand Medicaid HCBS and the need for information on program and policy trends. This paper draws from a unique national dataset to present the latest trends in participants, expenditures and policies for the three Medicaid HCBS programs serving the elderly. While data for 2007 show a steady increase in participants and expenditures, these growth rates have slowed since 2001. Inequities in access to services and limited funds have also resulted in unmet needs for HCBS among the elderly. Findings from the survey of policies used in the programs in 2009 show that states are increasing the number of waiting lists for elderly waiver services even as the number of available "slots" increases. Cost caps such as service and cost limits are also used in almost half the state plan personal care programs and almost a third of home health programs.

## SESSION 1845 (PAPER)

## WOMEN AND AGING

### BECOMING THE OLD ONES: IDENTITY AND FAMILY TRANSITIONS IN A RURAL CONTEXT

B. McCann, K. Allen, K.A. Roberto, *Human Development, Virginia Polytechnic Institute and State University, Blacksburg, Virginia*

Social theorists posit that how people experience aging depends on their social location. Using an integrative feminist, life course, and symbolic interactionist frame we asked how single, baby boomer women in rural Appalachia (n=14) experienced aging in a relational context. During in-depth qualitative interviews we asked participants to describe their closest relationships over their life course and how their beliefs and ideas about relationships have changed over time. We also asked them to describe how they coped with losing loved ones. We found that the women who were lifelong residents of their community thought of themselves as becoming the community "old ones" as the elders in their extended kin networks died. These women had an awareness that they were the keepers of family knowledge and traditions, as well as community history. They passed their knowledge to the younger generation (specifically children, nieces, and nephews) to keep family traditions alive. Women who were not reared in the community in which they currently lived, but entered the community via a former partner, did not describe experiencing this family transition. We conclude that marital status, i.e., being single, was less salient to how the women experienced aging; rather losing family and community members, and family-of-origin history intersected to shape the rural baby boomer women's sense of self.

### AGING AT ARM'S LENGTH: A QUALITATIVE EXAMINATION OF MIDDLE-AGED AND OLDER WOMEN'S DISTANCING FROM OLD AGE

A. Barrett, *Florida State University, Tallahassee, Florida*

Given the cultural devaluation of the elderly, particularly older women, few in midlife relish the thought of growing older. However, we have a limited understanding of specific social psychological strategies of managing the aging self. The present study addresses this issue by drawing on semi-structured interviews with middle and older aged women (n=52). Analyses reveal a focus on distancing oneself from old age. This paper explores six distancing strategies: engaging in activities associated with youth, including childhood; maintaining youthful identities and appearances; postponing perceived markers of old age; making self-enhancing comparisons with women from current as well as earlier cohorts; maintaining a belief in personal controllability of aging; and downplaying the salience of age and aging. Although less common than distancing, two other strategies were observed: active resistance of negative stereotypes of older women and an embrace of positive aspects of aging, including liberation from demanding caring roles occupied in earlier life. The paper concludes with a discussion of the possible implications of the various strategies for cultural change in images of older women, as well as consequences for self-conceptions and well-being in middle and later life.

### FEMALE VOICES: OLDER WOMEN IN APPALACHIA

M. Diderich*, Social Sciences, Shawnee State University, Portsmouth, Ohio*

Female Voices: Older Women in Appalachia The author lives in a unique area which is also a rich sociological laboratory that stands apart from mainstream American society. My findings are the result of an ethnography of the regional culture, spanning four years (2006-2010), and they are embedded in the oral life histories (in-depth face-to-face interviews) of Appalachian females who are 65 years or older. They have come of age in the 1920s, 1930s and 1940s, and, as the matriarchs of their families, have transmitted intergenerational values to their children and (great) grand children. Many contemporary female students in this Appalachian region are discouraged from going to college. Instead, in some cases, the adagio is to be a teenage mother or to at least find a man in which any man is considered “good enough” because he is of the male gender and can provide her with a socially acceptable status. Thus, females are raised and socialized in an atmosphere where it is imperative to find a man, and to view a male as a prize to be won, even if that male cannot provide a stable family life. Older Appalachian females advocate traditional and transitional gender roles for their daughters and grand daughters, including a traditional or transitional division of labor within the household. Their feelings about attitudes that have arisen in the second and third wave of feminism, as well as their current role in their respective families are discussed.

# SESSION 1850 (PAPER)

## ASSESSMENT IN HIGH RISK POPULATIONS

### PAIN ASSESSMENT IN NURSING HOME RESIDENTS WITH DEMENTIA

F.A. Cervo[1,2], P. Bruckenthal[3], J.J. Chen[2], L. Bright-Long[4,2], S. Fields[5,2], G. Zhang[2], I. Strongwater[1], *1. Long Island State Veterans Home, Stony Brook, New York, 2. Stony Brook University Medical Center, Stony Brook, New York, 3. Stony Brook University School of Nursing, Stony Brook, New York, 4. Maria Regina Residence, Brentwood, New York, 5. Gurwin Jewish Geriatric Nursing and Rehabilitation Center, Commack, New York*

Background: The effective management and treatment of pain in nursing home residents with dementia requires the use of a reliable, valid, and clinically feasible pain assessment tool. Our study examined the application of the CNA Pain Assessment Tool (CPAT) in long term care settings. Methods: 186 residents of three regional skilled nursing facilities participated in the study. The reliability, validity, and clinical feasibility of the CPAT were determined in Phase I of the project. In Phase II, the implementation of the CPAT was combined with the American Medical Directors Association pain management guideline to determine if short term improvements in pain management could be achieved. Results: The CPAT was found to have statistically significant levels of interrater and test-retest reliability as well as acceptable levels of internal consistency. Construct and criterion validity were also found to be statistically significant. As determined by a practicality survey, the CPAT was found to be a clinically useful and feasible instrument. Phase II analysis revealed a statistically significant reduction in CPAT pain scores in both control and intervention arms of the study. When reductions in pain scores were compared for control and intervention periods, no significant change was found. Conclusion: This study provides evidence that the CPAT is a reliable and valid pain assessment instrument as well as a clinically utile and feasible tool when used in nursing home residents with dementia. Significant reductions in pain scores have shown that the CPAT is a useful tool in short term pain management.

### DIAGNOSIS COST GROUPS, SELF REPORTED FUNCTION, AND COGNITION PREDICT DEATH IN A HIGH RISK POPULATION

J.E. Agens[1], J. Lin[2], *1. Geriatrics, Florida State University College of Medicine, Tallahassee, Florida, 2. Florida State University Department of Statistics, Tallahassee, Florida*

Purpose: For the attendee, this session will provide empiric knowledge of how diagnostic and functional data obtained longitudinally predicts mortality in a group already at risk for death. Methods: This was a retrospective look at data collected prospectively in a group of 261 HMO patients, mean age 73, selected on the basis of high Diagnosis Cost Group (DCG ) scores. These yield a relative risk score based on an ICD9 coding algorithm. A baseline DCG relative risk score of 7 served as a cutoff for initial inclusion this primary care program utilizing a geriatrician and two nurses. Improvement in self-reported function has been previously reported after 12 months in the program. Independent variables included DCG score in year 2 of the program, Short Form 36 Physical Function and General Health Scores at baseline, and Folstein score at baseline. Dependent variable was death as a categorical variable. Deaths were counted in years two through five of the program to limit the effect of patients who were dying on program entry. DCG was obtained again at year two as an independent variable. Other variables were obtained at program entry. Results: 20 deaths occurred over 3 years of observation following year two of the program. Both univariate and multivariate logistic regression models predicting death were used. All independent variables noted above predicted death in the univariate model ($p<.05$). Only DCG and Folstein score predicted death independently in the multivariate model ($p <.05$). When predicting death, cognition may add more to diagnoses than function.

### AN INVESTIGATION OF THE DISCRIMINATIVE VALIDITY OF THE FULLERTON ADVANCED BALANCE SCALE AS A FUNCTION OF AGE AND FUNCTIONAL STATUS

D. Rose, D. Hernandez*, Kinesiology, California State University, Fullerton, Fullerton, California*

The Fullerton Advanced Balance (FAB) Scale is a reliable and valid tool for assessing balance in community-residing older adults. Purpose: To investigate the discriminative validity of the scale as a function of age and functional status in a group of moderate to high functioning older adults. Methods: A total of 407 independently functioning male and female adults (76.7 ± 6.3 years) performed the FAB scale as part of a comprehensive fall-risk screening. Participants were divided into five age groups (65-69; 70-74; 75-79; 80-84; 85-89). Inclusion criteria included residing independently in the community, being relatively healthy, and scoring above 12 out of 24 on the Composite Physical Function (CPF) scale. Three levels of functional status (high functioning, high moderate functioning and low moderate functioning) were created using the CPF scale. Results: A 5 (Age) X 3 (Functional Status) ANOVA (SPSS, V17.0) produced significant univariate effects for age and functional status only. Significant age associated changes were evident between all five age groups for mean FAB scores. Mean FAB score was highest for the 65-69 age group (29.2/40) and gradually decreased across age groups with the 85-89 age group demonstrating the lowest mean FAB score (18.7/40). Significant changes were also evident between all three levels of functional status identified. As expected, the mean FAB score was highest in the high functioning group (28.3/40) and lowest in the low moderate functioning group (19.3/40). Conclusions: The FAB scale can effectively discriminate between age groups and on the basis of self-reported functional status.

### INSIGHT INTO HOSPITALIZATION OF CENTENARIANS

A. Balstad[2], S. Patil[1], R.S. Chamberlain[1,2], *1. Department of Surgery, Suite # 1172, Saint Barnabas Medical Center, Livingston, New Jersey, 2. St. George's University, School of Medicine, Grenada, Grenada, Grenada*

Background: Advances in medicine has led to a growth in the centenarian population (> 100 years old). Centenarians are generally unstudied, but as longevity increases, so does the need to better understand the medical and surgical needs of this population. Methods: 195 hospital admissions corresponding to 110 patients were analyzed (2000 – 2009). Age, gender, ethnicity, diagnosis, co-morbidities, advance directives (ADRs), functional status, LOS and cause of death were abstracted. Results: Mean age was 101.3 years (100- to 111- years) with an M:F ratio of 86:24. The most common co-morbidities were hypertension (60%), congestive heart failure (CHF) (37%) and coronary artery disease (34%). CHF (13%), pneumonia (7%), and dehydration (4%) were the primary reasons for hospitalization. Mean LOS was 6.7 days (1 to 33 days). Mean ECOG performance score was 3.6 on admission (2 to 4) and 3.7 on discharge (2 to 5). Most centenarians were admitted from home (95%) but only 28% were discharged to home. ADRs were unavailable for 51% of patients, and only 2% established new ADRs during hospitalization. 31 procedures/surgeries were performed. Twenty two patients (20%) died in hospital. Conclusions: Most centenarians are hospitalized and treated without change in their functional status. Medical causes of admissions (84%) outnumber surgical causes (16%). Orthopedic procedures (29%) were the most common operations in this group, and restoration to pre-operative ambulatory status is normal. Mortality is primarily due to exacerbation of medical illness and not hospital related. Advanced directives are seriously lacking for this group.

## SESSION 1855 (PAPER)

## FALLS AND FALL PREVENTION ACROSS SETTINGS

### EXAMINING THE RURAL/URBAN GAPS IN FALLS PREVENTION STRATEGIES ADOPTED IN LONG TERM CARE FACILITIES

S. Johnson, *Faculty of Kinesiology and Health Studies, University of Regina, Regina, Saskatchewan, Canada*

Falls are a major threat to the health of older adults. Compared to older adults who live in the community, residents of long-term care (LTC) facilities fall two to four times more often, and are twice as likely to injure themselves. Given the high incidence of falls among LTC residents, several promising and effective falls prevention strategies are available for implementation in these facilities. However, rural-urban differences in the adoption of various falls prevention strategies in LTC facilities have not been examined. The present project examined this issue involving 70 LTC facilities and using a telephone survey. The survey instrument encompassed facility information, profiles of interviewees, and fall- intervention strategies currently in place in the facilities. Three falls prevention strategies, exercise, clinical assessment and nutritional review, showed the greatest rural-urban differences. Only 64% of rural nursing homes employed an exercise based intervention strategy compared with 79% of urban nursing home. Clinical assessment fall prevention strategy was utilized in 64% of rural respondents while 71% of urban nursing homes used clinical assessment as a intervention/prevention strategy. A clinical assessment may include the following components: sensory impairment, leg strength, ROM, balance/gait, footwear/clothing, acute or chronic conditions and mobility aids. Significant rural-urban difference was also observed for nutrition review with 43% of rural nursing homes and 50% of urban nursing homes utilizing this strategy for prevention. The study highlights the need to promote promising and effective falls prevention strategies in rural as well as urban contexts.

### TASK-SPECIFIC TRAINING DECREASES FALLS BY OLDER WOMEN IN THE COMMUNITY: 6 MONTH PROSPECTIVE DATA

N. Rosenblatt, J. Marone, M.D. Grabiner, *Kinesiology and Nutrition, University of Illinois at Chicago, Chicago, Illinois*

We have shown that training the execution of compensatory steps in response to large, anteriorly-directed postural disturbances reduces falls after laboratory-induced trips. The present work is extended by comparing all-cause falls by community-dwelling women following their having participated in a two week, four session protocol of task-specific training compared to age-matched controls. Data from 60 women age 55 years and older were monitored every two weeks for at least six months. The results revealed that 55% of control subjects fell compared to 38% of trained subjects. Of the 44 reported falls, 8 were considered not trainable (e.g. syncope) and eliminated from further analysis. Of the remaining 36 falls, 8 were considered "preventable trip-related falls", i.e., kind that was specifically targeted by the training protocol. Of these eight preventable trip-related falls, seven occurred in the control group and only one occurred in the trained group. In the age group 55-64 year old age group, four untrained women reported a preventable trip-related fall whereas there were none on the trained group. In the age group of 65 years and older, three and one preventable trip-related falls were reported by the control and trained group, respectively. Overall, these preliminary results suggest that during the six month period following completion of the task-specific training protocol, both the number of preventable trip-related falls and all-cause preventable falls was reduced. Thus, the data suggest that task-specific training protocols may amplify the efficacy of currently used multifactorial fall and exercise-based fall prevention programs.

### IDENTIFICATION OF SYSTEMIC CAUSES OF FALLING ACROSS THE AGING CONTINUUM

A.A. Zecevic, M. Halligan, P. van Wyk, *University of Western Ontario, London, Ontario, Canada*

The Systemic Falls Investigative Method (SFIM) emerged as a powerful and comprehensive analytical tool for identifying systemic causes and contributing factors of falls. The purpose of this study was to use SFIM to explore similarities and differences in causes of falling across the continuum of care in later life. Prospective, multiple case study design was employed to investigate falls in five diverse healthcare settings, including a community public health unit, an acute care hospital, a rehabilitation hospital, an assisted-living facility for individuals with acquired brain injury, and a long-term care home. From each setting, one to three staff members were trained in SFIM and mentored while investigating falls within their organization. Content analysis of 21 detailed reports from the falls investigations was employed to identify patterns of safety deficiencies within four levels of the Swiss Cheese Model of Accident Causation. Results indicate that SFIM helped identify several systemic issues contributing to falls in most participating organizations. For example, inadequate patient/resident supervision (i.e., staff`s unawareness of patient activity related to urgent voiding) was influenced by deficiencies in teamwork, poor communication between shifts, inadequate staffing levels, lack of training, budgetary restrictions and limited organizational learning. Falls in the community feature unsafe conditions of different origins, rooted in the lack of accountability for environmental hazards, poor employee safety training, inadequate policies and family supervision. The SFIM is an unique method for risk identification and analysis across healthcare settings, and can provide specific guidance for targeted injury prevention interventions.

### POSTURAL STIFFNESS, DAMPING, DISTRACTIONS, AND PROSPECTIVE FALLS IN OLDER ADULTS: THE MOBILIZE BOSTON STUDY

H. Kang[1], L. Quach[2], W. Li[3], L. Lipsitz[2,4,5], *1. Kinesiology and Health Promotion, Cal Poly Pomona, Pomona, California, 2. Institute for Aging Research, Boston, Massachusetts, 3. University of Massachusetts Medical School, Worcester, Massachusetts, 4. Beth Israel Deaconess Medical Center, Boston, Massachusetts, 5. Harvard Medical School, Boston, Massachusetts*

Outdoor falls have been recognized as a distinct problem that occur even in healthy older adults. Because the outdoors pose greater opportunities for mechanical perturbations to the postural system, the capacity to absorb these perturbations, quantified as mechanical stiffness and damping, may indicate reduced fall risk. Cognitive distractions may further increase fall risk. We tested whether biomechanical parameters of postural control, during quiet standing and dual task conditions, are associated with the risk of falls in a representative sample of community-dwelling older adults, the MOBILIZE Boston Study cohort. Static posturography data was captured for 30 seconds from 725 participants aged 78±5 years, with and without dual task (serial subtractions). Postural control was modeled as a damped oscillator inverted pendulum, from which stiffness, damping, and sway amplitudes were determined. Prospective falls were assessed through a mail-back monthly calendar (6-36 mo. follow-up). The association of biomechanical parameters and fall rates was estimated using negative binomial regression. Greater postural stiffness (adjusted RR=0.70 (0.50-0.96) p=0.03) and damping (RR=0.49 (0.29-0.82) p=0.007) were associated with lower outside fall rates. Results were similar for those measured during dual task. Decline in stiffness and damping may be an early marker of fall risk in healthy older adults. Causes of this decline require further study. Biomechanical parameters during dual task were no better at predicting falls than during quiet stance. A more sophisticated model of postural control that incorporate cognitive function may better explain the role of cognitive distractions on falls.

## SESSION 1860 (SYMPOSIUM)

### HEALTHY AGING WITHIN AND ACROSS SYSTEMS

Chair: *A.B. Newman, Epidemiology and Division of Geriatric Medicine, University of Pittsburgh, Graduate School of Public Health and School of Medicine, Pittsburgh, Pennsylvania*

Discussant: *J. Magaziner, University of Maryland, Baltimore, Maryland*

Healthy aging is a desirable goal for individuals and for public health. Longitudinal data can identify individuals who remain healthy for long periods of time and can assess trajectories of change that can better define healthy aging. Increasingly, health in late life is recognized to be far more than the absence of disease. For many age-related chronic diseases, there is a large reservoir of physiologic change that precedes clinical disease. Little is known about the relationship between changes across systems in their trajectories of age-related decline. Age-related change in one system could be a sentinel indicator for the overall rate of aging or mortality risk; alternatively combinations of factors might be more informative. In this symposium we will evaluate individual systems and combinations of age-related changes to define healthy aging. The first presentation will evaluate the potential for fracture-free survival to capture overall healthy aging in older women who have been followed for many years. The second will examine trajectories of IGF-1 and DHEAS to determine their individual and joint contributions to health risk. The third will focus again on bone, evaluating biologic age based on bone density compared to chronological age as a novel approach to defining healthy aging. The fourth will discuss novel immunological parameters related to healthy aging. The final presentation will illustrate the rates of healthy aging in multiple systems and the correlations between systems over time. By quantifying the risks related to these various approaches, insight will be gained into the processes underlying healthy aging.

### IS FRACTURE FREE SURVIVAL AN INDICATOR OF HEALTHY AGING: STUDY OF OSTEOPOROTIC FRACTURES (SOF)

J.A. Cauley[1], S.K. Ewing[2], L. Lui[3], T.A. Hillier[4], S.R. Cummings[5], K. Ensrud[6], *1. University of Pittsburgh, Pittsburgh, Pennsylvania, 2. University of California at San Francisco, San Francisco,, California, 3. San Francisco Coordinating Center, California Pacific Medical Center, San Francisco, California, 4. Permanente Center for Health Research, Portland, Oregon, 5. California Pacific Medical Center, San Francisco,, California, 6. University of Minnesota, Minneapolis, Minnesota*

To test the hypothesis that fracture free survival is a marker of healthy aging, we examined women enrolled in SOF. We limited our analysis to women who had at least 10 years of follow-up and compared women who remained fracture free (n=2407) with women who experienced at least one fracture (n=3604). Women who remained fracture free compared to women with a fracture, respectively, were younger at baseline (70.1 vs 71.2 yrs), heavier (68.5 vs 67.0 kg), experienced less weight loss (-0.34 vs -0.45%/yr), less height loss (2.7 vs 3.3 cm) and were less likely to report a stroke or pulmonary disease. Fracture free women reported higher total energy expenditure (1756 vs 1666 kcal/wk). All of the physical function measures at baseline e.g., gait speed showed higher function in women who remained fracture free. Fewer of the fracture-free women have died than women with a fracture (46% vs 54%), p<0.001.

### STABLE TRAJECTORIES OF IGF-1 AND DHEAS LOWER HOSPITALIZATION RISK

A.R. Cappola[1], N.D. Yanez[2], W. Guo[1], R.C. Kaplan[3], M. Pollak[4], A.B. Newman[5], L.P. Fried[6], *1. Division of Endocrinology, Diabetes, and Metabolism, UNIVERSITY OF PENNSYLVANIA - SCHOOL OF MEDICINE, Philadelphia, Pennsylvania, 2. University of Washington, Seattle, Washington, 3. Albert Einstein College of Medicine, Bronx, New York, 4. McGill University, Montreal, Quebec, Canada, 5. University of Pittsburgh, Pittsburgh, Pennsylvania, 6. Columbia University Mailman School of Public Health, New York, New York*

We have previously shown that the slope and variability of two hormones produced via distinct pathways, IGF-1and DHEAS, each predict mortality, whereas the absolute hormone level does not. In this analysis, we examined the relationship of IGF-1 and DHEAS trajectory patterns with hospitalization in 945 participants aged 65+ enrolled in the Cardiovascular Health Study who had hormone levels measured at 3-6 timepoints over an eight year period. Declining slope of IGF-1 (p=0.02) and increasing variability of IGF-1 (p=0.02) or DHEAS (p<0.001) were each associated with increased risk of hospitalization during the following six months. In models examining the impact of hospitalization on each hormone, we found no evidence that hospitalization in the prior six months affected the trajectory pattern or hormone level. Irrespective of the actual level, older individuals with stability of hormone levels are less likely to be hospitalized than those whose levels fluctuate.

### BONE AGE-A NOVEL INDEX OF AGE BASED ON BONE MINERAL DENSITY

Y. Sheu[1], A.B. Newman[1], P. Cawthon[2], T. Harris[3], F.A. Tylavsky[4], J.A. Cauley[1], *1. Epidemiology, University of Pittsburgh, Pittsburgh, Pennsylvania, 2. California Pacific Medical Center, San Francisco, California, 3. National Institutes of Health, Bethesda, Maryland, 4. University of Tennessee, Memphis, Tennessee*

Bone mineral density (BMD) and chronological age (CA) are strong risk factors for osteoporotic fractures. We investigated “bone age” (BA) as an alternative means to understand an individual’s biologic age. We used data from 3,043 Health Aging and Body Composition Study participants (68-80 yrs) to calculate non-vertebral fracture risk as a function of CA and femoral neck BMD separately, then equating them to define BA. During 7.7 yrs of follow-up, fracture occurred in 308 participants. Results from the Cox regression model showed that individuals with BA greater than their CA were more likely to experience an incident fracture. Compared to those with BA and CA difference within +/- 5 yrs, individuals with BA 5 yrs older and younger than their CA had 37% ($p<.02$) higher and 61% ($p<.0001$) lower risk of fracture, respectively. The concept of BA may provide an easily understandable translation of fracture risk to tailor preventive treatments.

### IMMUNOLOGICAL CORRELATES OF HEALTHY AGING

A.N. de Vallejo[1], D.L. Hamel[1], R.G. Mueller[1], J.J. Michel[1], R. Boudreau[2], A.B. Newman[1,2], *1. University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania, 2. University of Pittsburgh Graduate School of Public Health, Pittsburgh, Pennsylvania*

Immunity is vital to individual fitness and survival. Hence, we sought to define immunologic criteria for preserved function or ill-health among survivors of the Cardiovascular Health Study (n=140, aged >85 years). From clinical performance testing, 41% of subjects were categorized as impaired, and 59% were unimpaired. The impaired group has an immune signature dominated by interleukin (IL)-6, tumor necrosis factor (TNF)-$\alpha$, and T cells expressing the inhibitory natural killer receptors (NKR). In contrast, the unimpaired group had a signature dominated by interferon (IFN) $\gamma$, IL-5, IL-13, and IL-17, and T cells expressing activating NKRs. Cellular bioassays showed that activating NKRs were signaling competent receptors that trigger T cell activation without the need of the T cell receptor (TCR), suggesting a beneficial role of these unusual lymphocytes in immunity of older adults. These data highlight the value of immunological parameters as prognosticators of health outcomes of aging.

### RATES OF AGING–CROSS-SYSTEM CORRELATIONS AND MORTALITY RISK

A.B. Newman[1], R. Boudreau[2], A. Arnold[3], L.F. Fried[2], J.A. Cauley[2], T. Harris[4], *1. Epidemiology and Division of Geriatric Medicine, University of Pittsburgh, Graduate School of Public Health and School of Medicine, Pittsburgh, Pennsylvania, 2. University of Pittsburgh, Pittsburgh, Pennsylvania, 3. University of Washington, Seattle, Washington, 4. National Institute on Aging, Bethesda, Maryland*

A question fundamental to aging biology whether there is any correspondence or synchrony in aging across systems. It is not known whether individuals who are doing well in one system as more likely to maintain function in other systems. We examined 3727 older adults in the Cardiovascular Health Study (CHS) with at least two assessments 5 years apart in the CHS. The systems included 1) vascular (carotid wall thickness)2) brain (minimental state exam) 3) kidney (creatinine) 4) lung (forced vital capacity) 5) metabolic (fasting glucose) and 6) musculoskeletal system (grip strength). We defined "minimal aging" in each of the systems based on maintaining stable values over at least 5 years. About 50% remained healthy in 2 or more systems, while only about 10% remained healthy in 3 or more. Agreement for stability varied between systems, but individuals with minimal aging in all systems had remarkably low risk of mortality.

## SESSION 1865 (SYMPOSIUM)

### IS IT MY CANCER OR AM I JUST GETTING OLDER? HEALTH AND FUNCTION IN OLDER CANCER SURVIVORS

Chair: *K. Bellizzi, HDFS, UConn, Storrs, Connecticut*
Discussant: *C.W. Given, Michigan State University, East Lansing, Michigan*

The profile of cancer survivors is expected to change in parallel to the major shifts taking place in the age distribution of the US population. Moreover, cancer is often superimposed on other age-related health conditions making it difficult to disentangle the effects of cancer versus other age-related health problems. This symposium will present data from three studies that have examined health and function in older cancer survivors. The first presentation will focus on the influence of cancer and its treatment on falls, fall consequences, and use of healthcare in 865 elderly with cancer compared with 8,617 with no history of cancer. Findings suggest certain segments of those with cancer had an increased rate of falls ($p=0.01$) and more frequent services use ($p<.001$), compared to those without cancer. The second study examined measures of frailty, ADLs, IADLs, and functional limitations in 112 newly diagnosed older cancer patients at baseline, 3 and 6 months post diagnosis. At six months follow up, 58% remained stable, 19% improved in functioning and 23% declined in functioning. The third presentation will focus on data from a prospective study examining the impact of cancer on pre-existing health conditions and new health problems of older cancer survivors (n=1108) compared to matched controls (n=5540). Patients reported statistically significant declines in physical function and ADLs and an increase in arthritic pain and depression compared with controls. The discussant will discuss these findings in relation to potential interventions to attenuate these effects in the growing population of older cancer survivors.

### CHANGES IN FUNCTIONAL STATUS DURING A SIX-MONTH PERIOD IN OLDER NEWLY-DIAGNOSED CANCER PATIENTS

M.T. Puts[1,2], J. Monette[2,3,6], V. Girre[2,4], C. Wolfson[5], M. Monette[2], G. Batist[6], H. Bergman[2,6], *1. Lawrence S. Bloomberg Faculty of Nursing, University of Toronto, Toronto, Ontario, Canada, 2. Solidage Research Group on Frailty and Aging, Jewish General Hospital, McGill University, Montreal, Quebec, Canada, 3. Division of Geriatric Medicine, Jewish General Hospital, McGill University, Montreal, Quebec, Canada, 4. Department of Medical Oncology, Paris, France, 5. Division of Clinical Epidemiology, McGill University Health Centre, Montreal, Quebec, Canada, 6. Department of Oncology, Segal Cancer Centre, Jewish General Hospital, McGill University, Montreal, Quebec, Canada*

While the number of older cancer patients is expected to increase, little is known about their functional trajectories over time. One-hundred twelve newly-diagnosed cancer patients aged 65+ were recruited at the Jewish General Hospital, Montreal, Canada. Participants were interviewed at baseline, 3 and 6 months. Seven frailty markers (FM), functional limitations (FL), instrumental activities of daily living (IADL), basic activities of daily living (ADL) were assessed. Participants were grouped: independent, only FM and/or FL, IADL disability, ADL disability and death. Logistic regression analyses were conducted to examine if deterioration in functioning was associated with age, sex, diagnosis, extent of disease, and treatment received. At baseline, 12 (10.7%) were independent, 54 (48.2%) had FM/or FL, 34 (30.4%) IADL and 12 (10.7%) ADL disability. Among participants who completed the follow-up, 61 (58.1%) remained stable, 20 (19.0%) improved and 24 (22.9%) deteriorated in functioning. No variable was associated with deterioration in functioning.

### FALLS, FALL SEQUELAE, AND HEALTHCARE IN AGING COMMUNITY DWELLING ELDERLY CANCER SURVIVORS

S.L. Spoelstra[1], B.A. Given[1], D. Schutte[1], A. Sikorskii[3], M. You[1], C.W. Given[2], *1. Michigan State University College of Nursing, East Lansing, Michigan, 2. Michigan State University College of Human Medicine, East Lansing, Michigan, 3. Michigan State University Department of Statistics, East Lansing, Michigan*

The influence of cancer on elderly is examined in a Home and Community Based Waiver program during 2002-2007. A comparison of with cancer (865) to without cancer (8617) on falls, fractures and healthcare use occurred. Data were obtained from Minimum Data Set assessments, vital records, and claims. Mean age was 77.1 years, 67.8% female, 74.0% Caucasian. Cancers was 92.7% > stage 2. Falls were 35.9% (304) with cancer and 25.3% (2,174) with non-cancer, a significant difference (p-value 0.01); hip fractures were 4.6% (38) and 5.3% (449) p-value 0.38; service use: ER 35.4% (295) to 22.2% (1904) and hospitalization 13.1% (109) to 10.6% (911), p-values <.001 respectively. A cancer diagnosis increased falls and service use; no difference was found in fractures. As elderly cancer survivor's transition through life, clinicians need to be aware that these patients are prone to increased falls, assess risk, and implement interventions to prevent falls.

### A PROSPECTIVE STUDY OF THE IMPACT OF CANCER ON HEALTH AND FUNCTION OF OLDER CANCER SURVIVORS

K. Bellizzi[1], B. Reeve[2], *1. HDFS, UConn, Storrs, Connecticut, 2. National Cancer Institute, Bethesda, Maryland*

The impact of cancer and its treatment on preexisting health conditions and new age-related health problems of older persons is unknown. We prospectively examined the relative impact of cancer (prostate, breast, colorectal, or lung) on pre-existing health conditions (ADLs, neuropathy, arthritis, and physical function ) and new health problems (sensory impairment, depression) of older cancer survivors (n=1108) compared to matched controls (n=5540). Cancer patients whose first cancer occurred between their baseline and follow up assessment were identified for analyses. Patients with all cancer types reported statistically significant declines in physical function compared with controls. Prostate, colorectal and lung cancer patients reported significantly more difficulties performing certain ADLs compared with controls. There was a significant increase between baseline and follow-up for breast and prostate with respect to arthritis. Colorectal and prostate patients reported a significant increase in depression compared with controls. There was no increase in arthritis or neuropathic conditions or decline in visual and hearing impairment for cancer groups compared to controls.

## SESSION 1870 (SYMPOSIUM)

### RESEARCH DESIGNS FOR CLINICAL AGING RESEARCH

Chair: *H. Allore, Internal Medicine, Yale University, New Haven, Connecticut*

Good research designs promote sound statistical inference. Bad research designs cannot always be remedied by sophisticated techniques of statistical analysis. So careful attention to issues of research design is always warranted; however, it is especially valuable when dealing with older study participants who present distinctive challenges to clinical researchers. This symposium proposal outlines several proposed talks very pertinent to clinical aging research. Both experimental and observation designs will be addressed in them. A crucial aspect of a research design is a specification of when and how key variables are measured; a crucial consequence of any research design is the array of statistical techniques that are most appropriate for analyzing the data it yields. Thus, this symposium will touch upon all three of the components of our interest group title and will present an integrated account of how some distinctive challenges of dealing with older study participants might be met. Among these distinctive challenges are the identification of suitably measured outcomes and appropriately chosen eligibility criteria, the acknowledgment of multiple morbidities by multicomponent interventions, and the threat of biased inference introduced by missing data.

### DESIGNING MULTICOMPONENT INTERVENTIONS AND ESTIMATING TREATMENT EFFECTS

H. Allore, *Internal Medicine, Yale University, New Haven, Connecticut*

The full factorial design is a common multicomponent design in which intervention components and their levels are randomly assigned to study participants. This may result in an unwieldy number of treatment arms. However, in trials addressing multifactorial geriatric health participants typically have ≥ 1 modifiable risk factors, but rarely all risk factors. Consequently, participants are not eligible for all combinations of intervention components. Rather, the option for those randomized to the intervention arms is to apply each intervention component to each modifiable risk factor present. This type of multicomponent intervention is called "standardly-tailored". There are several methods for analyzing data from a full factorial design to estimate overall effects and component effects. For standardly-tailored designs the overall effect can be estimated; however, the appropriate comparison group to estimate a component effect includes only participants in the control arm that would have been eligible for that particular intervention component.

### TRIGGERED SAMPLING DESIGNS FOR OBSERVATIONAL COHORT STUDIES WITH OLDER STUDY PARTICIPANTS

P.H. Van Ness, *Internal Medicine, Yale University, New Haven, Connecticut*

A characteristic of observational cohort studies involving older study participants is the loss to follow-up that occurs when they die or become too ill to participate in the study. Various analytical techniques handle such missing data when it is missing at random, e.g., multiple imputation, joint modeling of death and a longitudinal outcome. A design approach that anticipates this difficulty specifies that additional information be gathered from study participants who experience a marked decline in health status, such as hospitalizations or referrals to hospice. This new sampling "triggered" by a decline in health status will most often occur at times when data was not scheduled to be gathered and is intended to detect changes in key variables occurring prior to drop-out. This presentation will describe the advantages and disadvantages of this type of study design and will illustrate several analytical and interpretive issues.

### DESIGNING CLINICAL TRIALS TO ASSESS THE EFFECTS OF BEHAVIORAL INTERVENTIONS ON COGNITIVE OUTCOMES IN SENIORS

M.A. Espeland, *Wake Forest University Health Sciences, Winston-Salem, North Carolina*

Clinical trials of promising non-pharmacological strategies to prevent cognitive impairment are needed. Features of these trials (choice of behavior, required sample sizes, and expected rates of adherence and retention) are dependent on the targeted baseline levels of cognitive and physical function for the cohort. The required sample size and duration of follow-up are also sensitive to the choice of the trial's primary outcome. Data from several trials will be reviewed to provide empirically-based projections for these design benchmarks that are critical for the design of efficient trials of behavioral interventions. These demonstrate the feasibility of such trials. Attendees will learn how the choice of outcomes — ranging from changes in global and domain-specific cognitive function to incident dementia — influence the required sample sizes of trials of promising behavioral interventions. They will learn how eligibility criteria defining baseline cognitive and physical function influence recruitment, retention, adherence, and sample size requirements

### USING AUXILIARY INFORMATION TO CORRECT FOR INFORMATIVE LOSS TO FOLLOW UP

C.B. Hall, *Albert Einstein College of Medicine, Bronx, Connecticut*

Loss to follow-up among participants in longitudinal aging studies introduces a bias in the estimation of functional and cognitive changes as well as of disease incidence. Joint modeling of auxiliary information collected on those lost to follow-up, and multiple imputation using such information, have the potential to allow investigators to estimate the magnitude of this bias and possibly to correct for it. This presentation will outline statistical methods needed to use this auxiliary information. It will further show examples of the use of existing primary care medical records, and of cognitive and mobility data collected via telephone, to correct for the informative dropout. Finally, it will discuss barriers to implementing these and similar approaches and suggest directions for future methodologic improvements.

## SESSION 1875 (SYMPOSIUM)

### VA GRECC SYMPOSIUM: VITAMIN D AND GOOD HEALTH ACROSS THE AGING CONTINUUM

Chair: *G.A. Howard, GRECC, Miami VA Medical Center, Miami, Florida, University of Miami Miller School of Medicine, Miami, Florida*

Co-Chair: *S. Levis, GRECC, Miami VA Medical Center, Miami, Florida*

For years 400 IU/d of vitamin D (RDA) was thought to be sufficient to maintain a healthy lifestyle. Hence, health care practitioners are surprised when presented with data showing a prevalence of vitamin D deficiency over 50% in certain populations. In spite of a number of publications, there is widespread naiveté concerning the worldwide prevalence of vitamin D deficiency and insufficiency, particularly in the elderly. A number of reports have shown the beneficial effects of increased vitamin D intake not only on the skeleton, but on the heart and virtually all major organ systems. Not without controversy, the question of how much is enough is being investigated in several on-going studies to provide a definitive answer. Vitamin D plays a major role, not only in bone health, but also in neuromuscular function. In the elderly, vitamin D deficiency is associated with decreased lower extremity neuromuscular function and increased risk for falls and fractures. This symposium will provide a glimpse into several beneficial aspects of increased vitamin D intake among the elderly. The benefits are not only physiological, i.e., raising the serum level of circulating vitamin D and its biologically active derivatives, but physical in terms of improving physical and functional performance in the elderly. After attending this session, participants will be able to appreciate the benefits that vitamin D supplementation at the appropriate dose could afford in ameliorating functional decline in elderly adults, as well as understanding the potential benefits of supplementation as an important intervention in type 2 diabetes.

### SAFETY AND PHYSICAL PERFORMANCE BENEFIT OF DAILY SUPPLEMENTATION WITH 2000 IU OF VITAMIN D3 IN OLDER AMBULATORY PERSONS

S. Levis[1,2], H. Florez[1,2], B.R. Troen[1,2], E. Cherniack[1,2], O. Gomez[1,2], B.A. Roos[1,2,3], *1. Miami VA Medical Center, Miami, Florida, 2. University of Miami Miller School of Medicine, Miami, Florida, 3. Miami Jewish Health Systems, Miami, Florida*

Since we previously observed a high prevalence of vitamin D (vitD) insufficiency in older south Floridians, we conducted a pilot study of vitD supplementation in 49 ambulatory persons age 73.1 ± 6.5 years, range 64 to 92 (83% women, 45% Hispanic white). Serum 25-OH vitD at baseline was 26.92 + 8.82 ng/ml and vitD intake 275 ± 220 IU/d; the majority (50% men; 61% women) had low weekly caloric expenditure consistent with sedentary lifestyle. Regardless of baseline level of serum 25-OH vitD (25-vitD) or physical activity, all persons received vitD3 2000 IU/d. Serum and urine calcium remained unchanged throughout the trial. After 6 months, participants had a mean increase of 0.09 ± 0.2 m/sec from baseline in the 4-meter walking speed test ($p<0.05$, CI 0.035, 0.15). These results suggest that supplementation with vitD3 2000 IU/d safely and effectively improves physical performance in older individuals.

### ASSOCIATIONS BETWEEN VITAMIN D INTAKE AND PHYSICAL FUNCTION: THE RENEW (REACH-OUT TO ENHANCE WELLNESS) TRIAL

M.C. Morey[1,2], P.E. Miller[3], D. Snyder[2], B. Peterson[2], H. Cohen[2,1], W. Demark-Wahnefried[4], *1. VA GRECC, Durham, North Carolina, 2. Duke University OAIC/ Aging Center/ and/or School of Nursing, Durham, North Carolina, 3. Pennsylvania State University, College Park, Pennsylvania, 4. University of Alabama at Birmingham, Birmingham, Alabama*

Recent evidence suggests that vitamin D status is positively associated with physical function. At baseline (n=641) and 1-year (n=558), cross-sectional associations between vitamin D intake and self-reports of physical function were examined in older, long-term cancer survivors in the Reach-Out to ENhancE Wellness (RENEW) trial, a 1-year-home-based intervention designed to promote exercise and diet quality. We also investigated whether change in vitamin D intake was associated with change in physical function post-intervention. Dietary vitamin D intake, but not supplemental intake, was modestly associated with physical function at both baseline and 1-year ($P<0.05$ both assessments). However, no significant associations were observed between change in vitamin D intake (through diet or supplements), and change in functional status. Our findings suggest that long-term dietary intake may play a role in physical functioning and that additional research is needed to elucidate the role of dietary vitamin D intake on physical function in older adults.

### RACIAL DISPARITY AND EFFICACY OF VITAMIN D SUPPLEMENTATION IN INCREASING 25(OH)D SERUM LEVELS

D.M. Kresevic[1,2], M. Pallaki[1], C. Burant[3,1], J.E. Denton[1], A.E. Higgins[1], *1. GRECC, VA, Cleveland, Ohio, 2. University Hospitals Case Medical Center, Cleveland, Ohio, 3. Case Western Reserve University Frances Payne Bolton School of Nursing, Cleveland, Ohio*

This pilot study, a retrospective chart review, was conducted on community-dwelling veterans (≥65 years) who were cared for in VA geriatric clinics and had one or more recorded 25(OH)D levels. At baseline, 206 of 234 (88.0%) patients had a serum level below normal (32 ng/ml). In a subsample of patients (n=62) who had complete data over three time periods (supplementation for at least 90 days), type of supplementation as compared to 25(OH)D serum levels was analyzed. Of these patients, 95% were prescribed calcitriol at least one time, 72% of whom increased their 25(OH)D levels. Fifty-two percent were prescribed calcitriol at all three time periods, 63% of whom increased their 25(OH)D levels. It should be noted that while not significant due to small sample size, in veterans who took calcitriol for at least 90 days, Caucasians were 3.5 times more likely to increase their 25(OH)D levels as compared to African Americans.

### THE ROLE OF VITAMIN D IN DIABETES PREVENTION AND MANAGEMENT

H. Florez[1,2], L. Oropesa[2], W.M. Valencia Rodrigo[3,2], F.A. Andrade[2], S. Levis[1,2,3], B.A. Roos[1,2,3], *1. University of Miami Miller School of Medicine, Miami, Florida, 2. Bruce W. Carter Miami VA, Miami, Florida, 3. Jackson Memorial Hospital, Miami, Florida*

Altered calcium and vitamin D homeostasis plays a role in the development of diabetes. The mechanisms responsible include effects on insulin resistance, beta-cell dysfunction, and the degree of inflammation. Studies have shown an inverse association between dietary vitamin D and diabetes risk. We have found that hypovitaminosis D (HVD) and daily calcium intake are associated with elevated fasting plasma glucose (FPG). In a post-hoc analysis of 3-year clinical trial data, Pitas et al. (2007) showed a modest but significant difference in FPG (~6 mg/dl) in subjects with prediabetes treated with cholecalciferol (D3) versus those that received placebo. HVD is associated with obesity, sarcopenia, and functional decline while D3 supplementation may enhance muscle function and provide added benefits to lifestyle intervention in older adults at high-risk for diabetes and cardiovascular disease (CVD). Well-designed studies investigating the effect of vitamin D supplementation on glycemic status, diabetes and CVD risk are needed.

## SESSION 1880 (SYMPOSIUM)

### CARE TRANSITIONS: LESSONS THE U.S. CAN LEARN FROM LONG-TERM CARE IN OTHER INDUSTRIALIZED NATIONS

Chair: *H. Gleckman, The Urban Institute, Washington, District of Columbia*
Discussant: *H. Gleckman, The Urban Institute, Washington, District of Columbia*

The U.S. is not alone in its efforts to improve delivery and finance of care transitions across the aging continuum. In contrast to the U.S. system—-built principally on informal care and Medicaid-funded paid assistance—most other developed nations have dramatically reformed their long-term care structures in recent decades. Over the past year, the U.S. has struggled to do the same, especially through debate over the CLASS Act. While the designs of other nations differ from one another, each has important lessons for the U.S. In this symposium, participants will learn about successful models of long-term care developed in recent years by Japan, Germany, and Sweden. In addition, they will learn how the U.S. can adopt the experiences of those nations as it reforms its long-term care model. In this symposium, John Creighton Campbell will argue that Japan's experience with its mandatory long-term care insurance system demonstrates that comprehensive LTC is workable and controllable at moderate cost. Mary Jo Gibson will present on the German model and discuss the early experience of important 2008 reforms that attempted to improve care coordination and quality, expand some benefits, and help ensure long-term financial sustainability of its long-term care insurance design. Gerdt Sundström will review Sweden's efforts to control costs by refocusing its taxpayer-funded system on ancillary home-based services rather than aides and nursing facility care. Howard Gleckman will moderate and discuss how the U.S. can adopt elements of each of these systems to fit its preference for private market solutions.

### PUBLIC AND PRIVATE LONG-TERM CARE FINANCING IN THE U.S: EXPERIENCE WITH RECENT REFORMS

H. Gleckman, *The Urban Institute, Washington, District of Columbia*

In contrast to Japan, Germany, Sweden, and most other developed nations, the U.S. continues to struggle in its efforts to expand benefits for long-term care supports and services. Increasingly resource-constrained, many states are cutting back on Medicaid benefits for the elderly and disabled. Yet, private long-term care insurance finances less than 10 percent of long-term care costs in the U.S. To ease growing burdens on family caregivers, the CLASS Act is an effort to create a public long-term care insurance system. However, unlike Germany and Japan, this is a voluntary model. Participants will better understand what lessons the U.S. can learn from the successful implementation of public insurance in Germany and Japan, and from the taxpayer-funded system in Sweden? They will also learn whether elements of those models can be tailored to the U.S. preference for private-market solutions to social problems?

### THE SWEDISH EXPERIENCE: DIVERSIFICATION OF SERVICES AND CONTAINING COSTS

G. Sundström, *Institute of Gerontology, School of Health Sciences, Jönköping, Sweden*

Public services for older people are often limited to institutional care or home care, usually assistance provided by aides. In many countries these major services are supplemented – or substituted – by "minor" services such as transportation, meals-on-wheels, electronic monitoring, and day care. Sweden's taxpayer funded system provided comprehensive, but costly, care until the 1980s. To contain rapidly rising costs, Sweden – largely successfully – substituted these less intensive, "minor" services for more "heavy" ones. Home Help is rationed to support only the neediest, before ever-shorter institutional care. While everyone in need receives benefits, these are often provided later than prior to the reforms. However, care across the continuum continues to be reasonably well targeted. Participants will learn that older people and their families appear to be well served by this broad range of services, particularly in contrast to the alternatives: Home Help, institutional care, or nothing.

### GERMANY'S PUBLIC, MANDATORY LONG-TERM CARE SYSTEM: FIFTEEN YEARS OF EXPERIENCE AND RECENT REFORMS

M. Gibson, *Independent Health Policy Analyst, Santa Barbara, California*

Germany's Public, Mandatory Long-Term Care System: Fifteen Years of Experience and Recent Reforms Based on a social insurance model, the German system provides long-term services and supports with no means test, yet its public expenditures on long-term care (per capita age 65 +) are less than those in the U.S. Benefits include a cash allowance for home care, formal home care services, and institutional care. Important reforms were enacted in Germany in 2008 to improve care coordination and quality, expand some benefits, and help ensure long-term financial sustainability. The German experience is salient to policy discussion in the U.S. in light of its efforts to expand coverage for long-term care, support family caregivers, improve quality, and contain the costs to states and the federal government of Medicaid's long-term care safety net. Participants will be able to compare and contrast the U.S. and German experiences, focusing on what seems to work and what does not.

### JAPAN'S PUBLIC, MANDATORY LONG-TERM CARE INSURANCE: TEN YEARS OF EXPERIENCE AND RECENT REFORMS

J.C. Campbell, *1. University of Michigan, Ann Arbor, Michigan, 2. Institute of Gerontology, Tokyo University, Tokyo, Japan*

After its first ten years, Japan's LTC insurance program is operating successfully and providing services to some 4 million people (about 14 percent of the 65+ population), without respect to income or family situation. Financing is ½ social insurance premiums, ½ taxes. More than 3 million get home and community based services, the majority using adult day care. Government covers 90 percent of the cost, but public spending (per older person) is only slightly higher than in the U.S. despite such high service levels. Expenditures ran more than expected due to high enrollment by people with light needs, so a reorganization in 2006 moved this group into a lower-cost program. These and other reforms brought enrollment and spending growth roughly in line with growth in the target population. Participants will learn that Japan demonstrates comprehensive LTC is workable and controllable at moderate cost.

## SESSION 1885 (SYMPOSIUM)

### POLICY SERIES SYMPOSIUM: CIVIC ENGAGEMENT IN LATER LIFE: TRANSLATING PROMISING IDEAS INTO REALITY WITHIN DIVERSE COMMUNITIES

Chair: *J. Hinterlong, College of Social Work, Florida State University, Tallahassee, Florida*

The promise of civic engagement among older adults to address community needs has sparked the creation of program models, planning efforts, and public policy in diverse communities throughout the United States. While interest in these efforts continues to grow, differences in the definition of civic engagement raise challenges to identifying key features of successful initiatives. One strategy for addressing this barrier is to understand how older adults and others involved in these programs have translated the goal of engagement into community-specific action. This symposium first will explore how the concept of civic engagement has emerged and evolved. An inclusive framework to guide scholarship and practice is presented. Next, an overview of recent efforts to promote engagement at the national, regional, and local level will illustrate the diversity of activities in the field. Three related papers will consider how communities have responded to call for increased support of older adults' engagement. Examples are drawn from ethnically and geographically diverse settings. Emphasis is placed upon evidence provided from the participants and local leaders about the implementation of these programs and policies. We highlight the roles and voices of older adults themselves in translating the promise of civic engagement into real opportunities for individuals and communities. Recommendations for scholarship, community practice, and public policy are offered.

### IDENTIFYING THE BOUNDARIES AND HORIZONS OF CIVIC ENGAGEMENT AS A CONCEPT FOR THE FIELD OF AGING

E.A. Greenfield, *School of Social Work, Rutgers, The State University of New Jersey, New Brunswick, NJ*

Despite increasing attention to older adults' civic engagement across the field of aging, there nevertheless remains a plurality of approaches to defining what civic engagement means. Based on a review of extant research, this paper identifies points of convergence and divergence among gerontological definitions of civic engagement. While there is agreement regarding organizational volunteering, voluntary group participation, political participation, and community leadership as types of civic engagement, there is less agreement on employment, caregiving, and lifelong learning. This reflects the fact that, until recently, the concept of civic engagement has developed largely within fields outside of gerontology, such as political science and youth development. Regarding implications for research, practice, and policy, the paper concludes by discussing the importance of broad and inclusive definitions of civic engagement for the field of aging, as well as the use of theory to systematically distinguish among varied manifestations of civic engagement in later life.

### OLDER ADULTS' CIVIC ENGAGEMENT: FOSTERING FIELD-BUILDING IN THE UNITED STATES

J. Hinterlong, *College of Social Work, Florida State University, Tallahassee, Florida*

Propelled by private philanthropic investments, public sector activity, and emerging preferences among aging individuals, program and policy initiatives aimed at promoting civic engagement among older adults have proliferated. The growth of the field has faced challenges in the replication of models across communities and the threats to economic security. Nevertheless, sustained efforts by advocates and prominent organizations coupled with growing evidence of the positive impacts of engagement to older adults and others have produced a corps of national, regional, and local leaders to support this work. This paper uses lessons learned from an evaluation of a national philanthropic program to build the field of aging and civic engagement. It highlights the evolution and structure of the field, suggests reasons for its success, and proposes directions for future growth.

### DEVELOPING AND SUSTAINING SUCCESSFUL COMMUNITY PARTNERSHIPS: THE DIVERSE ROLES OF OLDER ADULTS

N. Giunta, *School of Social Work, Hunter College, New York, New York*

Through the Community Partnerships for Older Adults (CPFOA) Program of the Robert Wood Johnson Foundation, fifteen Community Partnerships (CPs) received development and implementation funding to improve the lives of older adults. Assuming no one-size-fits-all approach to meet older adults' complex needs in a diverse society, each CP developed an individualized plan to address its community's unique needs. Surveys, national program office documentation, and other communications with CP participants were examined to identify common "keys to success" across partnerships (N = 15). Among others, two particularly relevant themes emerged across successful partnerships: direct involvement of older adults in leadership, planning, and implementation of partnership initiatives; and consensus from a broad spectrum of stakeholders on community-specific plan implementation. This paper supports evidence that participation in community development initiatives such as CPFOA is related to positive outcomes for older adults and their communities. Community practice, policy, and research implications will be discussed.

### INCREASING ETHNIC COMMUNITY CAPACITY THROUGH TRAINING VOLUNTEERS FOR LEADERSHIP ROLES

S. Diwan[1], T. Blair[2], A. Chandra[3], K. Grimsich[3], R. Grimm[3], S. Shenfil[3], *1. San Jose State University, San Jose, California, 2. UC Berkeley, Berkeley, California, 3. City Of Fremont Dept of Human Services, Fremont, California*

Older immigrants face numerous challenges such as cultural and linguistic barriers to accessing health and social services. Designed to increase community capacity, the Community Ambassador Program for Seniors (CAPS) trained volunteers from ethnic and faith organizations to create a network of bicultural, multi-lingual advocates for seniors in northern California. Since 2007, CAPS trained 85 volunteer "ambassadors," who have assisted more than 600 seniors with health and mental health care, transportation, and other essential services. Training increased volunteers': 1) effectiveness in noting particular areas of individual needs; 2) responsiveness through enabling a wider range of responses to be addressed by volunteers; and 3) considerable satisfaction with their leadership roles. Ambassadors frequently grapple with boundary and role issues that are unique to working within ethnic communities. Lessons learned include the need for understanding key features of particular communities, and supporting volunteers to better understand their roles and boundaries within their communities.

### REMOVING BARRIERS TO CIVIC ENGAGEMENT: LOCAL GOVERNMENT ZONING, HOUSING, AND TRANSPORTATION POLICIES AND PROGRAMS

A.J. Lehning, *School of Social Welfare, UC Berkeley, Berkeley, California*

The physical environment in a majority of this nation's communities presents a significant barrier to the civic and social engagement of older adults. This mixed methods study examines the factors that influence local government adoption of community design, housing, and transportation policies and programs that previous research suggests are important to helping older adults age in place and remain connected to their communities. Survey responses from 62 city planners provide partial support for facilitating factors identified from policy adoption literature, particularly in terms of the importance of advocacy by individuals working within local government and residents. Contrary to hypotheses, however, cities with a higher socioeconomic status and percentage of the population age 65 and older are less likely to have these innovations in place. Qualitative interviews with 18 local government employees suggest explanations for these results and offer some additional factors that should be considered in future research.

## SESSION 1890 (PAPER)

## INFORMAL CAREGIVING

### INFORMAL CAREGIVING BY AND FOR THE OLDEST OLD: POLICIES FOR THE FUTURE

D. Wagner, E. Takagi, *Gerontology, Towson University, Towson, Maryland*

Informal caregiving for an older adult is a normative activity today. The age of the care recipient and the caregiver has increased during the past decade as population aging has occurred in the US. We analyzed data from the 1997, 2004 and 2009 National Alliance for Caregiving (NAC)/AARP national surveys of caregivers and noted that the percentage of caregiving providing help to someone 85+ years of age increased from 24% in 1997 to 30% in 2009. Older adults are not only care recipients but caregivers and many of these older caregivers are often caregiving alone and are more likely than younger caregivers to have higher burden levels associated with this care. The oldest-old caregivers(75+)in the 2009 survey report spousal care as the most common care situation. However, significant numbers are also caring for a friend, a parent or a sibling. Much of the policy change being proposed to support family caregivers on a national level is targeted at the younger (50 years on average) adult child caregiver with less focus on the oldest old. This paper describes the caregiving trends observed in the 2009 NAC/AARP study and discusses policy implications with a focus on the older caregiver. Existing policy proposals such as tax credits for family caregivers and assessment of caregivers are critically reviewed in the context of the growing number of older caregivers and care recipients and a policy paradigm for addressing the needs of this sub-population of informal caregivers is described.

### GENERATIONAL BALANCING ACTS: SOCIO-CULTURAL CONTEXTS OF MID-LIFE FAMILY CAREGIVING

B.A. Mitchell, *Gerontology, Simon Fraser University, Vancouver, British Columbia, Canada*

It is well established that a significant number of aging parents are caught between the demands of caring for both younger and older generations. Past studies also indicate that only a minority of these "sandwiched generation" adults experience intense stress and strain with these competing responsibilities, despite the popularity of "apocalyptic" perspectives of aging families. However, gaps remain in the literature on how generational balancing acts are experienced within diverse cultural settings in a rapidly changing urban environment characterized by high rates of immigration. In recognition of these emergent trends and issues, the purpose of this paper is to explore predictors and subjective perceptions of middle-generational family demands using a mixed-methods approach. Building upon life course and role identity theory, both quantitative and qualitative data are drawn from in-depth interviews with a random sample of 490 parents (mothers and fathers) living in Metro Vancouver, British Columbia. Respondents have a mean age of 58 and self-identify as primarily belonging to one of four cultural groups: British-, Southern-European-, South Asian-, and Chinese-Canadian. Results reveal diversity in perceptions of "juggling acts" (e.g., by cultural and immigration background, age, gender, distance/proximity, health statuses, and relationship quality) and at various stages of child launching (e.g., "full nest" versus "empty nest" living arrangements).

### CHARACTERISTICS OF INFORMAL CAREGIVERS IN EUROPEAN COUNTRIES AND KOREA

S. Jang, I. Kawachi, S. Cho, M. Avendano, *Department of Society Human Development and Health, Harvard School of Public Health, Boston, Massachusetts*

Informal caregivers adopt their role for many different reasons, including cultural tradition, and/or dearth of formal long-term care resources. Informal caregivers in most societies are female family members, however, precise figures about the characteristics of caregivers in various societies remain scarce. This study sought to examine macro-level societal characteristics associated with a higher reliance on female family member's informal caregiving. The sample consisted of weighted populations of informal caregivers aged 50 years old or older who had responded to the Survey of Health, Ageing and Retirement in Europe (SHARE) in 2004 and to the Korean Longitudinal Study of Ageing (KLoSA) in 2006. We also used macro data obtained from OECD statistics for the GDP, total fertility rates, labour force participation rates, level of women's empowerment, long-term care resources, population statistics, and life expectancy to examine correlations with the proportions of women and older caregivers. We observed similarities and differences in the distributions of informal caregivers among 11 countries. Korea, Spain, and Italy exhibited similarly high percentages of women, homemakers, co-residents, and spouses in informal care giving roles. Denmark and Sweden showed high proportions of employed informal caregivers. Lower female labour force participation is associated with higher proportions of women caregivers. A higher proportion of women caregivers in the population correlate with lower national GDP per capita. Our findings suggested that relieving women of their caregiving roles and enabling them to share these roles with formal care providers and other resources might increase the participation of women in the labour force and thereby improve the economic status of country.

## SESSION 1895 (PAPER)

## INTERVENTIONS AND SERVICES ACROSS CONTEXTS II

### TO THE HOSPITAL AND BACK HOME AGAIN: A NOVEL NURSE PRACTITIONER-BASED TRANSITIONAL CARE PROGRAM FOR THE HOSPITALIZED HOMEBOUND

K. Ornstein[1,2], K. Smith[1], D. Foer[3], T. Lopez-Cantor[1], T. Soriano[1], *1. visiting doctors program, mount sinai, New York, New York, 2. columbia university, new york, New York, 3. Yale University, New Haven, Connecticut*

Seamless transitions between care settings are a critical component of high quality care for frail older persons and may be a particularly salient issue for the growing number of elderly homebound patients. With high prevalence of chronic and end-stage disease, homebound patients have particularly high rates of hospitalizations and emergency room visits resulting in frequent changes in care settings and increased vulnerability to poor outcomes. Increasingly, homebound patients are being cared for by primary care physicians who are part of multidisciplinary outpatient care teams within home-based primary care (HBPC) programs. At the Mount Sinai Visiting Doctors Program(MSVD), the largest academic HBPC program in the U.S., we developed a novel, nurse-practitioner led transition of care program to improve coordination of care and communication between patients, caregivers and physicians on the inpatient and outpatient setting. We report on the details of the intervention model, including the communication tools developed and utilized for the project. Over a 27 month period the team followed 532 homebound patients through 1088 hospital discharges across 11 services within Mount Sinai Hospital. 663 post-discharge visits were made by nurse practitioners within 3 weeks of discharge representing more than 90% of all patients discharged home. We conducted a detailed evaluation of program effectiveness and costs. While we did not find significant reductions in length of stay during the intervention period, the 30-day rehospitalization rate decreased from 16.6% to 15.8% for this population. We also report results from focus groups conducted among inpatient and primary care providers on program satisfaction.

### ENGAGING LONG TERM CARE HOMES TO PROMOTE SUCCESSFUL RESEARCH IMPLEMENTATION

S. Kaasalainen[1], J. Williams[4], T. Hadjistavropoulos[2], L. Thorpe[3], S. Whiting[3], J. Tremeer[5], S. Neville[6], *1. McMaster University, Hamilton, Ontario, Canada, 2. University of Regina, Regina, Saskatchewan, Canada, 3. University of Saskatchewan, Saskatoon, Saskatchewan, Canada, 4. QEII Health Services Centre, Halifax, Nova Scotia, Canada, 5. Regina Qu'Appelle Health Region, Regina, Saskatchewan, Canada, 6. Saskatoon Health Region, Saskatoon, Saskatchewan, Canada*

BACKGROUND: Quality improvement initiatives can benefit from both the conduct and utilization of research. Researchers need to involve LTC staff in planning and implementing interventions to maximise the likelihood of success. The purposes of this study were to: (a) identify barriers and facilitators of LTC homes' readiness to implement research interventions; and (b) develop strategies to facilitate their implementation. METHODS: A mixed method design was used, primarily driven by the qualitative method and supplemented by a smaller, embedded quantitative component. Data were collected at seven LTC homes from health care providers and administration using 13 focus groups, 26 interviews and two surveys. RESULTS: Findings revealed that participants appreciated being involved at early stages of the project. We developed a model to help conceptualize the study findings. The core of the model represents the innovation which will be implemented within the practice environment. In order to implement the innovation successfully, all of the participants described the importance of working within the structures and processes of the existing practice environment. As such, a number of strategies were highlighted for researchers to help facilitate a positive engagement with LTC homes. All of the themes within the model were well-supported by data from each of the participating LTC homes. CONCLUSIONS: Engaging staff at the planning stage facilitated effective communication and helped strategize implementation within the constraints of the system.

### SUCCESSFUL STRATEGIES FOR STRENGTHENING THE DIRECT SERVICE WORKFORCE: FINDINGS FROM CMS ASSISTANCE TO STATES

B. Wright[1], C. Blakeway[1], J. Engberg[2], S. Hunter[2], L. Steighner[3], *1. The Lewin Group, Falls Church, Virginia, 2. RAND Corporation, Santa Monica, California, 3. American Institutes for Research (AIR), Washington, District of Columbia*

As the older population increases, many states are struggling to recruit and retain qualified direct service workers (DSWs) to meet the growing need for long-term services and supports. In this session, participants will hear findings from two CMS projects to help states improve recruitment and retention of DSWs: 1) the CMS Direct Service Workforce Demonstration grants awarded to 10 states in 2003 and 2004, and 2) intensive technical assistance (TA) provided by CMS through the DSW Resource Center to 16 Money Follows the Person states in 2009-2010. In the Demonstration, each grantee undertook one or more activities. The evaluation used a cluster design, which clustered states by type of initiative (e.g., health care, training, mentoring, marketing campaigns) to permit a comparison of outcomes among grantees with similar initiatives. The study found that stakeholders identified low pay and difficult work as the main challenges. In many cases, implementation struggled because of an incomplete understanding of workers' needs. The implementation evaluation suggests that much of the worth of the initiatives is demonstrating to workers that they are valued and that realistic job previews can help reduce turnover due to unrealistic expectations. In providing TA to states through the DSW Resource Center, interviews with state officials indicated that major challenges were developing core competencies, collecting data needed to understand the problem and design/evaluate initiatives, and strengthening the workforce in rural areas. Through consultation with workforce experts across disciplines/sectors and review of existing literature/resources, promising solutions to these problems were developed.

### LESSONS LEARNED USING INCLUSIVE STRATEGIES FOR AGE-WAVE COMMUNITY PLANNING

P. Dressel[1], G. Walker[2], *1. JustPartners, Inc., Baltimore, Maryland, 2. Jefferson Area Board for Aging, Charlottesville, Virginia*

Given both the aging demographics and financial constraints affecting communities across the nation, interventions that do more for more constituents more efficiently are especially appealing and necessary. This paper shares twelve lessons from three communities in three states utilizing strategies from the Viable Futures Toolkit to address issues of aging by employing a new math that offers results far beyond this one constituency. Lessons focus on using existing resources, opportunities, and challenges to forge common ground practical solutions; making families a key building block for cross-constituency interventions; avoiding conflict across constituencies through shared guiding values; advancing policy change to sustain changed inter-organizational practice; and paying particular attention to internal organizational needs as cross-organizational collaboration gets underway. Aging services organizations and local governments implementing this multi-constituent approach to address elders' concerns report win-win outcomes of expanded policy allies, additional funding sources, and greater media attention for positive change and public acceptance.

## SESSION 1900 (SYMPOSIUM)

### PROMOTING PARTNERSHIPS TO SUPPORT PARTICIPANT-DIRECTED COMMUNITY LIVING FOR SENIORS AND VETERANS

Chair: *A.B. Stevens, Scott & White Healthcare, Temple, Texas*
Discussant: *N. Whitelaw, National Council on Aging, Washington DC, District of Columbia*

The Administration on Aging (AoA) and the Veterans Health Administration (VA) are promoting community living for Seniors and Veterans with disabilities by partnering on two new programs. The Community Living Program targets adults age 60 and over who are at risk of nursing home placement and spend down to Medicaid. In the Veterans Directed Home and Community-Based Services (VDHCBS) Program, the VA purchases community-based services on behalf of eligible Veterans from the AoA Aging Services Network. This symposium will describe the AoA/VA partnership, including the shared goal of providing participant-directed services, and will provide an example on how this national partnership can lead to community-based care options in local communities. Lori Gerhard, Director of AoA's Office of Planning and Policy Development, will describe the AoA/VA partnership and the unique value that academic health scientists can bring to programs that result from this partnership. Dan Schoeps, Director of VA Purchased Long-term Care Group, will describe the VA's evolving approach to consumer directed long term care. Alan Stevens and Richard McGhee, Co-Directors of the Central Texas Community Living Program and VDHCBS will present an overview of the project, which includes Coleman's Care Transitions Intervention. Angie Hochhalter, evaluation specialist, will present the logic model used to guide the implementation and evaluation of the Central Texas program. Baseline data from the initial cohort of 232 participants will be described as well as preliminary data from a 6 month follow up assessment. Dr. Nancy Whitelaw of NCOA will serve as the symposium's discussant.

### THE U.S. ADMINISTRATION ON AGING (AOA) AND THE U.S. DEPARTMENT OF VETERAN AFFAIRS (VA) WORKING TOGETHER TO FACILITATE COMMUNITY LIVING OPTIONS

L. Gerhard[1], D. Schoeps[2], *1. Administration on Aging, Washington DC, District of Columbia, 2. Veterans Health Administration, Washington DC, District of Columbia*

Flexible community-based long term care services result from a unique AoA/VA partnership. Lori Gerhard, Director of AoA's Office of Planning and Policy Development, will describe the partnership and the unique value that academic health scientists can bring to AoA's goal of providing evidence based interventions. Dan Schoeps, Director of VA Purchased Long-term Care Group, will describe the VA's dedication to participant-directed long term care. Programs resulting from the AoA/VA partnership share a common goal of engaging individuals during transitions in care to ensure access to the full range of service options to promote health and independence. Presenters will describe how AoA and the VA are collaborating to implement care transitions models, build community capacity to implement transitional care, achieve hospital buy-in, and evaluate care transitions activities. Training materials, strategies, and tools from ongoing projects funded by AoA and the VA will be showcased.

### THE CENTRAL TEXAS COMMUNITY LIVING PROGRAM

A.B. Stevens[1], T.D. Butler[1], J. Jones[1], R. McGhee[2], *1. Scott & White Healthcare, Temple, Texas, 2. Central Texas Aging and Disability Resource Center, Belton, Texas*

Partnering with Scott & White Healthcare and interfacing with the Central Texas Veteran Directed Home and Community-Based Services Program, the Central Texas Aging and Disability Resource Center (ADRC) is implementing and evaluating a multi-component education and support program which supports community-based living for older individuals at risk of nursing home placement. Participants are identified in the hospital setting and through community referrals. All services are delivered according to a customized, ten-month plan of care developed in partnership with the person at risk of nursing home placement and the responsible family caregiver. Core services include the Coleman Care Transitions Intervention and the REACH II Intervention, both evidence-based. Formal support services such as respite and home modifications are provided at no charge to the participant. Implementation of the program, including the importance of developing strong community/healthcare provider partnerships, will be highlighted in this presentation.

### PRELIMINARY FINDINGS FROM THE CENTRAL TEXAS COMMUNITY LIVING PROGRAM

A. Hochhalter[1], E. Smith[1], A.B. Stevens[1], R. McGhee[2], *1. Scott & White Healthcare, Temple, Texas, 2. Central Texas Aging and Disability Resource Center, Belton, Texas*

The Central Texas Community Living Program is designed to delay or prevent nursing facility placement for individuals who prefer living at home. The program targets those at risk for placement and Medicaid spend-down. To date, 504 persons have been referred through Scott & White Memorial Hospital or the Central Texas Aging and Disability Resource Center. Of these persons, 232 have enrolled. A comprehensive evaluation of program implementation and effectiveness on both the individual consumer and organizational levels is underway. Among enrolled participants, 18 have cancelled services, 10 have been transferred to the Central Texas Veteran Directed Home and Community-Based Services Program, 10 have died at home, and 3 have entered a nursing facility. The presentation will describe the evaluation logic model and six-month follow-up data for enrolled consumers, including clinical status, functional status, and quality of life of the consumer and family caregiver, and nursing home placement of the consumers.

## SESSION 1905 (SYMPOSIUM)

### SUSTAINABLE COMMUNITIES: GOOD FOR THE ENVIRONMENT AND OUR HEALTH

Chair: *K.E. Sykes, Aging Initiative, US EPA, Washington, District of Columbia*

Discussant: *K.E. Sykes, Aging Initiative, US EPA, Washington, District of Columbia*

Taking action against global warming creates immediate “win-win” situations for our health and environment. Older adults can be part of the solution to this problem through civic engagement to address better transportation options and community designs that lead to more active and less stressful lifestyles and ultimately healthy people. The EPA Aging Initiative has funded and inspired 3 projects focusing on smart growth, civic engagement and active aging. Results and progress from these exemplary pilots will be discussed. ENCorps, a training program for Mainers 50 years and older, contained program components attractive to baby boomers: 1) flexibility in defining smart growth projects that address community projects that promote environment integrity; 2) educational opportunities that build skills and foster leadership capacity and 3) provide opportunities for social networking. A case control study conducted in Portland, OR examined whether green streets contribute to community well-being, (physical and mental health of older and younger adults). The findings will inform changes to the urban environment that are both ecologically sensitive and socially beneficial for people of all ages. Philadelphia Corporation for Aging developed an agenda to promote a built environment that encourages social connectedness, and government policies that encourage a high quality of life for persons of all ages. A broad coalition was created designed to achieve the goals set by the EPA by examining the impact of the built environment on health outcomes through interventions that impact the urban environment such as the rewriting to the City’s zoning code.

### THE EFFECTS OF GREEN STREETS ON OLDER ADULTS’ PHYSICAL AND MENTAL HEALTH

M.B. Neal, J. Dill, G. Luhr, A. Adkins, V. Shandas, D.A. Lund, *Portland State University, Portland, Oregon*

Sustainable, or “green,” streets incorporate natural, landscape-based features that manage stormwater, accommodate walking and bicycling, mitigate urban heat island effects, and reduce greenhouse gas emissions and air pollution. Although the environmental benefits (e.g., improved water and air quality) of natural greenery in urban areas are well known, potential secondary benefits of green streets could include higher levels of physical activity, increased social interaction and social capital, and improved health, yet no published research has directly demonstrated these benefits. This paper reports the results of a study designed to determine whether green streets contribute to community well-being, including the physical and mental health of older and younger adults. A mailed survey of residents of four Portland, Oregon neighborhoods, two with green streets and two without, was conducted. The study findings will help inform changes to the urban environment that are both ecologically sensitive and socially beneficial for people of all ages.

### BRINGING ACTIVE AGING TOGETHER WITH SMART GROWTH: THE PHILADELPHIA EXPERIENCE

K. Clark, A. Glicksman, D. Nevison, *Planning, Phila Corporation for Aging, Philadelphia, Pennsylvania*

Integrating active aging and smart growth into the fabric of a large city requires long-term commitment, from a variety of diverse stakeholders, based on careful planning and coalition building. Philadelphia Corporation for Aging (PCA), the Area Agency on Aging for the city of Philadelphia, has developed an agenda to promote a built environment that encourages social connectedness, and government policies that encourage a high quality of life for persons of all ages. PCA is building a broad coalition of private, not-for-profit, and municipal agencies committed to this agenda and is attempting to achieve the goals set by the EPA on a city-wide scale through: sharing the results of research designed to examine the impact of the built environment on health outcomes, identifying common interests and developing partnership for various projects, and by participating in activities that will impact the urban environment such as the rewriting to the City’s zoning code.

### DESIGN AND IMPLEMENTATION STRATEGIES FOR ENGAGING OLDER ADULT VOLUNTEERS AS ENVIRONMENTAL STEWARDS

L.W. Kaye, J. Crittenden, A. Chamberlain, *Center on Aging, University of Maine, Bangor, Maine*

Encore Leadership Corps (ENCorps) is a state-wide training and civic engagement program for Mainers 50 years and older who wish to participate in smart growth, community revitalization, and environmental stewardship initiatives. In four months, 110 older adults have enrolled ranging in age from 50 to 85 years (mean = 63.2 years). Sixty two percent are women. Male enrollees are significantly older (65.4 years) than their female counterparts (61.8 years) ($p<.05$). Programmatic components that were particularly influential in attracting baby boomers to ENCorps include: 1) flexibility in defining volunteer smart growth projects; 2) opportunities to address real community issues that promote environment integrity; 3) an emphasis on continuous education and skills building; 4) opportunities for social networking/collaboration; and 5) the fostering of leadership capacity. Supported by grants from the U.S. EPA's Aging Initiative, Maine Community Foundation, the Atlantic Philanthropies, Jane's Trust, Margaret E. Burnham Charitable Trust, and the Davis Conservation Foundation.

## SESSION 1910 (SYMPOSIUM)

### THE POLITICAL ECONOMY OF RETIREMENT SECURITY: RECESSION, BUDGET DEFICITS AND THE ENTITLEMENTS PROGRAM

Chair: *L. Polivka, The Claude Pepper Foundation, Inc., Tallahassee, Florida*

Initiatives to reduce the costs of the entitlements programs, which were created to ensure the economic well-being of the elderly, have emerged at regular intervals since the 1980 election of Ronald Reagan. The most recent initiative is now underway with President Obama's creation of a commission to address the projected growth of large budget deficits over the next 10 years. Proponents of reduced entitlements spending anticipate that budget deficit anxiety among the political elite and in the media will finally make it possible to make major reductions in these programs. The President's Deficit Commission will consider potential cuts in the entitlements programs after a decade's long period of decline in private defined benefit pension plans, wages and family savings. Baby boomers have less total retirement wealth than those in the same age cohort 25 years ago, and are facing substantially higher out of pocket health and long-term care (LTC) expenses (200 thousand plus). These trends raise serious questions about the capacity of many future retirees to have an adequate standard of living in retirement without maintaining or even increasing benefits in the Social Security and Medicare programs. Presenters in this session will address each of these issues and offer alternative strategies for ensuring the future of retirement security.

### ECONOMIC RESOURCES OF FUTURE RETIREES

L. Polivka, *The Claude Pepper Foundation, Inc., Tallahassee, Florida*

The retirement prospects of successive generations of retirees have improved steadily between 1945 and 1990 with the development of Social Security, Medicare and Medicaid (LTC coverage for some), the growth of private pensions and retiree health benefits, and the increase in wages and savings. Over the past 20 to 30 years, however, private pensions have become a less reliable source of retirement income and wages and savings have declined. This presentation will discuss the impact of these changes and their sources (globalization, deregulation, privatization, declining union power, revenue reductions and cuts in social programs) on the generation of retirement wealth since 1980, and the relative capacity of future generations of retirees to maintain an adequate living standard in retirement. The paper will address the kinds of changes in income support and health care policies that will be needed to ensure retirement security for most workers in the future.

### CRISES AND OLD AGE POLITICS: THE DEBT-REDUCTION COMMISSION

C.L. Estes, *Institute for Health & Aging, University of California, San Francisco, San Francisco, California*

This paper examines President Obama's National Commission on Fiscal Responsibility and Reform and its implications for the politics and economic security of the aging. Research methods include discourse and network analyses of commission members, their statements, invited testimonies, and commission products, as well as public opinion polling and media accounts. The paper offers (1) a chronology of "crisis" claims; and (2) identification of (a) the dominant narratives (e.g., "Catastrophic Deficits, Demography and the Nation's Downfall" versus "Social Security does not contribute to The Debt, and its Guarantee ensures the Common Good,") and (b) the major "solutions" (e.g., entitlement cuts (Social Security, Medicare, Medicaid) versus revenue/tax increases, or variations and combinations of each. Theories of Legitimation Crisis (Jurgen Habermas), The Fiscal Crisis of the State (James O'Connor), and Antonio Gramsci inform this examination of the: (1) objective and subjective dimensions of crisis, and (2) symbolic and material consequences of deficit crisis for the aging and future generations.

### THE TWO LEGGED STOOL: INDIVIDUALIZING INCOME RISK IN RETIREMENT

P. Herd, *University of Wisconsin-Madison, Madison, Wisconsin*

The composition of retirement income has shifted from a mixed portfolio of individual and collectivized risk, to one dominated by individual responsibility. The three legs of the retirement stool traditionally had varying levels of risk. Both Social Security and employer provided defined benefit plans pooled risk across all beneficiaries. The riskiest part of the leg, the individualized part, was private savings. But over the past 30 years, employer provided pensions and private savings have merged into a seamless leg of risk. Both are individualized and their values are linked to the ups and downs of the stock market and the individual's ability to invest those resources wisely. The consequence of these changes is that the retirement income stool is now just two legs. One leg, which collectivizes risk, is comprised of Social Security. The other leg, which individualizes risk, is comprised of private savings, employer provided defined contribution plans, and earnings.

## SESSION 1915 (SYMPOSIUM)

### AGING AND THE BATTLE OF THE BULGE

Chair: *D. Ingram, Pennington Biomedical Res Center, Baton Rouge, Louisiana*

Current estimates of the number of obese persons over 65 years of age are close to 30%. For those aged 45-64, the estimate is about 40% with incidence having more than doubled over the last 35 years. This obesity epidemic will have major negative impact upon the health and quality of lives of older persons as well as create incredible challenges to the health care system and its financing. To bring these challenges into perspective for the audience, this symposium will cover several aspects of the "Battle of the Bulge." First, Vishwa Deep Dixit will describe the impact of obesity on the aging thymus and the resulting negative consequences for immune function. Annadora Bruce-Keller will discuss effects of obesity on brain aging as it relates to inflammation and oxidative stress and their impact upon cognitive function. Roy Martin will describe the role of fermentable dietary fiber on preventing obesity and diabetes and attenuating aging processes including effects on appetite control. Finally, Eric Ravussin will describe on-going studies of calorie restriction in humans as an approach for controlling the risks of obesity in later years and attenuating other age-related diseases of aging and functional declines.

### GEROBESITY AND IMMUNE FUNCTION

V.D. Dixit, *Pennington Biomedical Res Ctr, Baton Rouge, Louisiana*

Nearly 40% of Americans age 50 years or older are overweight. Both aging and obesity are known to compromise immunity which is reflected in greater incidence and severity of infections and certain cancers. However, it remains unclear how obesity impacts the aging of immune system and mechanisms regulating generation of T cells from thymus. Intriguingly, by 5th decade of life, 80% of human thymus is replaced by adipocytes and dramatically looses its capacity to produce naïve T cells and maintain T cell repertoire diversity. Using genetic fate-mapping approaches, our recent studies show that process of epithelial-mesenchymal transition (EMT) contributes towards generation of fibroadipogenic precursors in thymus and loss of organ function. Diet-induced obesity accelerates the aging of thymus by inducing defects in thymic stromal cells as well as hematopoietic stem cells. Our data suggest that obesity accelerates immunosenescence mechanisms which may lower the health-span of a growing "gerobese" population.

### THE IMPACT OF HIGH FAT DIETS ON BRAIN AGING

A. Bruce-Keller, *Pennington Biomedical Res Ctr, Baton Rouge, Louisiana*

The obesity epidemic will likely pose major impact upon the incidence of neurodegenerative disease. Using rodent models, we are examining the degree to which, and the mechanisms by which, high dietary fat intake affects brain function. Mice of different ages are administered diets with differing fat composition and evaluated for cognitive ability and biochemical markers of redox signaling. Consumption of high fat diet increases body weight and fat accumulation in mice of all ages, but only the oldest mice became cognitively impaired following high fat diet consumption. Furthermore, biochemical analyses of brain redox signaling and oxidative injury revealed that aged mice respond to high fat diet with significantly enhanced oxidative stress, which histological analyses localized primarily to neurons. Collectively, these data suggest that aged mice are particularly susceptible to the detrimental neurologic effects of high fat diet, which may disrupt cognition through increased neuronal redox signaling and oxidative injury.

# SESSION 1920 (PAPER)

## DEPRESSION: PREVALENCE AND TREATMENT

### A RCT FOR FOLIC ACID AND VITAMIN $B_{12}$, AND PHYSICAL ACTIVITY IN THE PREVENTION OF COGNITIVE DECLINE IN OLDER ADULTS WITH ELEVATED DEPRESSIVE SYMPTOMS

J.G. Walker[1], P. Batterham[1], A. Mackinnon[2], A. Jorm[2], I. Hickie[3], M. Fenech[4], D. Crisp[1], H. Christensen[1], *1. Centre for Mental Health Research, Australian National University, Canberra, Australian Capital Territory, Australia, 2. The University of Melbourne, Melbourne, Victoria, Australia, 3. The University of Sydney, Sydney, New South Wales, Australia, 4. Commonwealth Scientific and Industrial Research Organisation, Adelaide, South Australia, Australia*

Objective: The present randomized controlled trial (RCT) investigated whether folic acid + vitamin $B_{12}$ intake or physical activity prevented cognitive decline in elderly with elevated depressive symptoms. Method: A community-based of a two-year intervention with a completely crossed 2 x 2 x 2 factorial design: (400 mcg/d folic acid + 100 mcg/d $B_{12}$ vs placebo) by (physical activity promotion vs nutrition control) by (MHL vs pain information control). 909 adults aged 60-74 years with elevated psychological distress (Kessler - 10). The interventions were delivered via post in 10 modules with concurrent telephone tracking calls. The main outcome was change in cognitive function at 12 and 24 months using the Telephone Interview for Cognitive Status – M (TICS-M) and the Test of Adult Cognition by Telephone (BTACT), the Informant Questionnaire on Cognitive Decline in the Elderly (IQCODE) was administered at 24 months. Results: Folic acid + $B_{12}$ compared to placebo improved TICS-M total score ($p = .032$; $d = .17$), TICS-M immediate ($p = .046$; $d = .15$) and delayed recall ($p = .013$; $d = .18$) at 24 months. There were no significant changes for TICS-M orientation, TICS-M attention/calculation, TICS-M semantic memory, the BTACT or the IQCODE. Physical activity compared to nutrition promotion was associated with improved recall memory (TICS-M) from baseline to 12-month follow up ($p = .036$; $d = .14$). Conclusion: Long-term daily folic acid 400 mcg + $B_{12}$ 100 mcg promotes improvements in cognitive functioning, particularly in immediate and delayed memory performance, in elderly with depressive symptoms.

### DEPRESSION, COGNITIVE FUNCTIONING AND MORTALITY IN AN OLDER-OLD SAMPLE

D. Paulson[1,3], M.E. Bowen[2], P.A. Lichtenberg[1], *1. Wayne State University, Institute of Gerontology, Detroit, Michigan, 2. Veterans Health Administration, HSR&D/RR&D Center of Excellence, Tampa, Florida, 3. Henry Ford Health System, C/L Psychiatry, Detroit, Michigan*

The relationship between mood and longevity in late life has been found to be robust, but highly influenced by contextual factors such as catastrophic cognitive decline and functional independence. Given that the fastest-growing population segment include older-old women, it is important to better understand factors associated with longevity and decline. Using the Health and Retirement Survey (years 1998-2006), the current longitudinal study examined the relationship between longevity, cognitive functioning and mood among stroke-free women over the age of 80 across 8 years. Depression symptoms were assessed using the 8-item Center for Epidemiological Studies Depression Scale (CESD) and cognitive functioning was assessed using the 35-point Telephone Interview for Cognitive Status. Cerebrovascular risk factors (CVRFs) included diabetes, hypertension, heart disease and lifetime history of smoking. Respondents who endorsed multiple CVRFs were identified as having high cerebrovascular burden. Using logistic regression, depression symptoms (CESD; $\beta$=.077, ExpB=1.080, p=.018) and cognitive functioning (TICS; $\beta$=-.068, ExpB=.934, p<.001) predicted incidence of death over 6 years after controlling for age, years of education, BMI, cerebrovascular burden, and IADL functioning. Model sensitivity was .76. Using cox regression, time to death was significantly predicted by age ($\beta$=.021, p=.013) and cognitive functioning ($\beta$=-.018, p=.009), with cerebrovascular burden showing a strong trend toward significance (-.141, p=.058). Time to death was not predicted by years of education ($\beta$=.012, p=.284), BMI ($\beta$=-.012, p=.168), or CESD ($\beta$=-.003, p=.886). These findings suggest catastrophic decline for both mood and cognitive functioning preceding death, and underscore the importance of these variables for elders.

### EVALUATION OF A BEHAVIORAL ACTIVATION GROUP THERAPY PROTOCOL IN A GERIATRIC PSYCHIATRY FACILITY

M.J. Norton[1], M.R. Crowther[1], F. Scogin[1], L. Ward[2], A. Snow[1,2], D. Boles[1], *1. Psychology, The University of Alabama, Tuscaloosa, Alabama, 2. Tuscaloosa VAMC, Tuscaloosa, Alabama*

The purpose of this study was to evaluate the effect of a Brief Behavioral Activation Therapy for Depression (BATD) group protocol added to hospital treatment as usual (TAU) on patient depression (measured by the Geriatric Depression Scale-GDS). BATD strives to bring individuals into contact with positive reinforcement in their environment through increasing participation in pleasant, personally rewarding activities. Few studies to date have examined behavioral activation therapies in state psychiatric facilities. Participants were patients at a state-run inpatient geriatric psychiatry facility (mean age=72.2). A 2-group comparison design was used. 25 patients were randomized to BATD + TAU, and 25 were randomized to a TAU only control group. The BATD intervention consisted of 8 group sessions. Measures of treatment delivery, receipt, and enactment were utilized to assess treatment implementation. A one-way between-subjects analysis of variance (ANOVA) was used to test the effect of the intervention on depressive symptoms. The results showed no significant effect of group assignment on depression change scores (F [1, 47]= .46, p=.501). Assessment of treatment implementation revealed good treatment delivery, as measured by ratings of therapist competence (87%) and adherence (89%). However, measures of treatment receipt (group attendance, scores on a BATD Knowledge Quiz) and enactment (homework completion) were below expectation. Patient attendance at group sessions averaged 3 out of 8 sessions. Patient scores on a BATD Knowledge Quiz averaged 12.3%. Treatment enactment scores averaged 48%.

We will discuss modifications to group BATD for future interventions and site willingness to implement interventions regardless of modest results.

### LONGITUDINAL PATTERNS OF DEPRESSIVE SYMPTOMS IN THE HEALTH AND RETIREMENT STUDY

A.T. Perzynski[1,2], J. Sudano[1,2], *1. Case Western Reserve University, Cleveland, Ohio, 2. MetroHealth, Cleveland, Ohio*

Most prior population-level studies of depressive symptoms in older adults have only compared the change in mean symptom scores over time or modeled development of depressive symptoms as a single growth trajectory. We use latent class growth analysis (LCGA) to investigate multiple patterns of depressive symptoms in the Health and Retirement Study (HRS). We analyze 5,195 age-eligible respondents from the 1992 HRS cohort, who completed interviews in all seven waves through 2004. Demographic characteristics are: 60.3% female, 76.4% non-Hispanic White, 14.4% Black, 7.4% Hispanic, 1.8% other racial/ethnic groups; median age=55; and mean education=12.4 years (SD=3.0). Depressive symptoms are measured using a dichotomous, 8-item version of the CES-D. Using MPlus, we compared the fit of LCGA models of two to eight classes while also accounting for the HRS complex sampling design. The best fitting model has four distinct patterns of depressive symptoms: (1) Almost no symptoms throughout=73.5%, (2) Decreasing symptoms=9.6%, (3) Increasing symptoms=11.5% and (4) Many persistent symptoms=5.4%. Further analysis including covariates shows a greater likelihood of being in the "many persistent symptoms" class as opposed to the "almost no symptoms" class for women (OR=2.16, p<.001) Blacks (OR=1.95, p<.001), Hispanics (OR=1.32, p<.05) and those with lower education (OR=1.32, p<.001). Our results support a four-pattern typology that can serve as a framework for better understanding depressive symptoms and underscore the importance of gender, race/ethnicity and socioeconomic status for mental health among older adults. Future work will examine how patterns of depressive symptoms are associated with specific life events, health conditions and mortality.

### DEPRESSION, MASCULINITY, AND AGING: FINDINGS FROM THE MEN'S HEALTH AND AGING STUDY

E. Apesoa-Varano[1], J. Barker[2], J. Unutzer[3], L. Hinton[1], *1. Psychiatry, Univ. of California, Davis, Sacramento, California, 2. University of California, San Francisco, San Francisco, California, 3. University of Washington, Seattle, Seattle, Washington*

Depression in older men has been associated with functional disability, poor quality of life, and identified as a major risk factor for suicide. A gap remains in our understanding of the social processes and factors involved in older men's help-seeking that may hinder or facilitate depression care. This paper addresses this gap by exploring how Mexican and white non-Hispanic (WNH) older men experience and express their depression. The data are drawn from an NIMH funded (R01 MH080067) mixed method study of barriers and facilitator of care in white non-Hispanic and Mexican-American men. Findings are based on in-depth, semi-structure interviews with 50 men over the age of 60 screened for clinical depression in primary care settings, including treated and untreated. We identify specific idioms of distress that are linked to men's conceptions of masculinity and aging across both ethnic groups. We found that older men across groups do not use "red flag" terms commonly associated with depression (e.g. feeling sad or lacking interest) and instead communicate their depression as a sense of worthlessness and lost productivity. WNH men are more likely to perceive their depression as a reflection of individual failure while Mexican men ground them in their socio-economic life and consider their impact on the family. We explore further implications of these findings.

## SESSION 1925 (PAPER)

## EARLY IN THE LIFE COURSE

### THE IMPACT ON YOUNG PEOPLE OF HAVING A FATHER WITH YOUNG ONSET DEMENTIA: A FOLLOW-UP STUDY OF TRANSITION TO ADULTHOOD

J.R. Oyebode[1,2], N. Lord[1], J. Allen[2], *1. School of Psychology, University of Birmingham, Birmingham, United Kingdom, 2. Birmingham and Solihull Mental Health Foundation Trust, Birmingham, United Kingdom*

Background: An earlier study by our group found that having a father with dementia had a profound impact on children/young people aged 13-24 years. Aim: This study follows up the original participants four years after their first interview to explore the continuing influence on their lives of living/having lived with a father with dementia. Method: A Grounded Theory approach was taken. Seven young people were interviewed, with all being recorded and transcribed. Results: Analysis highlights the powerful narratives of these young people as they witnessed and lived with their father's deterioration, and in some cases death. They spoke of a succession of turning points, each taking them on to further challenges. Most retained huge sympathy for their fathers, and their caregiving mothers, whilst also being very distressed on their behalf. They spoke of their adolescence being different from their peers, leaving them with some feeling of distance and isolation, though their bonds with their well parent and siblings were often strengthened. Some were still waiting for their father's (and their own) ordeal to end. Others, whose father had died, were very conscious that they were missing a father but were working to try and re-establish their lives. Meaning-making was a strong theme throughout. Conclusions: Young people who have a father with early onset dementia see things and take on responsibilities that are rare in their age group in the developed world. The meaning they are able to take from this seems to play a key part in determining personal outcomes.

### INTERGENERATIONAL LEARNING THROUGH COMPUTER AND INTERNET

E. Chang, *Gerontology Academic Program, California State University Fullerton, Fullerton, California*

The stereotype that "you cannot teach an old dog new tricks" persists despite scientific evidences that human brain has plasticity and human development continues through lifetime. This stereotype is perpetuated in technology-related learning; the misconception is commonly embraced by both the young and the old. Computer and Internet has created a digital gap between age groups. Contrary to conventional belief that older people cannot handle technology, computer and Internet can be a tool to dispel this stereotype. A class assignment requiring students to teach older adults who never used Internet to learn how to surf Internet or send an e-mail or learn new computer software provides encouraging evidences. Different from most older-adult computer classes, whose focus is on the benefits for the older learners, this assignment aims for students to advance their understanding of aging through teaching older computer novices. 21 students in the Successful Aging and Gerotechnology class completed the assignment. Students are asked to document their teaching experiences and write a reflection essay. The age of participants ranged from 50 to 93; the teaching sessions lasted from four hours to five days. Students identified barriers for older adults to embrace computer and Internet and tested different ways to motivate their older students. In general, students reported a positive experience for both parties. Some students also reported becoming less trusting of Internet security, echoing concerns of their students with age-old wisdom. All of them affirmed that older people can learn new things if motivated and taught well.

### THE EDUCATIONAL SUPPORT PROGRAM IN A JAPANESE ELEMENTARY SCHOOL OFFERED BY THE SENIOR VOLUNTEERS AND ITS INFLUENCE ON CHILDREN'S SCHOOL LIFE -THE RESULTS OF TWO-YEAR FOLLOW-UP SURVEYS-

H. Uchida[1], Y. Fujiwara[2], S. Shinkai[2], T. Nishigaki[1], S. Matsuura[3], H. Sakuda[1], *1. University of Hyogo, Himeji, Japan, 2. Tokyo Metropolitan Institute of Gerontology, Itabashi, Japan, 3. Matsuura Clinic, Himeji, Japan*

This study was to clarify the educational support program in an elementary school given by the senior volunteers and its influence on children's school life, based on the results of two-year follow-up surveys. The program served children in grades 2-4 (age 7 to 9) during the school day, and a volunteer was assigned to a classroom. The volunteers attended homeroom, and played with children in rest times. They also worked under the direction of the teachers to support children literacy, mathematic, physical education, moral education, arts and crafts, etc. The participants were six seniors (age 66.8+/-5.8) and 15 children, who lived in Himeji, Japan. As the control groups, we selected 25 children who lived in a neighboring district. We carried out a baseline survey in the beginning of February 2007, and the follow-up surveys were done in Januarys 2008 and 2009. We questioned for the children several items such as health status, mental and emotional support from family, and school life and its rules. There was no significant difference in baseline characteristics between the two groups in children. After two years, average scores of "enjoying the activities with the class mates", "having an adult who cares about me" and "having an adult whom I can rely on" in educationally supported children significantly increased. A score of health status also increased in children. The educational support program for two years clearly promoted mental satisfaction and social networks of the school children. It is suggested that the program had the positive influence on the children and senior volunteers.

### THE INCREASING IRRELEVANCE OF AGE: ITS IMPACT ON THE CHARACTER OF CHILDHOOD

J. Levin, *Sociology, Northeastern University, Boston, Massachusetts*

Although ageism continues to characterize the attitudes and behavior of many Americans, there has also been a decline in the relevance of age for many of the important decisions made by adults—e.g., first marriage, childbirth, and retirement. As the barriers between age groups become more and more permeable, the variability of age as a decision-making marker continues to broaden. The result for middle-aged and older adults has been ameliorative. Americans now enjoy a wider range of ages within which they can legitimately decide to marry, give birth, and retire. For children, however, the blurring of age boundaries has had a deleterious effect. At earlier and earlier ages, children now engage in activities formerly associated with teenagers or young adults. Bullying peaks in the 6th, rather than the 11th, grade; oral sex has become a socially acceptable practice in middle-school restrooms and corridors. At the same time, teenagers are being treated like young adults. More and more 14 and 15 year old defendants are being tried as though they were 24 or 25. Middle school boys have opened fire on their schoolmates after being rejected by a girlfriend. And growing numbers of young adults are being regarded as adolescents who remain in school and in their parents' homes until they are in their late twenties and thirties.

## SESSION 1930 (SYMPOSIUM)

### HIV/AIDS IN LATER ADULTHOOD: CURRENT FINDINGS AND FUTURE DIRECTIONS

Chair: *N. Orel, Gerontology, Bowling Green State University, Bowling Green, Ohio*

Current data from the 2008 Department of Health Study indicate that between 1990 and 2005 the number of AIDS cases in people over the age of 50 increased by more than 700%. While many individuals assume that older adults are not involved in activities that would place them at risk for HIV, current research has found that the vast majority of older adults (92%) consider sex an important part of life and 75% of those between 65 and 74 report being sexually active (National Bulletin of the National Advisory Council on Aging, 2002). However, current research also indicates that one out of three sexually active older adults with HIV/AIDS has unprotected sex and often with multiple sexual partners (Lovejoy et al., 2008). Generally, older adults have been found to be the least knowledgeable about HIV and its transmission (Hillman, 2007) and fail to recognize the relevancy of HIV/AIDS education and prevention to their lives (Altschuler et al., 2004). Additionally, older adults who are diagnosed with HIV often find a scarcity of programs and services that would meet their specific needs and concerns. This symposium will highlight the most current and up to date research on a) myths and misconceptions about HIV/AIDS among ethnic elders, b) efficacious HIV/AIDS prevention education programs, c) training resources that emphasize the relevancy of HIV/AIDS education for an older adult population, and d) the importance of social networks for older adults living with HIV. This symposium highlights relevant issues in HIV/AIDS and the older adult population.

### MYTHS & MISCONCEPTIONS ABOUT HIV/AIDS IN OLDER COMMITTED ETHNIC MINORITIES

O. Macklin, *1. Los Angeles County Community & Senior Services, Los Angeles, California, 2. Veterans Healthcare Administration, Los Angeles, California*

This study examined Older Adults' (OA) perception of HIV/AIDS and their susceptibility. It further examined discrepancies in HIV/AIDS prevention services that may be exacerbating the pandemic. A qualitative study of diverse older adults in Los Angeles, who reported being in committed relationships, was conducted. Results indicate that OAs are aware of what HIV/AIDS is and how it is transmitted. Participants overwhelmingly identified high-risk groups as LGBTs, substance users, and younger people. OAs were not getting tested for HIV/AIDS, did not practice "safe sex", and felt being excluded from one of the high risk groups mentioned previously, reduced their risk of contracting it. Additionally, being religious and in a committed relationship, were also factors which influenced OAs' perceptions about their vulnerability. Results from this study demonstrate how the lack of HIV/AIDS resources designed to address the sociocultural needs of the aging community, correlates with the increase in newly-reported cases.

### TAKING INTO ACCOUNT OLDER WOMEN'S SEXUAL DECISION MAKING IN DEVELOPING HIV PREVENTION PROGRAMS

W. Watson, *Dept of Human Services, Bowling Green State University, Bowling Green, Ohio*

Most of what is known about sexual decision-making, condom use, and romantic relationships has been extrapolated from research with adolescents and college students. Older women are affected by sexually transmitted diseases, including HIV/AIDS, yet little is known about how they are processing information about their sexuality, romantic relationships, sexual decision-making, condom use, and information about HIV/AIDS. Through semi-structured, in-depth interviews, the narratives of fourteen women between the ages of sixty-five and eighty were examined. Analysis proceeded from an interpretive phenomenological approach, grounded within the author's developmental contextualist and feminist theoretical perspectives. Findings are organized around two overarching themes: a) most women feel knowledgeable about HIV and b) lack of HIV testing or condom use in this relationship. Trust in partner's honesty and faithfulness is seen as protection against disease. Findings are discussed in relation to understanding women's relationship and sexual decision making and the implications for HIV education and prevention.

### HOUSING AND OLDER ADULTS LIVING WITH HIV

L. Seidel, *AIDS Community Research Initiative of America, New York, New York*

Nearly half of individuals with HIV experience housing stressors, which have been linked to lower rates of medication adherence leading to poorer treatment outcomes and resistance, yet there is little research on housing and older adults with HIV. It was hypothesized that housing instability would have a direct effect on medication adherence and adherence self-efficacy with indirect effects through the mediating variables of loneliness, social support and depression among older adults with HIV (n=30). Results confirmed the higher rates of housing instability, loneliness and depression among those living with HIV. A multiple regression analysis found no significant effect of housing stability on medication adherence. However, social support emerged as a positive predictor of adherence, while loneliness negatively related to adherence self-efficacy accounting for 37% and 52% of the variance in these respective outcomes. Social networks are a crucial part of care that may result in greater self-efficacy and medication adherence.

### EVALUATING PROGRAMS ON HIV AND OLDER ADULTS: NOTES FROM THE FIELD

M. Brennan[1,2], L. Seidel[1], S.E. Karpiak[1,2], *1. Center on HIV and Aging, AIDS Community Research Initiative of America, New York, New York, 2. New York University College of Nursing, New York, New York*

Programs that address HIV and older adults are emerging. Funders increasingly require a strong evidence-base for program effectiveness. However, the newness of these programs and the constituencies involved require special considerations in program evaluation. The AIDS Community Research Initiative of America is in Year III of a $3,000,000 New York City Council contract for HIV and Older Adults education and prevention. Evaluating this program has highlighted some crucial issues, including bridging the cultural and organizational divide between AIDS Service Organizations (ASOs) and aging providers. For example, ASO staff is more accustomed to multi-day trainings and detailed outcome evaluations compared to many aging service provider staff. Also, funding mandates are often at odds with the methodology of many HIV prevention paradigms, leading to difficulty in program implementation and process evaluation. We will discuss these and other issues, and provide suggestions for conducting program evaluation for HIV and Aging prevention and education.

### "BE A LIVING EXAMPLE" – AN EVIDENCE-BASED HIV/AIDS PREVENTION EDUCATION PROGRAM FOR OLDER ADULTS

N. Orel, C. Stelle, W. Watson, *Gerontology, Bowling Green State University, Bowling Green, Ohio*

Although there are educational curriculum and programs available that address HIV/AIDS for individuals aged 50 and older (e.g., AIDS Community Research Initiative of America, National Association of HIV Over Fifty), it is apparent from current research that educational programs/resources that address HIV/AIDS with content on sexuality, sexual health, and medication are the most effective (Orel et al., 2009). Because a previously identified obstacle to educating older adults about HIV/AIDS was the "lack of perceived relevance," this presentation will specifically discuss an evidence–based prevention education program that emphasizes the relevancy of HIV/AIDS knowledge for an older adult population. The "Be a Living Example" program encouraged participants to become knowledgeable about HIV/AIDS and to be tested for HIV so that they could then share with the younger generation (i.e., grandchildren) information about how non-evasive, simple, and yet important HIV testing is. "Be a Living Example" campaign supported participants' desire for generativity.

## SESSION 1935 (PAPER)

## HOUSEHOLD AND PERSONAL FINANCES

### THE BURDEN OF ENERGY COSTS ON ELDERLY HOUSEHOLDS: EVIDENCE FROM THE 2006-2008 AMERICAN COUMMUNITY SURVEY

J. Deichert, S.P. DeViney, *Gerontology, University of Nebraska at Omaha, Omaha, Nevada*

This research measures the energy burden of households with at least one person aged 65 or older based on information from the US Census Bureau's 2006-08 American Community Survey. Energy burden is defined as the share of annual household income that is used to pay annual energy bills.. During 2006-08, the average energy cost for households with only one person 65 or older was $2,389 per year and represented 10.5 percent of their household income. For households with 2 or more persons 65 or older, the respective numbers were $2, 639 and 6.8 percent. The analysis also showed that energy costs were a sizeable component of housing costs. Renter households with only one person 65 or older paid 18.3 percent of housing to energy and owners paid 35.6 percent. The comparable numbers for households with two or more persons were 17.1 percent and 36.7 percent respectively. Energy burdens varied by state: the highest burdens generally in the Southeast and the lowest burdens in the West and Northwest. As a percent of income, energy burdens were highest for elderly households with low incomes, non-English speaking households, renter households, females living alone, and housing built prior to 1960. Since prior research have shown the elderly adjust other expenditures to pay for higher energy costs, other studies suggest that energy burden is linked to deferred health care, home maintenance, and food security. Quality of life for the elderly needs to include polices addressing energy burden.

### WHY DO PEOPLE LET THEIR LONG-TERM CARE INSURANCE POLICIES LAPSE? EVIDENCE FROM THE HEALTH AND RETIREMENT STUDY

Y. Li[1], G.A. Jensen[2], *1. School of Public & Environmental Affairs, Indiana University - IUPUI, Indianapolis, Indiana, 2. Wayne State University, Detroit, Michigan*

Objectives: To explore the patterns and determinants of long-term care insurance (LTCI) lapsing, using longitudinal data from the 1998-2006 Health and Retirement Study (HRS). Methods: We pool all two-wave intervals from the 1998-2006 HRS where the respondent reported holding private LTCI in the first sample wave. The final analytic sample consists of 6,920 two-wave intervals on 3,707 unique individuals. Multivariate logit models are estimated to uncover the effects of consumer learning-through-experience on LTCI lapsing that takes place in the second sample wave, while controlling for the policyholder's characteristics and the benefit provisions of the policy they hold. Results: The overall lapse rate in this sample is about 31%. Lapse rates vary considerably with policy characteristics, and substantially higher rates are observed for cheaper and less generous policies, e.g., policies that do not include inflation protection, or that limit coverage to in-home care only. Policyholders who are unknowledgeable about the specific features of their policies and who have actual encounters with the long-term care system are more likely to subsequently let their policy lapse. Conclusions: Many LTCI policyholders do not fully understand the limitations and benefit restrictions of their coverage. Some are learning about such limits "the hard way," after an encounter with the long-term care system, and then they drop coverage. These findings highlight the need for investment in consumer education and greater supply-side regulation in order to reduce LTCI lapsing.

### HEALTH, WEALTH, AND GENDER: LONG- VERSUS SHORT-RUN IMPACTS OF HUSBANDS' AND WIVES' HEALTH SHOCKS ON HOUSEHOLD WEALTH

J. Ward-Batts, *Economics; Institute of Gerontology, Wayne State University, Detroit, Michigan*

Health shocks to wives versus to husbands may have differential effects on household wealth. We expect that a health shock affecting a primary earner will affect household wealth less negatively than that to a homemaker, since the productivity of the former is often formally insured, whereas the household must insure itself against the latter. 1992-2008 longitudinal data from the Health and Retirement Study (HRS) data on married couples first observed near retirement age are used to estimate the effect of a new health condition on household wealth, in both the short-run and long-run. Effects are allowed to differ by type of health condition as well as by gender of the spouse affected. Labor supply of the affected individual and the spouse, out-of-pocket medical expenses, and other types of expenses are explored as mechanisms through which individual health shocks may affect household wealth. Potential mitigating factors are also explored. Estimates using only two waves of data indicate that the short-run impact of a health shock to the wife has a larger negative impact than a health shock to the husband. When adding additional waves of data, estimates in which health conditions are disaggregated provide better fit, but results are inconsistent with those when conditions are aggregated. This suggests that previous studies in which conditions are aggregated may be misleading when considering longer-term effects, and that "mild" conditions down-played in previous studies can eventually have significant impacts on household wealth.

### COUPLES MANAGING THE RISK OF FINANCING LONG TERM CARE

A.E. Matzek, M. Stum, *University of Minnesota, St. Paul, Minnesota*

Understanding the financing of long term care (LTC) from the perspective of couples is pertinent because couples are confronted with the challenge of financing LTC for not one, but both spouses. The purpose of this study was to examine how couples articulated consensus about financial LTC risk management strategies (i.e., purchasing LTC insurance, self-insuring, no strategy). The current study was a secondary analysis of a larger qualitative dataset examining couples from a population of state and university employees who had recently been making decisions about how to manage the risk of financing LTC. Sixteen heterosexual married couples (16 husbands and 16 wives) provided the units of analysis for the current study. Guided by decision making theory for families, triangulated qualitative data analysis was utilized to examine how couples articulated consensus about their financial LTC decision outcomes. Findings indicated that couples utilized a combination of risk management strategies and represented five consensus patterns of decision outcomes that ranged from convergent to divergent. Couples who articulated consensus with their decision outcomes seemed to be the couples who were being most proactive about planning for both spouses. Financial and family practitioners should work with both spouses to ensure that couples can reach consensus about responsibility for financing LTC.

## SESSION 1940 (PAPER)

## INTERGENERATIONAL RELATIONSHIPS IN CHINESE CULTURE

### GRANDPARENT–GRANDCHILD RELATIONSHIPS IN RURAL CHINA: THE MEDIATING ROLE OF THE MIDDLE GENERATION AND THE KINSHIP STATUS OF THE GRANDPARENT

L. Xu[1], I. Chi[2], *1. USC, Monterey Park, California, 2. USC, Los Angeles, California*

Background:The grandparent–grandchild relationship is important in Chinese society. Grandparent–grandchild relationships are linked with the middle generation and gender plays a central role in grandparent–grandchild relationships. Methods:Wave 4 of the Study of Older Adults in Anhui Province of China was drawn for this study (N=1,071). The dependent variable was the emotional closeness between the grandparent and each grandchild. And the independent variables were the grandparent-parent closeness and the gender of the parent which will reveal whether the grandparent is the paternal or maternal grandparent. Hierarchical regression model was conducted. Results:The results showed that the closeness between grandparent and their adult child medicated the grandparent-grandchild closeness (t=26.92, p=.000). Paternal grandparents had closer relationships with their grandchildren than maternal grandparents did (t=2.86, p=.004). The father's bond with his own parents had a greater effect than a mother's on the grandparent–grandchild closeness (t=24.57, p=.000). In addition, income and physical function of grandparents, the education of the grandchildren, and length of taking care of grandchild by grandparent were also significantly associated with grandparent-grandchild closeness. The final regression model explained 68.9% variance on grandparent-grandchild closeness. Conclusion:The role of the middle generation, especially the roles of the fathers, and the paternal family lineage should not be ignored when considering grandparent-grandchild relationships in rural China.

### YOU SHOW FILIAL PIETY TO YOUR CHILDREN: THE CHANGING MEANINGS OF FILIAL PIETY AMONG CHINESE ELDERLY IMMIGRANTS

E. Chang[1], M.A. Simon[2], E. Wong[3], K.A. Skarupski[1], B. Wong[3], X. Dong[1], *1. Rush Institute for Healthy Aging, Rush University Medical Center, Chicago, Illinois, 2. Northwestern University Medical Center, Chicago, Illinois, 3. Chinese American Service League, Chicago, Illinois*

Background: Despite prior research on older adults' shifting filial expectations for their younger children in contemporary Chinese society, few studies have examined how the Chinese elderly have adapted to the changing meanings of filial behaviors in the U.S. context. Methods: Based on focus group interview data (N=39) with community-dwelling Chinese elderly immigrants residing in Chicago Chinatown, this study explores how the cultural ideal of filial piety has been modified and reinforced on the foreign soil. The construct and practice of filial piety is analyzed from three dimensions— what is an ideal filial role, to what extent immigrant children fulfill filial care expectations, and how to respond to a challenging situation in which expectations were unmet. Results: Among these Chinese elderly immigrants, emotional support outweighs other forms of filial care. Qualitative data analysis demonstrates that fractions and contradictions exist between elders' conceptualizations of filial piety and the actual receipt of filial care. However, Chinese elders mitigate some of the potential intergenerational tension by prioritizing the whole family's socio-economic well-being over their own filial care needs. Discussions: These results show that elders opt for a more independent life by living in senior apartments and managing their own health problems without soliciting help from financially stressed, geographically distant adult children. By so doing, older Chinese immigrants describe their acts as "showing filial piety to their children," albeit genuine filial needs of emotional support may be left unattended. This study has implications for the provision of culturally-sensitive elder care.

### A VIGNETTE STUDY ON SONS' AND DAUGHTERS' OBLIGATIONS TO THEIR PARENTS IN RURAL CHINA

Z. Cong[1], M. Silverstein[2], *1. Human Development and Family Studies, Texas Tech University, Lubbock, Texas, 2. University of Southern California, Los Angeles, California*

This paper used a vignette to study under which circumstances daughters are regarded as more responsible for taking care of their elder parents in rural China. The vignette asked for elders' attitude about how a daughter and a son should share the responsibilities of taking care of a post-surgery widowed parent under different situations. The vignette study is a part of a four-wave longitudinal study in Anhui Province, China, with data collected between 2001 and 2009. Using a working sample of 1010 observations, we used ordinal logistic regression to predict how elders allocate the responsibility between the daughter and the son. We found that the daughter was regarded as more responsible when the son migrated to search for employment and when the daughter herself was living in proximity. Whether the son had minor kids to take care of did not influence elders' belief in the share of responsibilities. On the contrary, elders perceived the daughter as more obligated if the daughter did not have any kids. Rural to urban migration has increased distance between parents and their sons, and has forced elders to partially forgo traditional beliefs in gender differences concerning caregiving. At the same time, sons were still seen as more legitimate care providers, whose care responsibilities were less conditional to their family obligations than daughters, while daughters were more likely to be substitutes whose support would be called upon when sons failed to provide support and when situations allowed daughters to provide care.

### CULTURE, STRUCTURE, OR EMOTIONS? ADULT CHILDREN'S MARRIAGES AND INTERGENERATIONAL TIES IN THE UNITED STATES AND CHINA

N. Sarkisian[1], N. Gerstel[2], E. Calvo[3], *1. Sociology, Boston College, Chestnut Hill, Massachusetts, 2. University of Massachusetts, Amherst, Massachusetts, 3. Harvard University, Boston, Massachusetts*

Little research has examined the effects of adult children's marriages on intergenerational ties; even less examines cross-national variation in these effects. This paper fills that gap by comparing the effects of marriage on the relationship between adult children and their aging parents in the U.S. and China—two countries characterized by distinctive patterns of family ties, with the Chinese still emphasizing extended families (and incorporating the nuclear family into these larger groupings) and Americans emphasizing nuclear families (with a much less encompassing extended kinship structure). Using two datasets collected during the same time period—the Survey of Aging and Intergenerational Relations in Baoding City, China, and the second wave of the National Survey of Families and Households—this paper assesses the effects of marriage on various aspects of intergenerational ties, including three broad components: structural (coresidence and proximity), associational (frequency of contact), and functional (financial and practical assistance). It further evaluates the role of structural factors in explaining the effects of marriage. We find that in the United States, married individuals had significantly weaker ties to their parents than single individuals, and these differences cannot be explained by structural characteristics such as time demands, needs and resources, and extended family characteristics. In China, we also find that married individuals had less intense ties, but most of these differences are explained by structural characteristics. We conclude that persistent effects of marriage in the United States but not in China are consistent with cultural rather than universal theories of marriage and kinship.

## SESSION 1945 (SYMPOSIUM)

### LATER LIFE HEALTH IN SOCIAL CONTEXT

Chair: *R.M. Hauser, Center for Demography of Health and Aging, University of Wisconsin- Madison, Madison, Wisconsin*
Discussant: *J. Freese, Northwestern University, Evanston, Illinois*

This symposium presents a set of complementary papers on the health of older adults that address a combination of distal and proximate influences on those outcomes. Two of the papers focus on life-long influences. One explores the influence of the family of origin using a sibling-based design, while the other estimates the effects of life-long work and family trajectories. The other two papers address proximate sources of access to health care, size of place of residence in an upper-midwest state, and the complexity of individual health problems. These complementary perspectives on health outcomes in later life are each drawn from a common set of data, the 50+ year-long Wisconsin Longitudinal Study, which has followed the lives of Wisconsin's high school "class of '57."

### THE IMPACT OF WORK AND FAMILY TRAJECTORIES ACROSS THE LIFE COURSE ON HEALTH AT OLDER AGES

J. Raymo[1], J. Warren[2], A. Halpern-Manners[2], J. Goldberg[1], *1. Sociology, University of Wisconsin, Madison, Wisconsin, 2. University of Minnesota, Minneapolis, Minnesota*

We examine relationships between trajectories of work and family experiences across the life course and four measures of health at older ages: (a) self-rated health, (b) activity-limiting conditions, (c) SF-12, and (d) CES-D. We construct work and family trajectories using group-based trajectory modeling techniques (finite mixture models) to characterize the trajectories of family circumstances and transitions from birth through age 65 and trajectories of labor force experiences from age 36 through age 65. Preliminary estimates (conducted separately for men and women) indicate that latent work and family trajectories are significantly associated with multiple measures of health net of more temporally proximate correlates, including work and family circumstances. For men, trajectories characterized by employment interruptions in mid-life are negatively associated with later health whereas early retirement is associated with better health. For women, never marrying is negatively associated with emotional health and never having worked is negatively associated with physical health.

### PARENTAL AGES AT BIRTH, NUMBER OF SIBLINGS, AND HEALTH IN LATER ADULTHOOD: A SIBLING RESEMBLANCE MODEL FROM A PROSPECTIVE POPULATION STUDY

D. Kuo, *University of Wisconsin, Madison, Wisconsin*

In this paper, I use data of sibling pairs from Wisconsin Longitudinal Study to examine the relationships between parental age at birth and physical and mental health of the offspring in later adulthood. Parental ages were shown to be positively related to education, health and mortality. In the current study, I will observe health outcomes of sibling pairs. Using sibling resemblance model allows the (partial) control for unmeasured heterogeneity in the family environment and a better model specification on relative birth order and possible birth spacing which are both correlated to parental age at birth of the respondent. The main explanatory variables include number of siblings, parental ages at the birth of both siblings, and parental age at the birth of the first born. Parental socioeconomic status, childhood health, family environment and one's own socioeconomic status were controlled. I am interested in whether the positive relationship between parental ages at first birth may be explained by shared family environment.

### PERCEIVED AND REALIZED ACCESS TO HEALTH CARE: DOES RURAL RESIDENCE PUT THE NEAR ELDERLY AT RISK?

J.R. Schumacher, C. Everett, N. Pandhi, A. Wright, M.A. Smith, *University of Wisconsin-Madison, Madison, Wisconsin*

Rural versus urban residents are older, in poorer health, and have fewer health care resources. Whether individual-level (predisposing, enabling, need) or community-level (provider supply) factors account for rural/urban disparities in perceived access and utilization is unclear. We estimate rural-urban differences among Wisconsin Longitudinal Study respondents, aged 55-64. The primary predictor variable was participant residence area (urban (UA) or large, small, or isolated small rural (ISRA)). Linear/logistic regression models predicted perceived access and utilization sequentially including predisposing, enabling, and need factors. Results suggest the lower perceived access in ISRAs versus UAs is explained by physician supply. However, the lower odds of utilizing recommended services in ISRAs compared to UAs is explained by need factors. Rural residents are less likely to have dental check-ups, regardless of factors including dentist supply. Initiatives to reduce rural/urban disparities should emphasize provider supply, while considering need and cultural factors that impede receiving recommended care.

### COMPLEX PATIENTS AND CARE DISPERSION

C. Everett, J.R. Schumacher, C. Thorpe, M.A. Smith, *School of Medicine and Public Health, UW Madison, McFarland, Wisconsin*

Quality of chronic illness care in the US is suboptimal, in part due to disease-specific approaches utilized in our health care system. For complex patients with multiple chronic conditions, this approach leads to dispersion of care amongst multiple providers. Dispersion of care and strict adherence to disease-specific quality measures could result in poorer health outcomes due to exacerbations of comorbid diseases. Therefore, general health measures (e.g. Health Utilities Index) may be critical outcomes for complex patients. We identified Wisconsin Longitudinal Study participants with Medicare that responded to the 2004-2005 surveys and examined the relationship between patient complexity, care dispersion and general health outcomes. Preliminary results suggest patient complexity increases, the number of providers seen increases. After controlling for patient complexity, care dispersion appears to negatively impact general health. Results suggest that interventions to reduce care dispersion (i.e., medical home) may have beneficial impacts on the health of complex patients.

## SESSION 1950 (SYMPOSIUM)

### MEDICAL CARE IN ASSISTED LIVING

Chair: *J. Schumacher, Sociology and Anthropology, University of Maryland, Baltimore County, Baltimore, Maryland*

Discussant: *C. Cefalu, Louisiana State University School of Medicine, New Orleans, Louisiana*

This symposium addresses how medical care is provided in residential care/assisted living (RC/AL) from the perspectives of both primary care providers and the health care supervisors of RC/AL settings. Using data from an NIA funded study of 180 providers and health care supervisors from 80 RC/AL settings, the symposium examines providers' reported practice patterns with patients residing in RC/AL particularly the influence of providers' on-site visits. Results indicate over 80% of providers view their relationship with patients' RC/AL settings as a partnership, yet only 52% report understanding RC/AL offered health services. Confidence in RC/AL staff varied widely regarding the staff's ability to provide common health monitoring information (e.g., blood pressure) or problem management (e.g., fever assessment, agitation) with 4-41% reporting little or no confidence in RC/AL staff. In contrast, RC/AL healthcare supervisors report high levels of responsiveness to primary care providers as well as high confidence in their staffing and ability to provide requested information (80% agreement). In terms of nursing staffing and procedures, the data show 44% of RC/AL settings report RN coverage and most use their own staff for vital signs. Contractors are used to draw blood samples for 74% of settings. Overall, the RC/AL Health Care Supervisors who coordinate/oversee the medical care typically report frequent contact with residents' providers and over 70% are quite satisfied with the quality of their medical care. The implications of non-representative elements in the sample are discussed. The symposium provides a data based context for characterizing medical care provision in RC/AL settings.

### PRIMARY CARE PROVIDER PRACTICE PATTERNS WITH RESIDENTS OF ASSISTED LIVING

J. Schumacher[1], S. Zimmerman[2], P. Sloane[2], J.K. Eckert[1], B. Harris-Wallace[1], R. Perez[1], D.A. Reed[2], *1. Sociology and Anthropology, University of Maryland, Baltimore County, Baltimore, Maryland, 2. University of North Carolina, Chapel Hill, Chapel Hill, North Carolina*

Residents of residential care/assisted living (RC/AL) communities present providers with a range of opportunities and challenges for their care. This study of 180 primary care providers reveals a broad range of practice patterns and attitudes toward RC/AL. Overall, providers strongly endorse the view that caring for RC/AL patients differs from caring for patients living independently or in nursing homes. Results show 46% make on-site visits to RC/AL settings more than once a month. Also, over 80% view their relationship with RC/AL staff as a partnership. At the same time, only 52% of providers report a strong understanding of the health care services offered in the RC/AL setting and nearly 20% have stopped seeing RC/AL residents due to quality of care concerns. Results suggest an emerging care relationship between primary care providers and healthcare staff in RC/AL. Implications of the non-representative elements of the sample will be discussed.

### CARING FOR MEDICAL PROBLEMS IN ASSISTED LIVING: MEDICAL PROVIDER PERSPECTIVES

P. Sloane[1], A.S. Beeber[1], J. Schumacher[2], C. Mitchell[1], S. Zimmerman[1], *1. University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, 2. University of Maryland, Baltimore County, Baltimore, Maryland*

As residential care/assisted living (RC/AL) has grown, so too has the number of medical providers who provide care to these residents. This session will present primary care provider perspectives regarding medical care in RC/AL. Data from 180 providers (92% physicians, 8% nurse practitioners/physician assistants) will be presented regarding matters such as confidence in RC/AL staff ability to monitor resident blood pressure (48%) and weight (37%); assess patients with fever (29%); assess agitation (50% day staff, 17% night staff); follow instructions for agitation care (58%); and provide quality end-of-life care (50%). Depending on the problem, 4-41% of respondents had no or a little confidence in staff ability to manage these common medical situations. Implications of these data for medical care provision will be discussed.

### CARING FOR MEDICAL PROBLEMS IN ASSISTED LIVING: HEALTH CARE SUPERVISOR PERSPECTIVES

S. Zimmerman[1], J. Schumacher[2], B. Harris-Wallace[2], R. Perez[2], J.K. Eckert[2], P. Sloane[1], *1. University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, 2. Sociology and Anthropology, University of Maryland, Baltimore County, Baltimore, Maryland*

Staff of residential care/assisted living (RC/AL) communities must work with their residents' primary medical care providers to assure that their residents' healthcare needs are met. This session will present data from 80 health care supervisors regarding how often they provide residents' medication records to providers (84% most of the time) and contact providers when a resident falls (66% always); the credentials of day and evening staff who contact providers (30% RN, 30-38% LPN, 8-20% medication technicians, 8-16% certified nursing assistants); their confidence in day and evening shift ability to work with providers (64% extreme confidence day, 46% extreme confidence evening); and how satisfied they are with provider involvement in six areas (ranging from 36% extremely satisfied with medications to 6% extremely satisfied with incontinence care). (Note: Data in this abstract are preliminary.) The implications of these findings to inform staff-primary care provider relations for optimal resident care will be discussed.

### NURSING CARE IN ASSISTED LIVING

A.S. Beeber[1], S. Zimmerman[1], B. Harris-Wallace[2], J. Schumacher[2], R. Perez[2], P. Sloane[1], *1. University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, 2. University of Maryland Baltimore County, Baltimore, Maryland*

Nursing care is important in residential care/assisted living (RC/AL) but little is known about service availability and the type of staff who perform these services. This session will present 80 health care supervisors' reports on nurse staffing, available services, and the type of staff providing care. Preliminary analyses revealed 44% of settings had at least 1 full-time LPN, and 38% had at least 1 full-time RN. Rates of diagnostic and therapeutic services will be presented (e.g., 60% of settings do not administer intravenous medications, 94% provide wound dressing changes) as well as whether staff or contractors perform tasks (e.g., 94-98% of settings use their own staff to perform vital signs, 74% use contractors to draw blood). The session will further address whether staffing and procedures vary according to setting characteristics and findings will be discussed in the context of resident's healthcare needs and how well nursing practices are addressing them.

### HEALTH CARE SUPERVISORS PERSPECTIVES OF MEDICAL CARE COORDINATION AND PROVISION IN ASSISTED LIVING

B. Harris-Wallace[1], R. Perez[1], J. Schumacher[1], P.J. Doyle[1], J.K. Eckert[1], S. Zimmerman[2], *1. University of Maryland, Baltimore County, Baltimore, Maryland, 2. University of North Carolina, Chapel Hill, Chapel Hill, North Carolina*

Residential care/assisted living (RC/AL) communities are increasingly faced with a challenging array of medical-related responsibilities. The AL Health Care Supervisor (HCS) who coordinates/oversees medical care must therefore work closely with residents' providers to ensure care needs are met while maintaining AL's social model of care. This presentation focuses on health care coordination and provision in a sample of 80 HCSs and will address the relationship between RC/AL staff and primary care providers. Data reveal HCSs' have regular contact with providers (>8 times per month), are very satisfied with the quality of care provided to residents by providers (70%), and are quite satisfied with the quality of communication (70% satisfaction). Notably, themes such as access to providers and providers' specialization in geriatrics emerge as critical related to the quality of relationships and care in the environment. Implications of these findings for healthcare organization will be discussed.

## SESSION 1955 (SYMPOSIUM)

### MIDRANGE CHANGE OF PSYCHOSOCIAL AND HEALTH INDICATORS IN VERY OLD AGE: FINDINGS FROM EUROPEAN LONGITUDINAL STUDIES

Chair: *O.K. Schilling, Department of Psychological Ageing Research, University of Heidelberg, Heidelberg, Germany*
Co-Chair: *S. Iwarsson, Department of Psychological Ageing Research, University of Heidelberg, Heidelberg, Germany*
Discussant: *B. Johansson, Department of Psychological Ageing Research, University of Heidelberg, Heidelberg, Germany*

This symposium presents longitudinal findings from European aging studies, focussing on psycho-social and health changes in very old age (80+) across midrange time periods (5-7 years). The very old age deserves consideration as a period of major changes accompanying the approach of death among those who survived until that age, but midrange longitudinal data from the oldest-old have rarely been gathered. This collection of papers investigates intra-individual change in crucial life domains among very old people, that is, in indicators of environmental, social, and physical conditions. The first longitudinal study addresses linkages of subjective time perspective, health behavior and functional status in very old age, underscoring that health behavior and functional status are more closely related with subjective time perspective than with chronological age. This study uses data from the Amsterdam Longitudinal Study of Aging, whereas all the following are based on six-year longitudinal data from the German and Swedish national samples of the ENABLE-AGE Project. The second study explores patterns of relocation across a six-year period and relocation as related to aspects of health and subjective well-being over time in very old individuals. The third paper analyzes the characteristics of mid-range changes in common indicators of health symptoms, functional status and subjective well-being in very old age, revealing general tendencies of deterioration, but also differences in terms of "plasticity" of change. The fourth study addresses very olds' mortality across a six-year observation period and suggests that social participation and housing aspects may buffer health-related mortality risks.

### LONGITUDINAL INTERPLAY OF SUBJECTIVE TIME PERSPECTIVE, HEALTH BEHAVIOR AND FUNCTIONAL STATUS

J.P. Ziegelmann[1], D.J. Deeg[2], *1. Freie Universitaet Berlin, Berlin, Germany, 2. Vrije Universiteit Amsterdam, Amsterdam, Netherlands*

Objectives: The perception of time (e.g., subjective position in the life cycle) has been shown to be associated with longevity as well as with the deterioration of health and is central for the motivation to engage in health behaviors such as physical activity. This study aims at investigating the longitudinal interplay of subjective time perspective, health behavior and functional status. Methods: We used 7 year longitudinal data of 1250 older adults (aged 65-90 years) from three waves of the Longitudinal Aging Study Amsterdam (LASA). Results: Cross-lagged panel analyses revealed that subjective time perspective was significantly related to physical activity after three years. Physical activity in turn was significantly related to better functional status after four years. Conclusions: Results indicate the importance of paying specific attention to motivating individuals with a shorter subjective time perspective for behavior change which in turn might improve functional status.

### RELOCATIONS, ASPECTS OF HEALTH AND WELLBEING IN VERY OLD AGE – A SIX-YEAR PERSPECTIVE

C. Löfqvist[1], M. Granbom[1], F. Oswald[2], H. Wahl[3], S. Iwarsson[1], *1. Health Sciences, Lund University, Lund, Sweden, 2. Goethe University, Frankfurt, Germany, 3. University of Heidelberg, Heidelberg, Germany*

Based on data from the ENABLE-AGE Project, the study aims were to explore patterns of relocation across a six-year period in very old age, compare participants relocating versus staying put, and to study relocation in relation to aspects of health and subjective wellbeing (N=268 single-living persons, in Sweden and Germany). Interview data were collected at home visits, at baseline (T1) and one (T2) and six (T3) years later. In Sweden 15% relocated during the study period. Among those relocating, the magnitude of housing accessibility problems was higher compared to those staying put; most of them were dependent on mobility devices. Already at T1, participants relocating were less independent in I-ADL in comparison with participants not relocating, with a more marked difference at T3. In terms of perceived health and wellbeing, there were no differences between the groups, indicating complex housing and health patterns in the face of relocation.

### LONG TERM CHANGE IN SUBJECTIVE WELL-BEING, FUNCTIONAL STATUS AND HEALTH SYMPTOMS IN VERY OLD AGE: PATTERNS OF DETERIORATION, PLASTICITY, AND STABILITY

O.K. Schilling[1], H. Wahl[1], O. Reidick[1], F. Oswald[2], *1. Department of Psychological Ageing Research, University of Heidelberg, Heidelberg, Germany, 2. Goethe University Frankfurt, Frankfurt, Germany*

This study analyzed change over seven years in commonly used indicators of subjective well-being (SWB) and of physical and functional status in a very old sample (German ENABLE-AGE/LateLine study, N=115, aged 80-89 at 2002 measurement, followed-up 2003 and 2009). As longitudinal findings on very old age are rare, we addressed general dynamics of intra-individual changes by means of growth curve modeling. Three distinct patterns appeared: Indicators of SWB (positive/negative affect, life satisfaction) and of health symptoms appeared with general deterioration, varying only slightly between individuals. Measures of functional status and depressive symptoms deteriorated on average, but with "plasticity", showing substantial inter-individual variation of changes. Perceived health appeared stable. These findings and further analyses, addressing adaptation in terms of stabilization under worsening health, contradict the notion of SWB stability in very old age, but evidence adaptive potentials of the very old to maintain functional abilities.

### CAN HOUSING INDICATORS HELP TO PREDICT MORTALITY IN VERY OLD AGE? DATA FROM THE GERMAN ENABLE-AGE / LATELINE STUDY

R. Kaspar[1], F. Oswald[1], H. Wahl[2], O.K. Schilling[2], *1. Interdisciplinary Ageing Research, Faculty of Educational Sciences, Goethe University Frankfurt, Frankfurt am Main, Germany, 2. Institute of Psychology, Dept. of Psychological Ageing Research, University of Heidelberg, Heidelberg, Germany*

The aim of this presentation is to test if housing-related predictors, i.e. environmental barriers, place attachment, and social participation (frequent contact to relatives, friends and neighbors, religious activities and community involvement), in addition to well known health-related predictors (i.e. ADL, functional limitations), help to explain mortality rates. The sample includes 260 single-living and community-dwelling individuals aged 82 to 91 from the 2003 German part of the European project ENABLE-AGE survey study and its follow-up project LateLine, 106 of whom were deceased by March 2010 (mean survival time 3.5 years). Logistic regression analyses revealed social participation to systematically buffer the effects of health status on mortality. No long-term protective effects were found for lack of environmental barriers and place attachment. Further analyses elaborate on links between housing, health and survival time within the group of non-survivors. The findings exemplify the potential of housing to supplement the health focus in mortality-related analysis.

## SESSION 1960 (PAPER)

## NETWORKS OF CARE

### SOCIAL ROLES OF OLDER MEMBERS WITHIN THE SOCIAL NETWORK SYSTEMS OF FAMILIES AFFECTED BY A HEREDITARY CANCER SYNDROME

S. Ashida[1], D. Hadley[1], A. Giroux[1], K. Skapinsky[1], H. Devlin[1,2], L.M. Koehly[1], *1. NHGRI/NIH, Bethesda, Maryland, 2. The College of New Jersey, Ewing, New Jersey*

Evidence suggests that social networks provide contexts within which social resources are exchanged to help individuals cope with serious illnesses or disease risks that affect family systems. However, the importance of relationship characteristics such as age differences between members has not been well studied. This study evaluates whether social resources are exchanged more within relationships that involve older network members compared to relationships between younger network members. A total of 209 individuals from 35 families affected by Hereditary Nonpolyposis Colorectal Cancer (HNPCC) syndrome completed interviews about their social network systems (family and friends) and provided information regarding 2,085 relationship ties. Results of hierarchical logistic regression models showed that younger respondents (18 to 59 years) were more likely to receive social resources from older members (60 years or older) than from younger network members. When respondents were younger, older network members were more likely to: encourage colon screening (OR=2.49), tell the respondents about their family risk for HNPCC (OR=1.67), help in a crisis situation (OR=1.58), and be dependable when needed (OR=1.44). When respondents were older and network members were younger, respondents were more likely to share their genetic risk status (OR=1.94). Respondents were more likely to take advice from members within intergenerational relationships (younger-older: OR=2.74; older-younger: OR=2.11). Results suggest that older network members play important social roles by providing resources (e.g., social support, social influence) to the younger members in these families. Efforts to facilitate family adaptation should consider utilizing social relationships that involve older network members.

### THE ROLE OF FAMILY IN HELP-SEEKING AND DEPRESSION CARE AMONG OLDER MEN

L. Hinton[1], C. Apesoa-Varano[1], J. Unutzer[2], J.C. Barker[3], *1. Psychiatry and Behavioral Sciences, University of California, Davis, Sacramento, California, 2. University of Washington, Seattle, Washington, 3. University of California, San Francisco, San Francisco, California*

There is a gap in our knowledge of the social processes and factors shaping a family's role in depression care pathways for older adults. In particular, we know little about how family shapes help-seeking and depression care among older men of ethnically diverse backgrounds, who continue to be under-treated for depression and at a high risk for suicide. This paper addresses this gap by exploring data from an NIMH funded (R01-MH080067) mixed method study of barriers and facilitators of depression care among White non-Hispanic and Mexican older men. Findings are based on 50 in-depth, semi-structured interviews with men over the age of 60 screened for clinical depression in primary care settings, both treated and untreated. We found that family plays a dual role—as facilitator or barrier—as it "regulates" older men's help-seeking and depression care attitudes and behavior. Whether family is a barrier or facilitator depends on family dynamics, cultural and socioeconomic factors such as negative attitudes toward depression, access to general healthcare, and family involvement in illness management. A better understanding of these processes can provide clues to involving family in improving depression care for older men.

### JUST LIKE FAMILY: FICTIVE KIN TIES IN THE LIVES OF OLDER ADULTS

M. Voorpostel, *FORS, Lausanne, Switzerland*

In current society, older adults may have to rely increasingly on non-traditional forms of support. One adaptive strategy is expanding family boundaries to include non-kin ties (fictive kin). Creating fictive kin is a means to institutionalize relationships and create social capital. These ties develop from longstanding friendships or newer relationships, for example with (in)formal caregivers. A common explanation is that fictive kin substitutes for unavailable relatives. Yet, norms regarding the family may be important as well. Using a sub-sample of the Netherlands Kinship Panel Study (1'271 older adults aged 60-79), this study examines the prevalence of fictive kin ties, and looks at to whom they are most common. Specifically, the importance of family structure and family norms is assessed. Of the respondents, 41.5% mentioned fictive kin ties. Regressions showed that people with fictive kin ties were more likely to be never married, divorced or widowed than those without such ties. They had higher expectations from family, but relied more on friends. After controlling for partner status and family norms, no effect of gender, age and presence of children and siblings remained. Concluding, family structure and family norms are independently related to the creation of fictive kin. Older adults who have high expectations from family yet who rely more on friends are most likely to have fictive kin. This supports the idea that older adults create 'family-like' ties to compensate for expected but absent family support. Fictive kin ties should be included when assessing support networks of older adults.

### IMPROVING OUTCOMES OF FAMILY CAREGIVERS CARING FOR HOSPITALIZED ELDERS: THE CARE PROGRAM

B. Powers[1], H. Li[1], B. Melnyk[2], R. McCann[1], C. Koulouglioti[1], E. Anson[1], Y. Xia[1], S. Glose[1], *1. University of Rochester, Rochester, New York, 2. Arizona State University, Tempe, Arizona*

Older adults often experience functional decline and iatrogenic complications (e.g. confusion, incontinence, falls, nutrition problems, pressure ulcers) resulting from hospitalization. These can pose serious challenges for family caregivers (FCGs) responsible for managing transitions of hospitalized elders to post-acute care settings. Therefore, the purpose of this randomized controlled trial was to determine the effectiveness of the CARE Program in improving coping and role outcomes for 421 FCGs of older hospitalized adults. Intervention: Phase 1 involved information on what to expect regarding patients' potential responses along with a mutual agreement contract about how FCGs preferred to participate in their older relatives' hospital care; and Phase 2 involved information on how FCGs can smooth hospital-to-home transitions, participate in the discharge process, foster positive FCG-care receiver relationships, and prepare for follow-up care post hospital discharge. Outcomes were measured in the hospital, at 1-2 days post-admission and 1-3 days pre-discharge and post-hospital discharge, at 2 weeks and 2 months. Findings: Early findings suggest that the CARE Program may be especially effective at easing patient post-acute care transitions for non-spouse FCGs who, compared to spouses, reported statistically significant higher participation in the care of older relatives at hospital discharge, better preparedness for participation in care giving activities, feelings of less role strain, and less difficulty adapting to the caregiver role. Conclusions: Providing FCGs with information early in the hospitalization that helps them know what to expect and how they can participate in care is empowering and effective preparation for managing their older relatives' later post-hospital transitions.

## SESSION 1965 (SYMPOSIUM)

### REFLECTING ON THE PAST WHILE FORGING TOWARD THE FUTURE: HURRICANE KATRINA'S INFLUENCE ON OLDER ADULTS

Chair: *T.L. Henderson, Human Development & Family Science, Oklahoma State University, Stillwater, Oklahoma*

The impact of Hurricane Katrina on older adults provides an opportunity to enhance the scope of disaster research, preparedness efforts, and program modifications focused on the needs of older adults and their families. The current symposium provides an overview of the losses experienced by displaced older adults from the New Orleans area, perceptions of older adults who were long-term residents of Baton Rouge, and the impact of family and community demographic structure and characteristics on vulnerable elderly persons. To enhance the use of evidence-based practices, the New Orleans Council on Aging also provides lessons learned five years after Hurricane Katrina made landfall.

### SURVIVORS OF HURRICANE KATRINA: LOSSES, HOPES, AND DREAMS OF DISPLACED OLDER ADULTS

T.L. Henderson[1], Y. Kamo[2], K.A. Roberto[3], *1. Human Development & Family Science, Oklahoma State University, Stillwater, Oklahoma, 2. Louisiana State University, Baton Rouge, Louisiana, 3. Virginia Polytechnic and State University, Blacksburg, Virginia*

Hurricane Katrina brought financial and employment hardship, dislocation and housing challenges, and familial and social disruption to older citizens living in the Gulf Coast area. Based on interviews with 122 displaced adults, 60 years of age or older, we used Grounded Theory Methods to conceptualize their losses as well as their incredible resilience evident in their hopes and dreams in the aftermath of Hurricane Katrina. Losses faced by displaced older adults were explained by tangible domains of loss of lives, property, homes, and personal items; and community destruction. Another dimension of loss included the loss of contact and communication with family, friends, and neighbors, and family separation. Despite losing everything, most older adults hoped to return to the New Orleans area and find a new home. Others hoped for a better life for themselves and others. Findings suggest new directions for late life disaster-related research and implications for program development.

### THE IMPACT OF FAMILY AND COMMUNITY DEMOGRAPHICS ON THE VULNERABILITY OF THE ELDERLY TO NATURAL DISASTERS

T.J. Durant*, Sociology, Louisiana State University, Baton Rouge, Louisiana*

The purpose of this paper will be to examine the impact of family and community demographic structure and characteristics influence the vulnerable of elderly persons to natural disasters like Hurricane Katrina. The major premise examined is that older persons who live in families and communities with certain structure and characteristics, make them more vulnerable to the effects of a natural disaster. This vulnerability is indicated by family and community social capital, including family size, composition, and economic status, institutional living arrangements (nursing homes and assisted living homes) and community resources, contacts, and integration. These factors also interact with race, class, and gender to create different levels of vulnerability for the elderly and will be used to model families and communities in terms of level of vulnerability. Family and community Illustrations will be drawn from the Hurricane Katrina disaster in New Orleans in September 2005.

### HURRICANE KATRINA: PERCEPTIONS OF OLDER PEOPLE IN A COMMUNITY ACCEPTING DISPLACED VICTIMS

Y. Kamo, T.L. Henderson, K.A. Roberto*, Louisiana State University, Baton Rouge, Louisiana*

We examine perceptions about community changes and interpersonal relationships held by older residents in Baton Rouge, LA, following Hurricane Katrina. The perceived changes include increased traffic, congested businesses, higher housing costs, and tighter securities. Comparing the responses referring to weeks after Katrina and at the time of survey, we learn some changes were quickly modified (e.g., general congestion, cell phone connectivity, litter and trash), but others left a long time scar on the community and its residents (e.g., insurance premium, housing prices, and fear of crime, if not increased crime rates). While older Baton Rouge residents reported becoming friendlier, patient, and tolerant of others, they also became more suspicious and fearful of others. Suggestions are offered on policies to minimize negative effects of natural disasters on host cities.

### ISSUES FACING OLDER ADULTS IN NEW ORLEANS AFTER HURRICANE KATRINA: LESSONS LEARNED BY HOWARD RODGERS AND SONTRA CARMOUCHE

H.L. Rodgers[1], T.L. Henderson[2], *1. New Orleans Council on Aging, New Orleans, Louisiana, 2. Oklahoma State University, Stillwater, Oklahoma*

Older adults in New Orleans were affected adversely by Hurricane Katrina because many of them lacked the financial resources and transportation needed to evacuate. Those who were evacuated by the government found themselves in shelters operated by community groups, churches, and the American Red Cross with an array of service delivered by providers and volunteers with varying levels of expertise. Culturally appropriate service delivery for older adults residing in the New Orleans area was hindered by the relocation and temporary inoperable New Orleans Council on Aging (NOCOA); NOCOA lost its administrative office and all of the programs that operated directly and through subcontracts. Program participants will be given an overview of the journey of an aging agency (e.g., managing a temporary office 70 miles away in Baton Rouge and the return of NOCOA to New Orleans in January 2006), the state of aging service delivery five-years after Katrina, and program lessons learned for disaster preparedness

## SESSION 1970 (PAPER)

## SERIOUS MENTAL ILLNESS

### CHALLENGES FACING OLDER ADULTS WITH SCHIZOPHRENIA: THE PERSPECTIVE OF DIRECT SOCIAL SERVICE PROVIDERS

L.P. Ogden, *School of Social Work, Columbia University, New York, New York*

An estimated 1% of the U.S. population carries a diagnosis of schizophrenia. The majority of older adults with schizophrenia experience medical co-morbidities (Parks et al., 2006), social isolation (Jeste & Nasrallah, 2003), and enduring cognitive and psychiatric symptoms (Harvey, 2005), yet few social service programs address their needs, and even fewer have demonstrated effectiveness (Bartels & Pratt, 2009). Moreover, less than 2% of current research on schizophrenia focuses on older adults (Jeste & Nasrallah, 2003). Direct social service providers who work in housing programs witness the daily challenges, including barriers to service use, these older adults encounter. Thus providers in housing programs are particularly well positioned to inform the development and uptake of effective supportive and therapeutic services within such programs. This study used hermeneutic phenomenological methods to examine the experience of social service providers who work with older adults with schizophrenia in urban housing programs. I identified three core themes in the data: 1) Providers conceptualize older adults with schizophrenia as “survivors”. 2) Providers perceive these “survivors” as facing even more, albeit different, hardships as they age. 3) Providers and older adults with schizophrenia engage in a parallel process of coping with the severity of challenges for older adults with schizophrenia. The implications of the results for professional education and practice are discussed.

### DEPRESSED OLDER MEN’S PERSPECTIVES ON SUICIDE

J.C. Barker[1], E. Apesoa-Varano[2], J. Unutzer[3], L. Hinton[2], *1. Anthropology, History & Social Medicine, University of California San Francisco, San Francisco, California, 2. University of California Davis, Sacramento, California, 3. University of Washington, Seattle, Washington*

Rates of suicide are higher for older men than for any other age or gender group. Poor quality of life, functional disability and depression are risk factors for suicide. Relatively little is known, however, about what depressed older men think about suicide. This gap is addressed in this paper. Data come from 50 in-depth, semi-structured interviews with Mexican and white non-Hispanic clinically depressed men. Study participants were aged 60 or more, were either treated or untreated for depression, and were recruited from primary care settings. Men from both ethnic groups invoked the same basic images of masculinity as deterrents to actually attempting suicide, although at some time 48% of these men reported having had thoughts of committing suicide. “Being a man” meant being responsible or accountable for one’s actions; suicide violated this strongly held ideal. Depressed older men whose sense of loss includes loss of masculinity may be those who are more likely to attempt or complete suicide. (Men’s Health and Aging Study, grant # R01 MH 080067).

### THE IMPACT OF SERIOUS MENTAL ILLNESS ON THE DISCHARGE DISPOSITION OF OLDER ADULTS FOLLOWING A GENERAL MEDICAL HOSPITALIZATION

S. Bressi Nath[1], S.C. Marcus[2], J.E. Coulter[1], *1. Graduate School of Social Work and Social Research, Bryn Mawr College, Bryn Mawr, Pennsylvania, 2. University of Pennsylvania School of Social Policy and Practice, Philadelphia, Pennsylvania*

As compared to the general population, older adults with serious mental illness (SMI) face significant difficulties in psychological and social functioning and are also more likely to have chronic medical problems. Considering these vulnerabilities, these persons are likely to need significant medical and supportive services across the care continuum, including following an acute care episode for a general medical condition. Thus, the present analysis used a large nationally-representative data set, the 2007 Nationwide Inpatient Sample (NIS) of the Healthcare Cost and Utilization Project (HCUP), to examine the impact of SMI on the discharge status of adults 65+ following a general hospital stay. Method: The NIS is the largest all-payer database of hospital discharges in the US and contains over 100 patient-level variables. Among discharges for persons 65+ (N=13,229,946), a series of logistic regression models examined the impact of SMI on discharge to home care (HC), a skilled nursing facility (SNF), a nursing home (NH), or because of death. Results: Following hospitalization, persons 65+ with SMI were significantly more likely to be discharged to a NH [OR=2.1, p<.0001]], a SNF [OR=1.7, p<.0001], to HC [OR=1.8, p<.0001], or to die [OR=1.2, p<.0001] as compared to those without an SMI while controlling for demographic characteristics and clinical characteristics (e.g. severity of illness). Conclusion: In this analysis, SMI among those 65+ resulted in an increased need for higher-levels of care following hospitalization. Findings have implications for bolstering community-based services aimed at restoring the functioning of these persons across the care continuum.

## SESSION 1975 (PAPER)

## TECHNOLOGY AND ASSESSMENT

### DEVELOPMENT OF NURSING HOME - ELECTRONIC HEALTH RECORD SYSTEM

J. Lee[1], Y. Lee[2], *1. College of Nursing Science, Kyung Hee University, Seoul, Republic of Korea, 2. Kyung Hee Cyber University, Seoul, Republic of Korea*

Purpose: The purpose of the study was to develop and apply the Nursing Home – Electronic Health Record (NH-EHR) System in Korea. Methods: This study employed seven-phase methodological research design: 1) Literature review was done in 145 Korean articles, 279 foreign ones, 82 nursing home documentation forms from 58 Korean nursing homes and 146 American nursing home forms. 2) Center for Korean Nursing Facility (CKNF) and its home page (http://cknf.org) were established to build the national and international network. 3) Three times of interdisciplinary panel discussion were made. 4) Contents analysis of nursing home services were done in 6 nursing homes in Seoul and metropolitan area. 5) Contents were developed and validated in 9 nursing homes. 6) The NH-EHR program was developed by a software company. 7) The NH-EHR system was applied and modified in 9 nursing homes. Results: Nursing home documentation system included 6 main areas and total 540 items: 1) administration, 2) health assessment, 3) prescription and treatment, 4) diet and rehabilitation, 5) quality improvement, and 6) Statistics. Validity and reliability of the documentation system were tested in 152 nursing home residents from 9 nursing homes. The contents showed good validity and reliability in Korean nursing homes. The NH-EHR program was developed using application service provider (ASP) system. Conclusions: The NH-EHR system in this study was valid and reliable in Korean nursing homes. The system could be translated into other languages and provided for other countries.

### USING TECHNOLOGY FOR A HOLISTIC ASSESSMENT OF OLDER ADULTS' WELLNESS

G. Demiris, H.J. Thompson, *University of Washington, Seattle, Washington*

Numerous efforts have been developed to address a single aspect of older adults' well-being focusing on one or more specific functional, physiological, social or cognitive parameters. In order to capture and understand wellness, as defined by Halbert Dunn, namely "an integrated method for functioning which is oriented toward maximizing the potential of which the individual is capable," a holistic approach is required. Within the HEALTH-E (Home based Environmental and Assisted Living Technologies for Health Elders) Project we utilize an integrated monitoring system that consists of several existing telehealth technologies (incl. a telehealth kiosk, cognitive and gait assessment software and hardware) to assess the physiological, cognitive, functional, spiritual and social wellness of older adults. Our aim is to increase our understanding of older adults' wellness, allowing for identification of trends and patterns over time and ultimately support aging in place. Data collection takes place within a "living laboratory," namely a community room within an independent retirement community which residents visit multiple times a week. Synthesis methods applied on the resulting data sets include pattern discovery and sequence prediction. We use novel graphical and visual methods to ultimately represent older adults' wellness as part of their personal health record. We have to date recruited 30 subjects and our findings demonstrate that older adults appreciate a holistic assessment of their well-being, their active engagement in the decision making process and access to a personal health record that they control and share with both their formal and informal network.

### EVALUATION OF COMMUNITY-BASED COMPUTER/INTERNET TRAINING PROGRAM FOR SENIORS

C. Lee[1], J. Branham[2], M.H. Remis[2], S. Czaja[1], *1. Center on Aging, University of Miami Miller School of Medicine, Miami, Florida, 2. The OASIS Institute, St. Louis, Missouri*

The increased use of the Internet for information exchange, communication, and healthcare applications underscores the need for people of all ages to have computer/Internet skills. This paper describes the evaluation of a training program specifically developed to teach older adults basic computer and Internet skills. The program was developed and implemented by a non-profit community organization, the OASIS Institute, in four cities across the U.S. The program included 12 two hour sessions over six weeks. The sample included 194 ethnically diverse middle-income and lower SES adults age 40-90 yrs. who were randomly assigned to the training or a wait-list control condition. Knowledge of computers and the Internet, attitudes towards computers, and computer and Internet use were assessed at baseline, post training, and three months post training. Reasons for seeking training included communicating with family, accessing health information, learning something new and gaining job skills. The results provide evidence that the program helps students develop effective technology skills. There was a significant increase in computer and Internet knowledge among the participants who received the training program. The majority of participants found that the training was valuable and indicated that it met their learning goals. They also reported a significant increase in interest in computers and computer self-efficacy. We also found that some participants indicated a need for more training and practice. We discuss the key factors for successful implementation of the training in community settings.

### COMPLEX LIFE-CHANGES ILLUSTRATED IN THE COLLABORATIVE VIRTUAL REALITY ENVIRONMENT OF SECOND LIFE®

L.H. Rose, *Gerontology Interdisciplinary Program, University of Utah, Salt Lake City, Utah*

Life's transitions are complex, individualized, and interrelated with other aspects of people's lives. Scenario-based exploration is often the most effective means of individual and collective problem solving for complex cases. Virtual Reality is a relatively new tool for global collaboration and scenario-based training in gerontology and geriatrics. Gerontology Education Island is an immersive environment offering a visually/auditory, and socially-rich collaborative and educational environment. There, avatars interact synchronously and asynchronously with dynamic materials, interactive presentations, bots, holodecks, and other live people. The virtual environment of Second Life® allows for complex illustrations of life-altering situations through which professionals, caregivers, policy makers, and seniors can collaborate and learn. In this workshop, the presenter will introduce Gerontology Education Island in the virtual reality program of Second Life® which offers seniors, caregivers, educators, and professionals virtual "hands-on" experiences with purposefully-scripted objects, virtual avatars, other explorers, and a vast array of professionals.

## SESSION 1980 (SYMPOSIUM)

### TRAUMA, AGING AND TRANSITIONS OF CARE

Chair: *M. Aydin, Center for Health Policy Research, U.C.L.A, Los Angeles, California*

Co-Chair: *E.H. Davison, VA Boston HCS, Boston, Massachusetts*

Discussant: *M. Smyer, Bucknell University, Lewisburg, Pennsylvania*

The importance of psychological trauma in the aging survivor's experience of health care is often neglected by both clinicians and researchers. Trauma histories, including exposure to natural disasters or war events, may shape the experience of older adults living in a nursing home, living in the community, or receiving services for age-related deficiencies. This symposium brings together three complementary papers that address several important research questions: Are there differences in the mental health outcomes of aging trauma survivors who live in the community versus long-term care facilities? What are the cognitive risks associated with trauma-related distress in such settings? What interventions are available to clinicians in order to identify and treat aging natural disaster survivors? Glicksman and Mamberg describe the differences between Holocaust survivors who receive services in the community and those who receive care in a nursing facility, and explore the importance of social support in mitigating the psychological impact of trauma on the aging survivor. Brady and Spiro then provide an overview of the literature that examines whether deteriorating cognitive function is related to the development or exacerbation of posttraumatic stress symptoms. Finally, Brown and Hyer describe the evaluation of disaster mental health service training to Florida nursing home staff following residents' exposure to hurricanes, and describe how their findings can be used by those who work with the elderly following exposure to disasters.

### DEMENTIA AND POSTTRAUMATIC STRESS DISORDER IN OLDER ADULTS: NEUROPSYCHOLOGICAL PERSPECTIVES

C.B. Brady[1,2], A. Spiro[1,3], *1. VA Boston Healthcare System, Boston, Massachusetts, 2. Boston University School of Medicine, Boston, Massachusetts, 3. Boston University School of Public Health, Boston, Massachusetts*

Persons who experience trauma earlier in life may experience a waxing and waning of trauma-related psychological distress over their lifespan, with an exacerbation or new onset of symptoms in later life. This symptom exacerbation can range in severity from Post-Traumatic Stress Disorder (PTSD) to less severe "subclinical" stress-related symptomatology. In this paper, we provide an overview of the literature on the role of cognitive impairment and dementia in the development or exacerbation of PTSD symptoms in older adults. Specifically, we discuss whether there are patterns of neuropsychological deficits that are related to the onset and severity of trauma-related distress in older adults. Further, we discuss whether certain age-related disease risk profiles (e.g., vascular disease risk) are associated with late-life manifestation of cognitive impairment and PTSD. We conclude that consideration of the relations among stress-related symptomatology and cognition in older adults is underappreciated in both clinical and research settings.

### INTERVENTION WITH NURSING HOME RESIDENTS AFTER HURRICANES

L.M. Brown, K. Hyer, *Aging and Mental Health Disparities, University of South Florida, Tampa, Florida*

Two research studies evaluating use of disaster mental health services (DMHS) in nursing homes (NH) were conducted to understand staff perceived need for resident intervention after hurricanes (Study 1) and to evaluated the feasibility of using NH staff to provide psychological first aid (PFA) to residents (Study 2). Study 1: A 25-item questionnaire completed by 258 (40%) NHs in Florida revealed that DMHS were not routinely provided after hurricanes. Facilities that received evacuees were more likely to provide intervention than facilities that evacuated. The relationships between facility size, mental health, dementia, and type of clinician on willingness to use DMHS were not statistically significant. Study 2: Pilot study program evaluations indicated that staff felt that PFA training would improve overall care of residents, was worth recommending to colleagues, increased knowledge about DMHS, and enhanced confidence in using PFA with residents.

### ARE THERE MENTAL HEALTH DIFFERENCES OF TRAUMA SURVIVORS IN COMMUNITY VS. FACILITY LONG TERM CARE?

A. Glicksman[1], M.H. Mamberg[2], *1. Research, Phila Corporation for Aging, Philadelphia, Pennsylvania, 2. Bridgewater State College, Bridgewater, Massachusetts*

Serving older trauma survivors in Long-Term Care settings (LTC) raises the question of whether earlier experiences of trauma impact elders' later experience of LTC. Findings are presented from a study of Holocaust survivors in community-based and facility-based LTC. Holocaust survivors in both settings were compared with no-trauma groups in each type of LTC. No significant differences were found on measures of depression between elders residing in a nursing facility vs. those in non-facility communities. Significant differences were seen between the trauma and no-trauma groups in depression scores, with the trauma group displaying more depression ($p < 0.05$). However, when we controlled for the presence of a close family member the difference was no longer significant. We thus conclude that family support is critical for the mental health of older trauma survivors regardless of LTC setting.

## SESSION 1985 (SYMPOSIUM)

### EFFORTS TO SMOOTH TRANSITIONS FROM HOSPITAL TO HOME: PROGRAMS, RESOURCES AND LESSONS LEARNED

Chair: *P. Sprigg, Administration, Carol Woods Retirement Community, Chapel Hill, North Carolina*

In our fragmented health care system, patients face significant challenges when moving from one health care setting to another. The transition from hospital to home is perhaps one of the most complex transitions with the potential for patient and caregiver confusion about the patient's condition and appropriate care; lack of follow-through on referrals, medication errors, and inconsistent patient monitoring, all leading to a decrease in quality of care and quality of life and costly and avoidable emergency room use and re-hospitalization. This session is designed to introduce programs and resources at the national, state and local level to provide participants with tools and examples to improve transitions from hospital to home.

### REDUCING READMISSIONS THROUGH IMPROVING TRANSITIONS IN CARE

C. Lattimer, *Administration, Case Management Society of America, Little Rock, Arkansas*

Seniors face significant challenges when moving from one health care setting to another. Globally the healthcare systems are not structured to meet the needs of most patients or caregivers during transitions between health care settings. Discussion in this session will look at initiatives that are improving transitions of care in order to increase quality of care and patient safety. Tools and resources will be assessed along with the work currently being done by the National Transitions of Care Coalition to identify performance and outcome measures in support of improving quality transitions. Seniors and their caregivers are often the only consistent factor involved with transitions and how do we encourage them to play a more active role in their care during transitions. During this presentation issues and barriers related to Transitions of Care will be discussed along with an interactive review of several patient scenarios supporting the concerns. Several models of collaborative practice will be reviewed along with various tools and resources available that address improved communication and support to providers, patients and caregivers. Performance measures will be discussed that support improved quality of care and patient safety in addressing the needs of seniors and assisting seniors in remaining independent and active with their health care options. Participants will: 1) Identify the barriers and gaps with transitions of care and how they affect readmissions for seniors 2) Review tools and resources available for improving communication between providers and with seniors and their family caregivers

### TRANSITIONAL CARE PROCESS, FROM HOSPITAL TO HOME, STRIVES TO IMPROVE OUTCOMES FOR MEDICAID RECIPIENTS WITHIN COMMUNITY CARE OF NORTH CAROLINA

J. Cockerham, *Community Care of North Carolina, Raleigh, North Carolina*

Community Care of North Carolina, a state-wide program of community health networks, operated by community physicians, hospitals, health departments, and departments of social services, have established local systems that give primary care providers opportunities to work with Care Managers and community providers to develop capacity, tools, information and support needed to manage health care needs of the Medicaid population. Over 30% of 993,374 CCNC enrollees have 3 or more chronic conditions, incurring 4.5 times more cost. CCNC implements a Transitional Care Process to achieve long-term quality, cost, access and utilization objectives. Process begins on admission to facilitate interdisciplinary collaboration across transitions with focus on patient/caregiver playing central role in formation/execution of care plan. It promotes self-management and direct communication between patient/caregiver, primary care provider, etc. Care Managers ensure patients are linked back to medical homes, make home and PCP visits, collaborate with Network Pharmacists on medication management and reconciliation. .

### COMMUNITY CONNECTIONS: BUILDING COMMUNITY INFRASTRUCTURES TO SUPPORT TRANSITIONS FROM HOSPITAL TO HOME

H.K. Altman, *Administration, Carol Woods Retirement Community, Chapel Hill, North Carolina*

The Community Connections initiative is about building connections among organizations, programs and consumers at both the state and community levels, addressing the current fragmentation of the health and social service system and supporting the development of an infrastructure of services designed to successfully integrate individuals back into their communities following hospital discharges. Session participants will hear about this current 3-year project, funded by The Duke

Endowment that includes elements to coordinate community organizations to implement evidence-based hospital transitions and telehealth programs, expand PACE, Adult Day Health and Chronic Disease Self-Management programs, and partner with health care systems and state agencies to align efforts and enhance services, including participating in the AoA and CMS-supported Aging and Disability Resource Center initiative.

# SESSION 1990 (PAPER)

## FINDING THE RELATIONSHIP BETWEEN BIOLOGY, AGING AND DISEASE

### COVERT BRAIN CHARACTERISTICS OF PARKINSONIAN SIGNS: A DIFFUSION TENSOR IMAGING STUDY OF THE HEALTH AGING AND BODY COMPOSITION (HEALTH ABC) COHORT

C. Rosano[1], H. Aizenstein[1], V. Venkatraman[1], C. Taylor[1], K. Yaffe[2], T. Harris[3], S.B. Kritchevsky[4], A.B. Newman[1], *1. University of Pittsburgh, Pittsburgh, Pennsylvania, 2. University of California, San Francisco, San Francisco, California, 3. National Institutes of Health, Bethesda, Maryland, 4. Wake Forest University, Winston-Salem, North Carolina*

Parkinsonian signs occur commonly in older adults and predict greater risk of developing dementia and disability. While brain changes in Parkinson disease (PD) have been characterized, little is known about the brain abnormalities of Parkinsonian signs in community-dwelling older adults. Brain Imaging and a modified scale of the Unified Parkinson Disease Rating scale (UPDRS) were obtained in 274 Health ABC participants (80-89 years old, 56% women, 42% blacks) free from dementia and physical disability. Diffusion Tensor was used to quantify covert abnormalities as mean diffusivity of PD-related brain regions that are important for mobility/balance, memory and executive function (prefronto-temporal, subcortical and cerebellum). We found that parkinsonian signs were highly prevalent (45% with UPDRS>0). Greater UPDRS score (used as continuous) was associated with greater covert abnormalities localized to regions of mobility/balance (caudate, thalamus, posterior cerebellum), memory (hippocampus, parahippocampus, entorhinal cortex, amygdale) and executive function (middle frontal gyrus). In logistic regression models (outcome: UPDRS>0), there was a 30% greater probability of having Parkinsonian signs for each standard deviation of mean diffusivity obtained from the regions above (odds ratio [95% CI]: 1.31 ([1.07, 1.62], p=0.01). Adjustment for age, race, gender, intracranial and total brain volume did not change these associations. In this group of well functioning older adults, Parkinsonian signs were highly prevalent and were associated with focal bilateral covert abnormalities within PD-related networks. Future studies will need to assess whether these are true prodromal signs of PD or reflect other neuropathological findings such as Lewis bodies.

### COMMON HUMAN GENETIC VARIATION IN PATHWAYS TO SUCCESSFUL AGEING

D. Melzer, *Epidemiology and Public Health, University of Exeter, Exeter, United Kingdom*

Successful aging depends on delaying the onset of age-related disease (ARD) until late in life. Hundreds of genome wide association studies (GWAS) have identified common risk variants for ARDs and traits. Most GWAS are large-scale, with robust identification and replication of findings. This talk will present a review of GWAS results, addressing three basic questions: 1. Are the genetic variants identified involved in the key pathways prominent in aging research, especially oxidative stress, insulin, IGF-1 and other endocrine signalling, inflammation, or cell cycle control/cell senescence? 2. Are there variants or loci associated with more than one ARD – loci that might modulate overall aging? 3. How many variants are likely to influence human ARD? Dozens of variants have been identified as risk markers for key ARDs including cardiovascular disease, type 2 diabetes, osteoporosis, prostate cancer and Alzheimer's disease. Many more markers have emerged for other age related cancers and other conditions. Several markers are near or occasionally in genes linked to aging pathways. Cell cycle control is prominent. There are also many variants very specific to each disease process (e.g. for prostate cancer, variants only involved in prostate produced proteins). At least three loci associated with two or more ARDs have emerged, including a locus near TERT. These findings suggest that large numbers of cell type specific genetic variations are involved in human ageing, producing a 'mosaic' modulation of variation in the human aging process.

### CHRONIC PHYSICAL CONDITIONS AMONG THE ELDERLY PEOPLE WITH BEHAVIORAL HEALTH DISORDERS

W. Lin[1,2], R.E. Clark[1,2], J. Zhang[1], G. Leung[1], *1. Center for Health Policy and Research, University of Massachusetts Medical School, Shrewsbury, Massachusetts, 2. Department of Family Medicine and Community Health, University of Massachusetts Medical School, Worcester, Massachusetts*

Although studies have shown increased medical comorbidity among younger people with behavioral health disorders (BHDs), the information on elders is limited. Using merged claims data for elderly Massachusetts Medicare and Medicaid members (N=679,182, CY2005), we estimated logistic regression models to investigate whether mental illness and comorbid substance use disorders (SUD) were associated with a higher comorbidity of fifteen selected chronic physical conditions. The average number of chronic physical conditions was similar for elders with severe mental illness (SMI) and other mental illness (OMI) (4.5 and 4.2, respectively), but it was only 2.5 for those without mental illness. Compared with elders without mental illness and SUD, those with a BHD alone or co-occurring mental illness and SUD were more likely to have chronic physical conditions, except eye diseases. Furthermore, within each respective mental illness group (SMI and OMI), a comorbid SUD was associated with higher adjusted odds of having chronic physical conditions, except Parkinson's disease, diabetes, and eye diseases. The highly prevalent chronic physical conditions among elders with BHDs may introduce competing demands between physical and behavioral health treatment. This could have negative impact on access to these services and quality of care. Relying on either general medical or mental health sector alone may not be sufficient to manage physical and behavioral comorbidities concurrently and successfully. This underscores the need to coordinate physical and behavioral health services. The Special Needs Plan created by the Congress in the Medicare Modernization Act of 2003 is a possible venue to consider for care coordination.

### VALIDATING A NON-EXERCISE MEASURE OF CARDIORESPIRATORY FITNESS: ASSOCIATIONS WITH BRAIN STRUCTURE AND FUNCTION

A.N. Szabo[1], E.L. Mailey[1], S.M. White[1], T.R. Wojcicki[1], K. Erickson[2], M. Voss[1], A. Kramer[1], E. McAuley[1], *1. Department of Kinesiology and Community Health, University of Illinois, Urbana, Illinois, 2. Uiversity of Pittsburgh, Pittsburgh, Pennsylvania*

There is increasing evidence that cardiorespiratory fitness (CRF) is associated with brain structure and function, and improvements in CRF through exercise training have been implicated in the restoration of neural and cognitive functioning in older adults. Alternatives to graded exercise testing (GXT) such as submaximal field tests and equations used to calculate CRF in older adults have been demonstrated to be reliable, less costly, and less invasive measures of CRF in older adults (Mailey et al., 2010). However, their potential for assessing fitness relationships with brain structure and cognitive functioning has yet to be determined. Older adults (N = 70; M age = 65.03) completed a 3 Tesla sMRI, a spatial working memory task, a frequency of forgetting (FOF) questionnaire and three measures of CRF including a maximal graded exercise test (GXT), Rockport 1-mile walk test, and an equation derived measure of CRF (Jackson et al., 1990). Correlation analyses revealed all measures of CRF (GXT, Rockport, and Equation) were significantly correlated with hippocampus volume in both the right (rs = 0.57, 0.38, 0.39) and left (rs = 0.60, 0.41, 0.39) hemispheres. Additionally, all fitness measures were significantly correlated with spatial working memory reaction time (rs = -.39, -.29, -.35). Finally, all measures of CRF were significantly correlated with frequency of forgetting (rs = .33, .25, .30). No correlations were significantly different from each other. These findings suggest that a low-risk, low-cost, non-exercise estimate of CRF is significantly related to brain structure and cognitive function in older adults. Further validation is required, as is determination of whether such relationships hold over the course of exercise interventions.

## SESSION 1995 (PAPER)

## IMPROVING THE NURSING HOME EXPERIENCE

### DEVELOPMENT OF A NEW RESIDENT SAFETY CLIMATE SURVEY FOR VA COMMUNITY LIVING CENTERS (NURSING HOMES)

C.W. Hartmann[1,2], J.A. Palmer[1,2], D. Berlowitz[1,2], *1. CHQOER, Bedford VA Medical Center, Bedford, Massachusetts, 2. Boston University School of Public Health, Boston, Massachusetts*

VA Community Living Centers (CLCs—formerly Nursing Home Care Units) are undergoing “culture change,” designed to promote resident-centered care and create resident-centered environments. Important aspects of resident care and a facility safety’s environment can be improved through the development of a strong “safety climate” (staff attitudes and behaviors related to resident safety), which may or may not conflict with culture change. Our objective was to develop a nursing home safety climate instrument to provide measurable, actionable feedback to facilities about how to improve safety climate and about interactions between safety climate and culture change. Thirteen experts in survey design and methodology, nursing home care, and safety climate participated in the instrument development. We used existing instruments and the safety climate literature to create a pool of instrument domains and item objectives. Panel members ranked draft domains and objectives using a modified Delphi approach. After two rounds of rating, experts met to discuss the ratings. Items for which consensus was not reached were rated again a third time. The process resulted in an instrument with 9 domains, 43 safety climate items, and 5 demographic items. The domains were Safety priorities, Attitudes regarding resident safety, CLC senior management’s commitment to safety, Direct supervisor’s commitment to safety, Risk or hazards, Perception of shared importance of safety, Culture change and safety, Drivers of safety improvements, and Overall impressions. This is the first instrument designed to assess safety climate in VA nursing homes and to provide immediate, specific, and meaningful feedback to facilities.

### EXPERIENCE OF RESIDENTIAL TRANSITION AMONG FRAIL OLDER MINORITY PACE MEMBERS

S.L. Molony[1,2], L.K. Evans[2], *1. Nursing, Yale University, New Haven, Connecticut, 2. University of Pennsylvania, Philadelphia, Pennsylvania*

Transitions within and between various long term care environments are common as individuals age and their health and personal needs change. An empirical base is needed that identifies predictors of wellbeing in the context of co-occurring health and residential transitions among home, adult day health centers, assisted living/supportive housing and/or nursing homes. This paper describes perceived changes in person-environment relationship (at-homeness) over time among frail older minority PACE members who experienced a residential move, one aim of a larger feasibility study that explored predictors of wellbeing in this population. Purposive sampling was used to achieve diversity among residential settings. The five phases of person-environment (P-E) integration identified in a metasynthesis of older adults’ ‘meanings of home’ formed the framework for analysis of qualitative data from three time points: baseline and 3 and 6 months post move. The 17 enrolled elders were 59% male and age 62 – 88 years; 59% had < 8th grade education. More than 2/3 had some cognitive impairment (M MOCA 20.2 +/-6.06), health was self-rated as fair to good, and 10% died during the 6-month study, underscoring frailty. Categories emerging from qualitative content analysis revealed consistency with literature-derived themes, e.g., empowering (‘do what I want’) place of relationship, and with phases of integration in the new home, e.g., ‘closing one door - opening another,’ ‘nesting,’ and ‘continuity.’ Complex patterns of P-E fit also emerged, illustrating the importance of ‘knowing the person.’ A significant increase in ‘at-homeness’ after moving from nursing home to community housing supported qualitative findings.

### THE DEVELOPMENT AND PROCESS EVALUATION OF A MUTUAL SUPPORT GROUP IN LONG-TERM CARE FACILITIES

K. Theurer, A.V. Wister, H. Chaudhury, L.D. Lovegreen, *Simon Fraser University, Vancouver, British Columbia, Canada*

Mutual support groups have the potential to offer a process that acts as a buffer to offset the passivity and dependence fostered in the culture of long-term care facilities (LTCF). The purpose of this paper is to present the development of a new intervention involving co-led mutual support groups in LTCF and to evaluate its process, structure and content. Tom Kitwood’s Model of Personhood was used as the basis for developing *The Little Java Music Club*, a weekly discussion group using themes chosen by participants and supportive materials such as related music and photographs. A mixed methods qualitative process evaluation was used, utilizing focus groups, systematic observation of six resident groups, individual resident interviews (N=65) and staff interviews (N=7) in three LTCF in British Columbia, Canada. A majority of the residents reported positive benefits and themes generated included spending time together (versus being alone in their rooms), getting to know one another better, gaining new respect and understanding for one another, giving and receiving support, unloading their burdens and learning new coping skills. Group observations showed increased active participation during and after the sessions. In their interviews, staff revealed an overall positive experience and described how the unique program structure fostered sharing on a deeper level and how it empowered residents with moderate to severe cognitive impairment. Implications for a future outcome evaluation of the program will be presented. Funded in part by the Social Sciences and Humanities Research Council of Canada and the Michael Smith Foundation for Health Research.

### EFFECT OF FEASIBLE MOBILITY INTERVENTION IN NURSING HOMES: MOBILITY OF VULNERABLE ELDERS (MOVE)

S. Slaughter, C. Estabrooks, *University of Alberta, Edmonton, Alberta, Canada*

Introduction: Almost 90% of long-term care (LTC) residents have some type of mobility limitation leading to a loss of ability in activities of daily living and an increased the risk of problems such as pressure ulcers, falls, and incontinence. Objective: The purpose of this research is to study the effect of repeating a simple functional activity (sit-to-stands) on resident mobility. Methods: In this quasi-experimental study the sit-to-stand activity and a reminder system were introduced to health care aides during short education sessions. We monitored the monthly uptake of the sit-to-stands using the health care aides’ documentation flowsheets and we measured resident mobility using the 30-second sit-to-stand test at baseline and four months later. Using logistic regression we assessed the influence of exercise occasions on change in mobility as a binary outcome (improved/maintained mobility versus reduced mobility). Results: 98 health care aides and 32 residents participated in the study between October 2009 and February 2010. In the month prior to measuring the residents' sit-to-stand performance residents completed a mean of 29.7 (SD = 20.79; range 2 to 76) occasions of sit-to-stand repetitions. For every 12 occasions of repeating the sit-to-stand exercise in a month, the odds of improving or maintaining performance with the 30-second sit-to-stand test doubled (OR = 1.05, p = 0.014). Conclusions: This study provides promising evidence that the sit-to-stand functional activity many delay the loss of mobility in nursing home residents with dementia. We plan to evaluate the effectiveness of this mobility intervention in a larger controlled study.

# SESSION 2000 (PAPER)

## INNOVATIVE EDUCATION FOR OLDER ADULTS AND HEALTHCARE PROFESSIONALS

### ATTITUDES OF BACCALAUREATE NURSING STUDENTS TOWARD OLDER ADULTS: IMPLICATIONS FOR EDUCATION IN GERONTOLOGY

S. Swanlund[1], A. Kujath[2], *1. Illinois Wesleyan University, Bloomington, Illinois, 2. University of Illinois at Chicago, Chicago, Illinois*

Chronic conditions contribute to the factors making older adults (65 and older) the largest consumers of health care resources, yet graduating nurses are choosing intensive care nursing, pediatrics, and obstetrics over work with the elderly. This mixed methods study examined the attitudes of baccalaureate nursing students toward older adults, students' preferred work areas after graduation, and reasons for nursing career choices. A convenience sample of 50 students from a private Midwestern baccalaureate nursing program completed a demographic data sheet, the Tuckman-Lorge Attitude Toward Old People questionnaire and ranked 10 nursing work areas. Qualitative data included reasons why students were choosing or not choosing specific work areas, and factors which might change their opinion of working with older adults. Quantitative results revealed there was a trend for students who were in the program longer to have more positive attitudes towards old people. Students who spent time with an older family friend or relative had better attitudes than those who did not (p=.007). There was no correlation between attitudes and choosing to work with older adults. One overriding theme with two subthemes emerged from the qualitative data collected. The responses from these 50 BSN students revealed that developing a value for gerontology is imperative. Valuing gerontology was seen as a precursor to developing a positive attitude. Developing relationships with older adults and appreciating the complexity in the care of the older adult emerged as two subthemes. These results are important to future gerontological curricular planning.

### EVALUATING COMMUNICATION STRATEGIES IN DEMENTIA: CONVERSATIONS BETWEEN AGED CARE STAFF AND RESIDENTS

E.R. Smith, M. Broughton, R. Baker, C. Gallois, A.J. Angwin, D. Copland, K. Havas, H.J. Chenery, *The University of Queensland, Brisbane, Queensland, Australia*

Background: Communication difficulties are prominent in dementia and are distressing both for people with dementia and their caregivers. Based on empirical and clinical data, a DVD-based program entitled MESSAGE was developed to provide caregivers with evidence-based strategies to facilitate communication in dementia. The effectiveness of this program was examined in a sample of professional caregivers in residential facilities. Method: As part of the evaluation of the MESSAGE program in aged care settings, 10-minute conversation samples were recorded between caregivers and residents with dementia. Twenty caregiver-resident dyads were recorded at baseline. Caregivers then either received MESSAGE training or served as controls. Within the eight dyads recorded at follow-up three months later, there were four trained caregivers and four controls. Conversations were transcribed and analysed using Leximancer, a text-mining tool designed to identify meaningful themes, concepts and relationships in discourse. Results: Leximancer analysis revealed that, at baseline, conversational content was generated predominantly by caregivers. Dominant concepts included 'favourite', 'children', 'today' and 'remember'. Residents appeared to contribute to conversations using content-poor responses, including agreement, laughter, and automatic language (e.g., swearing). At three months post-training, contribution of content appeared more evenly shared between conversational partners for dyads involving trained caregivers, but not control caregivers. Discussion: This study describes a novel method for evaluating the effects of caregiver training. The provision of MESSAGE strategies appears to have a positive impact on communication between caregivers and people with dementia. In particular, trained caregivers appear better able to facilitate contribution of content by the person with dementia.

### EVALUATION OF AN INTRODUCTORY GERIATRICS COURSE FOR PHARMACY STUDENTS

C.A. Sadowski, M. Gukert, *Faculty of Pharmacy, University of Alberta, Edmonton, Alberta, Canada*

Objective: To describe the implementation and evaluation of the first 5 years of an introductory geriatrics course for pharmacy students. Methods: The pediatrics/geriatrics module, a mandatory second year course for pharmacy students, first ran fall 2005. This course was assessed by professor evaluation, teaching assistant feedback, student performance on assignments and examinations, and course evaluations completed by students. Content was compared to required syllabus content suggested by professional organizations. Student marks were analyzed descriptively. Feedback from all sources was categorized into themes. Results: The geriatrics portion of the course matched very well with curriculum suggested by the professional organizations (AGS, CGS, ASCP). The students identified 4 areas of concern: the content was too complex for second year, the content emphasized the social sciences over the medical sciences, much of the content appeared subjective, and the course was overall too onerous, particularly in relation to the 5 writing assignments. Professor evaluation identified 3 areas of concern: lack of student engagement, an inability to address the complexity of geriatrics by teaching so early in the curriculum, and lack of critical thinking on writing assignments. Student marks overall were quite high for the course, with no students failing. Conclusion: The implementation of an early geriatrics course did not meet student or professor expectations. The course may be improved by teaching later in the curriculum, when there is a professional identity and knowledge foundation already laid for the students.

### WILL EDUCATION PROTECT MIDDLE-AGED (45-64) WHITE AMERICANS FROM DEVELOPING MENTAL DISORDER?

X. Pan, *Miami University, Oxford, Ohio*

The objective of this research is to examine the relationships among education, mental health history, and well being at midlife among white Americans. It is hypothesized that individuals with higher education will experience protective effects on their mental health during middle age (45-64), particularly depression and anxiety. The sample consists of 2,911 persons (1,391 males, 1,520 females) drawn from the National Survey of Midlife Development in the United States (MIDUS), which is a collaborative, interdisciplinary investigation of patterns, predictors, and consequences of midlife development in the areas of physical health, psychological well-being, and social responsibility on a nationally representative sample of non-institutionalized, English-speaking adults in the United States. Bivariate correlations were used to examine the relationships among demographic characteristics, education, mental health history, and midlife well-being (depression and anxiety). Variables with significant bivariate correlations were entered as predictors into two linear regressions predicting depression and anxiety. Findings reveal that education level and mental health are significantly associated r=.249, p<.01; middle-aged white Americans who are highly educated are more likely to report their mental health as "very good" or "excellent" than those who are less educated. Higher levels of education predict better mental health at midlife.

## SESSION 2005 (SYMPOSIUM)

### PHYSICAL ACTIVITY AMONG VULNERABLE OLDER ADULTS: AN EXPLORATION OF POTENTIAL BENEFITS AND BARRIERS

Chair: *M. Shardell, University of Maryland School of Medicine, Baltimore, Maryland*
Discussant: *E.M. Simonsick, National Institute on Aging, Baltimore, Maryland*

The role of physical activity in delaying disability among community-dwelling older adults is well-documented. However, less work has examined the effects of physical activity in vulnerable subgroups of older adults, such as hospitalized, sedentary, or nutritionally compromised older persons, in whom the barriers to and benefits of participating in physical activity may differ from the general population. The research presented in this symposium takes advantage of longitudinal data and state-of-the-art techniques from several unique cohorts, including nationally representative cohorts with up to 12 years of mortality follow-up (NHANES III) and physical activity measured via accelerometry (NHANES years 2003-2006), a randomized clinical trial of an exercise intervention (LIFE), and a cohort study of hip fracture recovery (Baltimore Hip Studies 4), to provide new insights on the heterogeneous benefits of physical activity on health in older persons. Presentations examine the differential preventive effects of physical activity on mortality depending on vitamin D levels, the "pre-habilitative" impact of pre-fracture physical activity on post-fracture inflammation among hip-fracture patients, and the rehabilitative effects of physical activity on functional recovery from hospitalization. Presentations also address the influence of nutritional status measured by serum carotenoid levels on physical activity after hip fracture and the association between metabolic syndrome and accelerometry-measured sedentariness in older persons. Attendees will gain a greater understanding of 1) factors that influence physical activity and 2) its health effects among vulnerable older persons, which will contribute to efforts to develop and evaluate appropriate activity-based interventions to improve health at older ages.

### JOINT EFFECTS OF PHYSICAL ACTIVITY AND VITAMIN D ON LONGEVITY: NHANES III

M. Shardell[1], D. Alley[1], R.R. Miller[1], G. Hicks[2], *1. University of Maryland School of Medicine, Baltimore, Maryland, 2. University of Delaware, Newark, Delaware*

High physical activity (PA) and high vitamin D [25(OH)D] both relate to improved longevity. Research has not examined the joint relationship of PA and 25(OH)D with longevity. Analysis included 3,377 adults aged≥55 years from the National Health and Examination Survey III. PA was categorized using metabolic equivalent tasks (METs) in the past month as low (≤3.5 METs), moderate (3.6-14.9 METs), or high (≥15 METs). Mean follow-up was 7.8 years. Survey-weighted Cox regression adjusting for covariates was used. Participants with both high 25(OH)D (≥50 nmol/L) and high PA had the lowest all-cause mortality, relative to participants with both low 25(OH)D (<50 nmol/L) and low PA (Hazard Ratio=0.57, 95% Confidence Interval 0.33-0.98). Mortality for participants with low 25(OH)D/high PA did not differ from those with low 25(OH)D/low PA. Higher 25(OH)D and PA were jointly associated with longevity. This work is an important step toward identifying optimal 25(OH)D/PA combinations among older adults.

### PRE-FRACTURE PHYSICAL ACTIVITY AND POST-FRACTURE INFLAMMATION: THE BALTIMORE HIP STUDIES

R.R. Miller[1], M. Shardell[1], D. Alley[1], G. Hicks[2], D. Andersen[1], D. Orwig[1], J. Yu-Yahiro[3], J. Magaziner[1], *1. University of Maryland School of Medicine, Baltimore, Maryland, 2. University of Delaware - Physical Therapy, Newark, Delaware, 3. Union Memorial Hospital - Orthopaedics, Baltimore, Maryland*

Physical activity (PA) may have anti-inflammatory effects. Whether pre-hip-fracture PA is associated with lower inflammatory marker levels post-fracture is unknown. Using generalized estimating equations, we examined the association of pre-fracture PA with serum levels of soluble TNF- alpha receptor 1 (sTNF- alphaR1) at baseline and at 2, 6 and 12-months post-fracture in 161 women from the fourth Baltimore Hip Studies cohort. Adjusting for covariates, higher levels of pre-fracture PA were associated with lower sTNF- alphaR1 levels during the year post-fracture (p=0.09 for longitudinal association). Relative to other study participants, those in the lowest quintile of pre-fracture PA had sTNF- alphaR1 levels that were 514.5 pg/ml (95%CI: -27.1, 1056.0) and 560 (95%CI: -10.6, 1132.2) higher at baseline and 2 months. Higher levels of pre-fracture physical activity were associated with lower levels of sTNF- $\alpha$R1 during the year post-fracture a mechanism by which physical activity may increase resilience in older adults.

### EFFECT OF PHYSICAL ACTIVITY ON HOSPITALIZATION-ASSOCIATED FUNCTIONAL DECLINE: THE LIFE PILOT STUDY

D. Alley[1], F. Hsu[2], M.P. Walkup[2], M. Shardell[1], M. Pahor[3], S. Studenski[4], J. Guralnik[5], T. Harris[5], *1. University of Maryland School of Medicine, Baltimore, Maryland, 2. Wake Forest University School of Medicine, Winston-Salem, North Carolina, 3. University of Florida, Gainesville, Florida, 4. University of Pittsburgh, Pittsburgh, Pennsylvania, 5. National Institute on Aging, Bethesda, Maryland*

Hospitalization often precipitates the development of disability in older persons, possibly due to hospitalization-associated deconditioning. Few studies have addressed whether physical activity (PA) can reduce functional decline associated with hospitalization. Using data from a randomized controlled trial comparing a 12-month PA intervention to a successful aging (SA) intervention in sedentary older persons (The Lifestyle Interventions and Independence for Elders Pilot study, N=424, aged 70-89), we compared changes in physical function in participants by hospitalization status and intervention arm. Among hospitalized participants, the PA intervention group showed an average 1-point improvement in Short Physical Performance Battery (SPPB) score and no change in 400m walking speed during the six months in which a hospitalization occurred, while the SA group experienced declines in both outcomes (N=69 for SPPB, N=63 for 400m walk, p for difference <.01). Results suggest that participating in PA may increase resilience and recovery from hospitalization in older persons.

### ASSOCIATION OF SERUM CAROTENOID LEVELS WITH RECOVERY OF PHYSICAL ACTIVITY AFTER HIP FRACTURE: THE BALTIMORE HIP STUDIES

G. Hicks[1], M. Shardell[2], D. Alley[2], R.R. Miller[2], C. D'Adamo[2], J. Magaziner[2], *1. University of Delaware, Newark, Delaware, 2. University of Maryland School of Medicine, Baltimore, Maryland*

In older adults, low serum carotenoid levels have been associated with sarcopenia and progression of disability. We examined the association of carotenoid status at the time of hip fracture with recovery of physical activity, as measured by the Yale Physical Activity Survey (YPAS) and Six-Minute Walk (6MW) Test. Analyses included 96 participants aged ≥ 65 years from the Baltimore Hip Studies 4th cohort. Generalized estimating equations, adjusting for covariates, were used. Women with high carotenoid levels at baseline had higher physical activity levels in the year post-fracture (p=.01) as measured by the YPAS.

Although they did not have greater 6MW distances overall throughout the year (p=.12), their 6MW distances were 34.79 meters (95%CI: 2.32, 67.25) and 41.91 meters (95%CI: 2.69, 81.13) greater at 6 and 12 months post-fracture, respectively. Overall, women with higher carotenoid status at the time of fracture had better recovery of physical activity in the year post-fracture.

### SEDENTARY PATTERNS ASSOCIATED WITH METABOLIC SYNDROME INDEPENDENT OF PHYSICAL ACTIVITY

A. Koster[1], A. Bankoski[1], J.J. McClain[2], R.J. Brychta[3], P. Caserotti[1], T. Harris[1], *1. National Institute on Aging, Bethesda, Maryland, 2. National Cancer Institute, Bethesda, Maryland, 3. National Institute of Diabetes and Digestive and Kidney Diseases, Bethesda, Maryland*

This study examined associations between objectively measured sedentary patterns and metabolic syndrome (MS) among older adults. Data were from 1367 men and women, aged ≥60 years in the 2003-2006 National Health and Nutrition Examination Survey. Sedentary time was assessed using an ActiGraph accelerometer and defined as <100 counts per minute. MS was defined according to the ATPIII criteria. Compared to people without MS, people with MS spent more hours and a greater percentage of time sedentary, had longer average sedentary bouts, lower intensity (average counts/min) during sedentary time, and fewer breaks in sedentary time (all p<0.01). A greater percentage of time sedentary, a lower intensity sedentary time, and fewer sedentary breaks were associated with a significantly greater likelihood of MS after adjustment for physical activity. Older people may benefit from reducing total sedentary time and avoiding prolonged periods of sedentary time by increasing the number of breaks during sedentary time.

## SESSION 2010 (PAPER)

## PREDICTING MORBIDITY: NEW FINDINGS FROM LONGITUDINAL DATABASES

### A NUANCED ANALYSIS OF CANCER SURVIVORS' HEALTH STATUS: A REPORT FROM THE HEALTH AND RETIREMENT STUDY

S. Koroukian[1], D.F. Warner[1], C. Owusu[1], C.W. Given[2], *1. Epidemiology and Biostatistics, Case Western Reserve University, Cleveland, Ohio, 2. Michigan State University, East Lansing, Michigan*

Introduction: Studies documenting lower health status and greater decline in older cancer survivors (CS) compared to cancer-free (CF) elders have not accounted for the frequent occurrence and co-occurrence of comorbidities (COM), functional limitations (FL), and geriatric syndromes (GS). Our study aims to fill this gap in the literature. Methods: We used self-reported data on a U.S. representative sample of 13,544 adults age 50 or older from the 2004-2006 waves of the Health and Retirement Study. CS (13%) were identified based on history of cancer. We relied on COM, FL, and GS to group respondents in the following clinical categories: (CC0) none of COM, FL, or GS; (CC1) occurrence of any one of COM, FL, or GS; (CC2) co-occurrence of any two of COM, FL, and GS; and (CC3): co-occurrence of all three of COM, FL, and GS. Using multivariable logistic regression, we evaluated the independent association between CS status and each of self-rated fair/poor health and 2-year decline from excellent, very good or good to fair/poor health, or from fair to poor health. Results: More CS than CF respondents presented with CC2 (37.4% vs. 33.4%) or CC3 (33.2% vs. 24.5%), p < 0.01. After adjusting for the clinical categories, CS status remained independently associated with fair/poor health status (adjusted odds ratio 1.34, 95% Confidence Interval: (1.19, 1.52) and decline (1.23 (1.06, 1.43)). Conclusions: With the refined characterization of clinical presentation, we report a significant association between CS status and health outcomes, albeit at a relatively modest magnitude.

### VITAMIN D STATUS AND PERFORMANCE ON THE TRAIL MAKING TEST PARTS A AND B: CROSS-SECTIONAL AND LONGITUDINAL ANALYSES OF WOMEN'S HEALTH AND AGING STUDY II DATA

J. Deal[1,2], M. Carlson[1,3], Q. Xue[1,4,2], L.P. Fried[5], P.H. Chaves[1,4,2], S. Yasar[1,4], *1. Center on Aging and Health, Johns Hopkins Medical Institutions, Baltimore, Maryland, 2. Department of Epidemiology, Johns Hopkins School of Public Health, Baltimore, Maryland, 3. Department of Mental Health, Johns Hopkins School of Public Health, Baltimore, Maryland, 4. Division of Geriatrics, Johns Hopkins School of Medicine, Baltimore, Maryland, 5. Mailman School of Public Health, Columbia University, New York, New York*

Trail Making Test (TMT) Parts A (TMT-A) and B (TMT-B) are traditionally used in cognitive assessment in older adults. TMT-A provides insight into psychomotor speed, and TMT-B into executive function. Whether vitamin D affects performance on these cognitive subdomains is not known. We assessed cross-sectional and longitudinal relationships of serum vitamin D with TMT-A and TMT-B performance. Observational data were from the Women's Health and Aging Study II (age range: 70-80 y.o.). There were 6 data collection rounds (up to 9 years of follow-up) for longitudinal analyses (sample size: 341). Linear, logistic, and longitudinal random effect models were used. Exposure of interest was baseline serum 25-hydroxyvitamin D (25-OH-D). Adjustment was done for major demographics and baseline comorbidity. Cross-sectionally, vitamin D and TMT-A performance were not associated in a statistically significant fashion. Longitudinally, vitamin D sufficiency (25-OH-D>30 ng/mL) was associated with less decline on TMT-A in a statistically significant fashion (p<.05) after the initial 3 years of the study. Regarding the TMT-B, those with vitamin D deficiency (serum 25-OH-D<15 ng/mL) performed worse than those without deficiency. Longitudinally, vitamin D was not associated with decline rates over time on TMT-B performance. We documented statistically significant associations of serum vitamin D with TMT-A and TMT-B performance, though results from cross-sectional and longitudinal analyses differed substantially. Findings are relevant for the design of subsequent clinical trials aimed at assessing the impact of vitamin D interventions on cognitive decline prevention in older populations.

### THE ASSOCIATION OF OLDER COUPLES' COGNITIVE STATUS WITH HOSPITALIZATION, DOCTOR VISITS, AND FALLS: THE HEALTH AND RETIREMENT STUDY

T. Okura[1], K. Langa[2], *1. Baji Park Clinic, Tokyo, Japan, 2. University of Michigan, Ann Arbor, Michigan*

(Objectives) We hypothesized that couples of older adults in which both spouses are cognitively impaired are highly susceptible to adverse clinical events such as hospitalizations, a greater number of doctor visits including urgent visits, and falls due to an impaired ability to ensure a healthy and safe living environment. (Methods) We identified 2,323 older married couples (both aged 65 or older) living in the community in the 2006 wave of the Health and Retirement Study (HRS). Level of cognitive impairment was characterized according to quartile of scores on the 35-point HRS cognitive scale (HRS-cog). We ascertained hospitalizations, falls, and the number of doctor visits for the last 2 years in the same wave of the HRS. (Results) Both spouses were in the lowest cognitive quartile in 6.6% of older couples, compared to the 33.1% of couples where only one spouse was in the lowest cognitive quartile. In older couples where both partners were in the lowest cognitive quartile, both partners were more likely to be hospitalized and to fall, compared to the older couples where both partners were in the highest cognitive quartile (odds ratio (OR), 5.67; 95% CI, 2.44-13.15 for hospitalization; OR, 2.75; 95% CI, 1.22-6.20 for fall). (Conclusions) Older couples where both partners are cognitively impaired may be substantially more vulnerable to negative clinical events. Cognitive assessment of both partners of an older couple may be important to identify those at especially high risk for negative clinical outcomes and to better target interventions to prevent these outcomes.

### THE ASSOCIATION BETWEEN MIDLIFE BODY MASS INDEX AND COGNITIVE FUNCTION IN LATE LIFE: AGE GENE/ENVIRONMENT SUSCEPTIBILITY - REYKJAVIK STUDY

M. Chang[1], J. Saczynski[2], T. Aspelund[3,4], V. Gudnason[3,4], T.B. Harris[5], L.J. Launer[5], P.V. Jonsson[1,3], *1. Landspitali University Hospital, Reykjavik, Iceland, 2. University of Massachusetts, Worcester, Massachusetts, 3. University of Iceland, Reykjavik, Iceland, 4. Icelandic Heart Association, Kopavogur, Iceland, 5. National Institute on Aging, Bethesda, Maryland*

Background: Little is known about the association between midlife BMI and cognitive functions among older adults. The objective of the study is to examine the long-term association of midlife BMI to late-life cognitive function and dementia. Methods: A population based cohort of men and women (born in 1907–1935) participated in the Age Gene/Environment Susceptibility - Reykjavik Study. The interval between midlife BMI and late-life cognitive function was 26 years. Midlife BMI category was defined as 1) normal (BMI 18.5 to 24.9), 2) overweight (BMI 25 to 29.9), and 3) obesity (BMI 30 or more). Composite scores of speed of processing (SP), memory (MEM) and executive function (EF) were created from a neuropsychological test battery. Dementia was diagnosed according to international guidelines by consensus. Results: Analyses are based on 4954 participants (women = 57%, dementia = 3.9%; midlife BMI level: normal = 51.4%, overweight = 39.8%, and obesity = 8.7%). Compared to normal BMI group (reference), both the overweight and obesity groups had significantly slower SP (overweight, $\beta = -0.09$; obesity, $\beta = -0.14$, trend $p < 0.0001$), lower MEM (overweight, $\beta = -0.06$; obesity, $\beta = -0.11$, trend $p < 0.004$) and EF (overweight, $\beta = -0.06$; obesity, $\beta = -0.10$, trend $p < 0.002$), after full adjustment, but no association was found with dementia. Conclusion: Being overweight or obese at midlife contributed to lower cognitive function 26 years later. However, we found no association between midlife BMI and dementia, and this contradictory results need to be examined further.

## SESSION 2015 (PAPER)

## PREDICTORS AND FACTORS ASSOCIATED WITH DEMENTIA

### DO MIDLIFE MOTIVATIONAL ABILITIES PREDICT COGNITIVE DECLINE AND ALZHEIMER'S DISEASE?

S. Forstmeier, M.E. Mortby, A. Maercker, *Dept. of Psychology, University of Zurich, Zurich, Switzerland*

Motivational reserve (MR) is a form of brain reserve and can be defined as a set of motivational abilities that provide the individual with resilience to neuropathological damage. In two studies, the hypothesis was tested that lower premorbid motivational abilities are associated with higher risk of cognitive impairment and Alzheimer's disease (AD). Premorbid motivational abilities of the participants were estimated on the basis of the individual occupational history using the Occupational Information Network (O*NET) database which provides detailed information on worker characteristics. A previous study has shown that O*NET-based premorbid motivational abilities correlate highly significant with established self-report measures of motivational abilities. Cross-sectional study: In a community sample of 147 non-demented participants aged 60-94 years, 10% were mildly cognitively impaired. Motivational abilities predicted odds of mild cognitive impairment, even when age, sex, education, and premorbid cognitive ability ("cognitive reserve") were controlled (OR 0.24; 95% CI 0.08-0.71). Longitudinal study: In the German Study on Ageing, Cognition and Dementia in Primary Care Patients (AgeCoDe), about 2500 non-demented participants aged 75-89 were followed up twice (after 1 ½ and 3 years). In a fully adjusted model, motivational abilities were associated with a reduced risk of MCI. The association of midlife motivational abilities with incidence of AD was less clear. Midlife motivational abilities were associated with reduced risk of AD in ApoE e4 carriers, but not in non-carriers. Revealing the mechanisms underlying this association of motivational abilities and cognitive decline may lead to novel strategies for delaying the onset of AD symptoms.

### FACTORS ASSOCIATED WITH TIME TO IDENTIFY PHYSICAL PROBLEMS OF NURSING HOME RESIDENTS WITH DEMENTIA

C.R. Kovach[1], M.R. Simpson[1], L.L. Joosse[2], *1. University of Wisconsin-Milwaukee, Milwaukee, Wisconsin, 2. Aurora Healthcare, Milwaukee, Wisconsin*

The purposes of this study were to: a) examine factors associated with time to identify new physical problems of nursing home residents with dementia; and b) compare identification of dementia behaviors and physical assessment needs between staff nurses and an expert. A total of 155 residents and 38 nurses from eleven nursing homes participated. Physical problems emerging over six weeks were prospectively measured along with time, patient and nursing care variables. Staff and an expert nurse independently recorded behavior change and the need for further physical assessment. Analysis was done with mixed models, incorporating a random effect for nurse. Sensitivity and specificity indices were calculated. A one unit decrease in nurse assessment skill was associated with a 54% increase in the time to identify new physical problems ($p < .001$). A 10% reduction in the ratio of new to standard interventions was associated with a 14% increase in the time to identify new problems ($p = .002$). Patients without specific physical symptoms had 127% longer times to identify new problems ($p = .009$). Sensitivity was low for the staff nurses, ranging between 35-65% for identifying changes in the different types of resident behaviors, while specificity was quite high at over 95%. Additional assessment was felt to be needed for 51% of residents by the staff nurse and for 73% of residents by the expert. Staff nurses are under-identifying behavior changes and the need for additional physical assessment. Improved assessment may decrease the time to identify new problems.

### THE EMERGING ROLE OF ADIPOKINES IN COGNITIVE DECLINE AND DEMENTIA

D.J. Llewellyn[1], I. Lang[1], K. Kos[1], K. Langa[2], R. Clarke[3], D. Melzer[1], *1. Peninsula Medical School, University of Exeter, Exeter, United Kingdom, 2. University of Michigan, Ann Arbor, Michigan, 3. University of Oxford, Oxford, United Kingdom*

Obesity increases the relative risk of incident dementia over 10 years or more by around 75%, but the mechanisms involved are unclear. It is commonly overlooked that the effects of excess adipose tissue on the brain may be mediated by recently discovered adipokines that cross the blood brain barrier and whose functions in the brain have yet to be fully established. White adipose tissue is the largest endocrine organ in the body, and adipokines establish cross-talk between adipose tissue and the brain to communicate energy status. Adipokines may influence the risk of conditions related to dementia such as atherosclerosis and stroke through inflammatory mechanisms. However, recent large population-based studies suggest that the proinflammatory adipokine leptin may paradoxically be neuroprotective. Here we review recent adipokine research, with particular attention to the roles of leptin, adiponectin, TNFα, IL-6, and ZAG. Adipokines may provide early markers for those at higher risk and new insights into the complex pathogenesis of cognitive decline and dementia. Increased understanding of these mediators may also make it possible to prevent cases of dementia resulting from obesity by pharmacological manipulation of selected adipokines.

### MOTIVATIONAL RESERVE: A MODERATOR OF APATHY AND DEPRESSION IN DEMENTIA IN A US-REPRESENTATIVE SAMPLE

M.E. Mortby, A. Maercker, S. Forstmeier, *Psychopathology and Clinical Intervention, University of Zurich, Switzerland, Zurich, Zurich, Switzerland*

Motivational Reserve (MR; Forstmeier and Maercker, 2008), a complementary process to Cognitive Reserve (CR), is proposed to attenuate cognitive impairment in later life. Particularly, high MR is proposed to be associated with prolonged maintenance of cognitive function, delayed Alzheimer's disease (AD) onset, and subsequently a more rapid illness progression. Pre-morbid motivational abilities constituting MR, and the presence of neuropsychiatric symptoms of apathy and depression, have, independently, been associated with increased conversion rates from Mild Cognitive Impairment (MCI) to AD. Until this study, the moderating effects of pre-morbid motivational abilities on apathy and depression progression in dementia have not been established. Using the Aging, Demographics, and Memory Study subsample of the US-representative Health and Retirement Study, a longitudinal cohort comparison (N=80) of motivational abilities on apathy and depression progression was conducted. Participants were 70 years or older and categorized into normal, MCI and AD cohorts. MR was estimated using detailed occupational history (utilizing the Occupational Information Network (O*NET) database). Baseline and follow-up assessments were conducted 2 years apart. Using the Neuropsychiatric Inventory, Analysis of Variance and Covariance were conducted to determine the protective role of MR on apathy and depression within the cohorts. Analyses demonstrated significant cohort differences for MR when controlling for CR (p=.037), for apathy (p=.004) and depression (p=.001). Analyses including the covariables of MR, CR, and baseline apathy and depression further demonstrated significant differences. These findings suggest that over and above educational attainment, this index of MR has a protective function for apathy and depression in cognitive impairment.

## SESSION 2020 (PAPER)

### UNDERSTANDING CARE PREFERENCES AND QUALITY OF LIFE

### ADVANCE CARE PLANNING: THE IMPORTANCE OF SITUATIONAL FEATURES AND PERSONAL CHARACTERISTICS

K.R. Baughman[1], R.E. Ludwick[2], D.M. Merolla[2], S. Hazelett[3], B.R. Palmisano[1], J. Winchell[2], M. Hewit[1], *1. Behavioral & Community Health Sciences, NE Ohio U College of Medicine, Rootstown, Ohio, 2. Kent State University, Kent, Ohio, 3. Summa Health System, Akron, Ohio*

The purpose of this study was to examine factors contributing to Area Agencies on Aging (AAA) care managers' decisions to discuss advance care planning (ACP) with consumers. A factorial survey with three vignettes with randomly assigned situational features of a hypothetical consumer was administered to 182 AAA care managers (registered nurses and social workers) from three regional AAAs. Factorial surveys combine the strengths of the classic factorial design experiment with a sample survey allowing for analyses of how both situational features of the consumer and personal characteristics of the care manager are associated with ACP decisions. Hierarchical linear models indicated that most variability in ACP decisions is due to differences among care managers (64%) rather than situational features of the consumers (36%). A positive decision to discuss ACP was associated with consumers who needed assistance with legal issues as compared to those who were independent, and consumers who did not have a diagnosis of congestive heart failure, diabetes, Parkinson's disease or pulmonary hypertension as compared to cancer; these factors explained 7% of vignette level variance. Significant personal characteristics of the care manger included being white, having less direct contact with consumers, having personal experience with ACP, and having the skills, knowledge, confidence, and responsibility to initiate a conversation; these factors explained 23% of person-level variance. This study shows the lack of normative consensus about ACP and points to the need for consistent educational programs on ACP regarding the role of the care manager in the ACP process.

### THE UNIQUE IMPACT OF FRAILTY ON HEALTH RELATED QUALITY OF LIFE IN OLDER ADULTS WITH HEART FAILURE

H.G. Buck, B. Riegel, *University of Pennsylvania School of Nursing, Philadelphia, Pennsylvania*

Background: Frailty increases morbidity and mortality during transitions of care in older adults with heart failure (HF). Health related quality of life (HRQOL) also predicts both morbidity and mortality in this same population. The magnitude of the impact of frailty on HRQOL versus known predictors is largely unexplored in this vulnerable population. Objective: To determine the impact of frailty on variance in HRQOL after adjusting for known predictors- gender, income, ethnicity, health perception, and functional status. Methods: Frailty was determined on the basis of age, number of comorbid conditions, and symptom severity. HRQOL was assessed using the Minnesota Living with Heart Failure Questionnaire (MLHFQ) physical and emotional subscales and summary score. Predictors of HRQOL, identified from the literature, were tested with frailty using hierarchical regression modeling. Results: In a sample of 119 hospitalized HF elders (age M 76, SD 6.23); known predictors explained 10% (p 0.03) of the variance in total HRQOL. Frailty accounted for an additional 13% ($p< 0.001$) of the variance. As expected, known predictors explained 13% (p 0.007) of the variance in physical HRQOL. Frailty increased this to 25% (p 0.000). Frailty also impacted emotional HRQOL- with known predictors explaining 8% (p 0.08) of the variance and frailty increasing that to 13% (p 0.01). Conclusion: A triad of factors associated with frailty explains significant unique variance in both physical, and specifically, emotional HRQOL. Assessing and treating indicators of frailty may improve HRQOL and decrease the risk of morbidity and mortality for older adults with HF.

## SESSION 2025 (SYMPOSIUM)

### A PILOT STUDY OF A NON-PHARMACOLOGICAL INTERVENTION FOR DELIRIUM SUPERIMPOSED ON DEMENTIA

Chair: *A.M. Kolanowski, Penn State University, University Park, Pennsylvania*

Delirium is common in older adults with dementia, and is referred to as delirium superimposed on dementia (DSD). Individuals with DSD are at high risk for poor health outcomes. Our broad objective in this pilot project was to demonstrate that implementation of cognitively stimulating activities has potential for reducing delirium severity and duration, and functional loss in post-acute care settings. For preliminary analyses we used a mixed-model ANOVA. The group by time interaction indicated that the control group (N= 5) had a significantly greater decrease in physical function and mental status over time compared to the intervention group (N= 11). Delirium, severity of delirium, and attention all approached significance and improvement favored intervention over time. Although not statistically significant (p= .1113), there was a difference in mean (7.0 vs. 3.27) and median (7.0 vs. 3.0) days with delirium: the control group having more days of delirium.

### EFFECTS OF ANIMAL-ASSISTED THERAPY FOR RESPONDING TO PASSIVE BEHAVIOR IN PERSONS WITH DEMENTIA

C.A. Soprano[1,2], A.M. Kolanowski[2], V.M. Chinchilli[2], K. Colling[3], D. Lago[2], J. Penrod[2], *1. Nursing, Wilkes University, Wilkes-Barre, Pennsylvania, 2. Penn State, State College, Pennsylvania, 3. University of Michigan, Ann Arbor, Michigan*

Approximately 90% of nursing home residents with dementia experience passive behavior (PB). PB occurs daily, is often resistant to interventions, causes caregiver distress, and leads to negative consequences such as, social isolation, loss of physical functioning, excess disability, and further cognitive decline. PB is poorly understood, in that it is often diagnosed as depression and inappropriately treated with antidepressants. While few non-pharmacological interventions exist for PB, animal-assisted therapy (AAT) is a promising intervention. A within-subject, repeated measurements quasi-experimental study, using an ABAB design, was conducted to determine if a functional relationship existed between AAT and PB. Eight subjects completed 32, daily, 20-minute videotaped sessions under two conditions: dog present and dog absent. Measures of PB were obtained from the video-recordings using the Observational Form of Passivity in Dementia scale. Findings from this study suggest that AAT can serve as a useful intervention for decreasing PB in persons with dementia.

### INTERVENTIONS NURSES DOCUMENT IN RELATION TO THEIR PATIENTS' CHANGING MENTAL STATUS

M.R. Steis[1], D.M. Fick[2], S.J. Loeb[2], J. Penrod[2], R. Schrauf[2], *1. Penn Nursing Science, University of Pennsylvania, Philadelphia, Pennsylvania, 2. The Pennsylvania State University, University Park, Pennsylvania*

Purpose: To explore hospital nurses' management of delirium in elders with dementia, a common accompaniment to transitions in health state and care environments. Methods: This was a retrospective electronic chart review of documented nursing interventions related to patients' mental status in two patient groups: dementia-only and delirium-superimposed-on-dementia (DSD). Content analysis was performed using the Nursing Intervention Lexicon and Taxonomy classification system. Results: Nurses primarily documented Care Vigilance and Care Environment Management interventions. Many interventions appeared rooted in efforts to keep the patients safe and to maintain control over the situation. Differences between groups were limited to quantity, not type of intervention documented. Conclusions and Implications: There is evidence that nurses intervene to protect delirious patients. Overall, nurses did not document care that was consistent with published delirium management guidelines. Specific educational interventions will be presented.

### HOW DO ACUTE CARE NURSES ASSESS AND MANAGE THE TRANSITION OF DELIRIUM IN HOSPITALIZED OLDER ADULTS?

T. Diehl[1], M. Steis[2], A. Yevchak[1], N.L. Hill[1], A.M. Kolanowski[1], D.M. Fick[1], *1. School of Nursing, The Pennsylvania State University, University Park, Pennsylvania, 2. University of Pennsylvania, Philadelphia, Pennsylvania*

Purpose: To explore how nurses report they assess and manage delirium in hospitalized elders and to describe barriers and facilitators . Methods: Focus group methodology was used with the discussion audio-recorded and transcribed verbatim. Seventeen nurses participated in three-60 minute groups in a central Pennsylvania hospital. Data were analyzed using content and thematic analysis. Results: Three broad themes were identified: Confusion as Normal, Our Duty is to Protect, and Balancing on a Tightrope. Nurses (mean age of 43, 13 years experience) did not have a formal way to assess delirium or to choose non-pharmacological interventions. They were often conflicted about how to balance the care of patients with confusion. Conclusions: In this context, a prominent theme was the need for nurses to protect themselves and their patients. Nurses used a variety of approaches to balance the demands of their patients with confusion. Implications for practice and research will be discussed.

## SESSION 2030 (SYMPOSIUM)

### ETHNOGRAPHIC RESEARCH METHODS: ILLUMINATING THE UNIQUE CULTURE OF AGING IN COMMUNITY ENVIRONMENTS, SPECIALIZED SENIOR ENVIRONMENTS, AND IN MEDICAL ENVIRONMENTS

Chair: *C.M. Gallogly, Community Health and Human Services, St. Joseph's College, Patchogue, New York*
Discussant: *L.K. Donorfio, University of Connecticut, Storrs, Connecticut*

The Qualitative Research Interest Group has discovered in its various sessions over the past two years a growing interest in how qualitative methods fit into research designs focused on elders in their various environments: community based models, senior segregated living models, and medically based models. Ethnographic methods seem particularly well suited to exploring the relationship between elders and the culture of their environments. This series of papers will demonstrate the traditional ethnographic approach of cultural immersion and participant observation of older adults in university linked retirement communities and in the hospital setting, specifically addressing the meaning of institutional ethnography. It will also show how ethnography can inform research on innovative, widely-studied programs such as Cash and Counseling, with an in-depth analysis of participant needs, using a wide variety of ethnographic approaches. The unifying theme in ethnography is culture so it is no wonder that gerontological researchers are experimenting with the longstanding anthropological research method of ethnography to better understand the evolving nature of the culture of aging.

### ETHNOGRAPHIC STYLE OF INQUIRY USING OBSERVER PARTICIPANT ROLE

A. Kydd, *Health Nursing and Midwifery, university of the west of scotland, Hamilton, Lanarkshire, United Kingdom*

It has been argued that ethnography is not possible within the welfare state due to the cultures and subcultures within the organization. However, adapting an ethnographic style of inquiry serves to illustrate the contexts and mechanisms within a health care setting. This study involved a combination of methods; exploring the political backdrop at the time of the study, using reflexive notes during the study to provide chronology, interviewing staff at different levels within the organization and taking on the role of observer participant in the field for a year. This paper outlines some of the challenges posed in seeking to uncover what life is like for older people in long term care focussing on the role of the observer participant. Such a role takes the power from the researcher and serves to facilitate a deeper relationship with the frail older people involved in the study.

### A COMMUNITY OF INTERESTED, INTERESTING PEOPLE: EXPLORING THE CULTURE OF UNIVERSITY-LINKED RETIREMENT COMMUNITIES

R.B. Meraz, *Leadership and Counseling, Eastern Michigan University, Ypsilanti, Michigan*

This presentation highlights findings from an ethnographic study which explored the culture of three unique university-linked retirement communities (ULRC) located in various regions of the United States. ULRCs have been growing in popularity since the mid 1980s and now exist on more than 50 campuses across the United States. This qualitative study was conducted as part of dissertation research which employed an interpretive, ethnographic approach utilizing site visits, life-history interviews, observations, and artifact analysis. Primary data was obtained from site visits to three ULRCs located in the Midwest, Northeast, and South which varied in the continuum from independent living to assisted and nursing care. Thematic coding and analysis was conducted on interviews with 47 individuals ranging in ages from 56-92 years old. The presentation focuses on the distinctive culture of academically oriented retirement communities. Emerging themes to be explored in the session include: (1)the level of importance residents place on opportunities for intellectual exchange and what they call "living among interested, interesting people"(2)the overwhelming sense of dedication residents had to the founding and continued growth of the community, and (3) internal conflicts around resident participation and involvement.

### INSTITUTIONAL ETHNOGRAPHY AS A PRACTICE OF FREEDOM

C.A. Leedham*, Department of Sociology, University of Kentucky, Lexington, Kentucky*

This paper will explore how Dorothy Smith's institutional ethnography may be used to explore the choices and transitions facing people as they age, in order to challenge researchers to incorporate Smith's approaches into their research. Institutional ethnography begins with the local actualities of people's everyday lives and traces how people are enmeshed in institutional relations and how texts coordinate people's activities across time and space through what Smith calls the "relations of ruling". Institutional ethnography's purpose is to expand people's knowledge rather than substituting the expert's knowledge for people's own knowledge. Details of institutional ethnography's methods will be discussed with examples from the literature, and institutional ethnography will be linked with Foucault's call to explore the webs of power relations in which we are caught, thus opening up the possibility of doing things differently and making us realize that we are far freer than we thought.

### TRAINING NEEDS FOR CONSUMER-DIRECTED CAREGIVERS AND OLDER CONSUMERS WITH DEMENTIA: AN ETHNOGRAPHY

L. Simon-Rusinowitz[1], K. Ruben[1], K.J. Mahoney[2]*, 1. University of Maryland, College Park, Maryland, 2. Boston College, Chestnut Hill, Massachusetts*

As the number of elders with dementia increases, so does the demand for caregivers. Consumer-directed (CD) services offer participants and their caregivers control over their services, which may increase satisfaction and caregiver retention. There is a need; however, to develop dementia-specific training informed by the views of diverse participants and caregivers. To better understand their training needs, we conducted in-depth interviews with five consumer teams and three program consultants. We addressed the following research questions: How do caregivers and older consumers with dementia in CD personal care programs describe their training needs? How can improved training lead to better care for this consumer group? Informants identified the following topics: CD program training, knowledge about dementia, technical and personal care skills, coping and problem- solving skills. Improved training can lead to better care quality, increased preparedness, and access to resources. Project findings will inform CD training programs for this consumer group.

## SESSION 2035 (SYMPOSIUM)

### NATIONAL DATA ON ORGANIZATIONAL CULTURE IN THE NURSING HOME SETTING

Chair: *J.C. Banaszak-Holl, Health Management and Policy, Univ. of Michigan, Ann Arbor, Michigan*
Co-Chair: *N. Castle, University of Pittsburgh, Pittsburgh, Pennsylvania*
Discussant: *M.K. Lin, University of Pittsburgh, Pittsburgh, Pennsylvania*

This symposium presents four papers using a national survey of organizational culture and staff turnover in a random sample of U.S. nursing homes. While culture change is critical in debates on nursing home quality, there is little evidence on cultural types predominating in the industry or on whether cultural values affect organizational structure and quality. Our data were collected through a 2009 mailed survey to 1,056 facilities across the country, out of which 37 closed facilities were dropped from sampling frame. Among the remaining facilities, response rate was 52.6% across facilities—-405 Nursing Home Administrators (39.7% responded) and 356 Directors of Nursing (34.9% responded). Surveys included a small incentive and non-respondents were pursued through telephone follow-up. The survey included an instrument of 16 questions for the Competing Values Framework (CVF) differentiating four types of organizational culture: 1) group culture, 2) developmental culture, 3) hierarchical culture, and 4) rational culture. The CVF instrument uses likert scales on which respondents evaluate the extent to which facility practices reflect those values. Respondents were also asked to report background demographics, how they implement organizational culture and current rates of staff turnover (administrator only). These four papers examine 1) how reports of organizational culture compare to other studies, 2) differences in the responses of NHAs and DONs, 3) differences among chain and non-chain and for-profit and nonprofits and 4) the impact of culture on nursing staff turnover rates. These talks suggest culture must be integrated with other elements of organizational change in nursing home reform.

### EVALUATING THE COMPETING VALUES FRAMEWORK FOR STUDYING NURSING HOME CULTURE

J.C. Banaszak-Holl[1], M.K. Lin[2], N. Castle[2]*, 1. Health Management and Policy, Univ. of Michigan, Ann Arbor, Michigan, 2. University of Pittsburgh, Pittsburgh, Pennsylvania*

We present comparisons of organizational culture across nursing homes using the Competing Values Framework (CVF). We compare the CVF to other commonly used measures of organizational culture, both in nursing home and hospital studies. The CVF has been used in other studies of nursing homes, largely to demonstrate that Group Cultures predominate within nursing homes although those studies have used questions that require facilities to make forced choices among organizational values. We allow facilities to report how they value individual components of the CVF independently and we find a substantial number of facilities balance several competing cultural values. Facility administrators and DONs both reported valuing multiple conflicting values fairly strongly, which implies administrative staff face harder choices regarding how values drive organizational practices. This suggests that organizational culture may be effective as an instrument of change to address specific types of needs.

### DIFFERENCES IN TOP MANAGEMENT PERSPECTIVES OF NURSING HOME CULTURE

N. Castle[2], J.C. Banaszak-Holl[1], M.K. Lin[2]*, 1. Health Management and Policy, Univ. of Michigan, Ann Arbor, Michigan, 2. University of Pittsburgh, Pittsburgh, Pennsylvania*

We compare Nursing Home Administrators (NHAs) and Directors of Nursing (DON) ratings of cultural values from facilities responding to a national survey on nursing home culture. Comparisons are made on dimensions of the Competing Values Framework (CVF). The CVF identifies four types of values: 1) group culture, 2) developmental culture, 3) hierarchical culture and 4) rational culture. Data come from 219 facilities in which both the DON and NHA responded. Descriptive analyses show NHAs are slightly more likely to rate facilities as having a stronger hierarchical culture (dimensions include predictability and dependability); whereas, DONs rate facilities stronger in group cultures (broader participation and decentralization). We present detailed comparisons of statistical tests of difference. Individual factors associated with larger differences in value ratings will also be presented. These results are important to understanding the diversity of perspectives within the nursing home's top management team.

### STRUCTURAL PREDICTORS OF NURSING HOME CULTURE

M.K. Lin[1], J.C. Banaszak-Holl[2], N. Castle[1], *1. Health Policy & Management, University of Pittsburgh, Pittsburgh, Pennsylvania, 2. University of Michigan, Ann Arbor, Michigan*

To better understand variation in organizational culture across US nursing homes, we profile assessments of culture across a national sample of facilities based upon particular structural dimensions- for-profit status, chain ownership, and size. Organizational culture is identified through a relative quantitative basis using the Competing Values Framework. Ratings are reported by a facility's nursing home administrator and director of nursing. The results demonstrate that certain core structural characteristics are associated with organizational culture types: for-profit nursing homes are more likely than non-profits to have a group culture, while non-profits are more likely to have a rational culture. Chain facilities are more likely than independents to have a rational culture, while independents are more likely to lack a dominant culture. Larger-than-average facilities are more likely than smaller ones to lack a dominant culture. Given the association between culture and quality improvement, we will discuss the implications of these findings.

### RETAINING A CLINICAL WORKFORCE: WHAT ROLE DOES ORGANIZATIONAL CULTURE PLAY?

J.C. Banaszak-Holl[1], M.K. Lin[2], N. Castle[2], *1. Health Management and Policy, Univ. of Michigan, Ann Arbor, Michigan, 2. University of Pittsburgh, Pittsburgh, Pennsylvania*

Organizational culture is a managerial tool for improving the nursing home work environments by reinforcing values meaningful to clinical staff. As such, it has been viewed as a means for improving retention of the clinical staff. We evaluate the role of culture in predicting staff turnover among RNs, LPNs, and nursing aide staff using multivariate linear models and several methods for measuring culture, including the presence and intensity of the four cultural types proposed by the Competing Values Framework, and a dichotomy of balanced vs. focused cultures. Analyses include controls for prior turnover levels, individual demographic characteristics and facility structural factors. Facility effects are tested using a hierarchical linear model. Preliminary analyses are underway and preliminarily show that the four types of culture, defined by the CVF do not impact the turnover of clinical staff. A comparison of the effects of culture and organizational structural factors will be presented.

## SESSION 2040 (SYMPOSIUM)

### PREPARING NURSES TO CARE FOR OLDER ADULTS

Chair: *T.J. Roberts, School of Nursing, University of Wisconsin - Madison, Madison, Wisconsin*
Co-Chair: *B.J. Bowers, School of Nursing, University of Wisconsin - Madison, Madison, Wisconsin*
Discussant: *R. Stone, American Association for Homes and Services for the Aging, Washington, District of Columbia*

Caring for older adults, regardless of setting, requires nurses to possess complex knowledge and skills. This session describes three research projects and a demonstration program that address the link between formal nursing education and the quality of nursing care for older adults. The first study explored nursing care of older adults in hospital settings and discusses some of the implications for admission to nursing programs and design of nursing education, particularly for skills development. The second study focuses on the influence of formal education on nurse attitudes toward older adults and preference to work in long term care settings, with a focus on the educational needs identified by nurses to care for older adults in long term care settings. The next presentation describes a nursing home workforce development intervention designed to help nurses improve their leadership and supervisory skills to work more effectively with direct care staff and manage organizational influences on nursing practice. The final presentation describes a long term care nurse residency program designed to improve recruitment, retention and nursing care quality in long term care settings. The residency program was created as a partnership with schools of nursing, the state department of health services and long term care provider organizations.

### GETTING PATIENTS MOVING: HOW NURSES DECIDE TO MOBILIZE HOSPITALIZED OLDER ADULTS

B.J. King, B.J. Bowers, *School of Nursing, University of Wisconsin-Madison, Madison, Wisconsin*

New walking dependence, which is associated with limited mobility during hospital stays, occurs in 16.8% to 59% of hospitalized elders. Nurses have been identified as the providers' best positioned to increase patient mobility thereby decreasing new walking dependence. This study used Grounded Theory to examine how nurses make decisions about mobilizing patients and factors that influence whether, when and how patients are mobilized. Twenty-five registered nurses were interviewed. Inexperience with mobilizing patients had a significant impact on whether or not nurses got patients moving. Nurses indicated they initially learned how to mobilize patients in their schools of nursing. However this skill was taught in a laboratory setting on other health students with little reinforcement during the clinical rotation. Implications for nursing school curriculum such as completion of a nursing assistant course prior to entering a nursing program, and other options for teaching the psychomotor skill of mobilizing will be discussed.

### SYMPATHETIC BUT STILL NOT INTERESTED: RECRUITING BACCALAUREATE NURSES TO WORK IN LONG TERM CARE

T.J. Roberts, B.J. King, B.J. Bowers, *School of Nursing, University of Wisconsin - Madison, Madison, Wisconsin*

Research on health professional education suggests that curriculum can influence student attitudes toward older adults, however little is known about the relationship between these attitudes and preferences for working with this population. This paper describes a mixed method study that tracked students' (n=80) attitude toward older adults and work preferences (both for population and setting) at four time periods during their baccalaureate nursing program. Attitudes toward and preferences to work with older adults improved over time. However, working in long term care (LTC) settings was consistently the least preferred of 10 possible work settings. Contrary to research suggesting that students see LTC as not challenging, focus group data suggested that students believed work in LTC was quite complex and they felt they were unprepared clinically and administratively to work in LTC as new nurses. Implications for nursing education will be discussed.

### LEADERSHIP ENRICHMENT AND DEVELOPMENT (LEAD): PILOTING AN LVN LEADERSHIP TRAINING PROGRAM

K. Nolet[1], B.J. Bowers[1], A. Sanders[2], R. Stone[2], M.F. Harahan[3], *1. School of Nursing, University of Wisconsin-Madison, Madison, Wisconsin, 2. Institute for the Future of Aging Services, Washington, District of Columbia, 3. Consultant, Greensboro, North Carolina*

Despite research that demonstrates the relationship between supervisors and nurse aides has a significant impact on job satisfaction, turnover and quality of care, few nurses receive supervisory training. The purpose of this project was to develop and pilot a leadership training program for LVNs in four California nursing homes. Two cohorts of nurses participated in a one-day synchronous training on five modules: communication, critical thinking, coaching, staff diversity, and conflict resolution, with a half-day focused on implementing the new knowledge gained. Interviews with pilot facility nurses, CNAs and administrative teams were used to shape training delivery, content and support throughout the pilot. Pre- and post-test measures of supervisory skills were obtained from LVNs and CNAs. CNA ratings of most LVN supervisory skills improved following the training program. Barriers and facilitators to successfully implementing a nurse training program and implications for nursing home leaders and researchers implementing staff education are discussed.

### LONG TERM CARE NURSE RESIDENCY PROGRAM : A SCHOOL OF NURSING, DEPARTMENT OF HEALTH AND PROVIDER PARTNERSHIP

B.J. Bowers, K. Nolet, *Nursing, University of Wisconsin-Madison, Madison, Wisconsin*

Research conducted in acute care settings has documented that higher ratios of baccalaureate to non-baccalaureate prepared nurses are correlated with improved patient outcomes. However, only very few current long term care (LTC) nurses are baccalaureate prepared. A recent study identified barriers to new baccalaureate graduates considering a career in LTC. The barriers included insufficient preparation for managing residents with complex conditions and leading/supervising direct care staff. Residency programs that provide clinical and leadership training have proved successful in recruiting and retaining nurses in other settings. This session describes the development of a LTC nurse residency program through a partnership involving the UW Madison School of Nursing, the Wisconsin Department of Health Services and nursing home providers. The goals are to increase the number of baccalaureate nursing graduates taking positions in long term care settings, support tenured LTC nurses to continue their formal education, and improve patient outcomes.

## SESSION 2045 (PAPER)

## SUCCESSFUL AGING AND LIFE QUALITY

### ENGAGEMENT IN PRODUCTIVE ACTIVITIES AND SELF-RATED HEALTH AMONG OLDER ADULTS: MULTI-GROUP PATH MODELS

Y. Jung, *Social Welfare, UCLA, Los Angelels, California*

This paper examines pathways between productive activities and self-rated health focusing on gender as a moderator. Data are based on 551 adults aged 55 and older from the first (1995/1996) and the second (2004/2005) waves of the National Survey of Midlife Development of the United States (MIDUS), a nationally representative sample of adults aged 25-74. Multi-group path models used to investigate the associations between Wave 1 engagement in productive activities, measured by paid work, volunteering, and informal helping, and self-rated health at Wave 2 and if these associations differ by gender. Model fits were gradually tested from a baseline model where all the paths were constrained to be equal between males (n=244) and females (n=307) to a final model where paths between productive activities and paths from productive activities to self-rated health were allowed to vary by gender. The final model which relaxed the equality constraints fitted the data best ( $\Delta\chi2(6)=14.5$ p=0.02). For males, paid work negatively influenced volunteering (b= -0.19, p=0.00) and informal helping (b= -0.14, p=0.03), while no effects of paid work on volunteering and informal helping was found among females. Volunteering negatively influenced self-rated health (b= -0.17, p=0.01) for males, whereas paid work was the only activity that was associated with self-rated health (b= 0.15, p=0.00) for women in a positive direction. Results suggest that male and female older adults may experience productive aging differently in terms of the associations between activities and their influences to health.

### INCOME ADEQUACY, HOUSING AND ESSENTIAL ITEMS AND SERVICES FOR OLDER PEOPLE

C. Waldegrave[1], M.P. Cameron[2], *1. Family Centre Social Policy Research Unit, Wellington, New Zealand, 2. University of Waikato, Hamilton, New Zealand*

The aim of this research is to identify the drivers of wellbeing and quality of life among the older population. Amartya Sen's capabilities approach has formed the conceptual basis of the theoretical framework (Sen, 1999). This paper will report on the results of a study of ageing and wellbeing with a national random sample of 1,680 New Zealanders aged 65 to 84 years using computer assisted technology interviewing (CATI). Objective measures of income and wealth are compared with the older people's subjective assessments of the adequacy of their income to meet their everyday needs, their satisfaction with their economic standard of living, and with their assessment of overall wellbeing. Two internationally comparable poverty thresholds at 50 and 60 percent of median household income are also applied. The results showed that the subjective assessments of living standards were generally in line with the results of the objective indicators of income and wealth. Few experienced severe poverty, but most participants clustered between the two most currently applied poverty thresholds internationally. Income and housing were significantly associated with wellbeing. The importance of these findings lies in the significant associations between the subjective and objective measures of living standards and wellbeing among the older participants and their implication for capability and future policy settings. After attending this session participants will be much more informed about the significant challenges to the quality of life of older citizens if the critical issues of income, housing and affordable access to essential services are not adequately planned for.

### COMING TO ART IN LATER LIFE: ART AS IDENTITY

P.J. Brett-MacLean, *Arts & Hum in Health & Med Prog, University of Alberta, Edmonton, Alberta, Canada*

This inquiry explored the experience and significance of "coming to art" in later life. Eight women and three men (average age 71.6 years) participated in two in-depth conversational interviews. Seven participants described a serious commitment to art. The remaining participants described a somewhat more casual visual art practice. Narrative inquiry supported a close reading of the participants' stories that led to the identification of three primary storylines: 1) "Coming to Art," 2) "Flourishing through Art," and 3) "Art as Identity." In this presentation the last of these storylines is considered. The high biographical relevance of coming to art is described. While art was at the centre of their lives, the participants' "artist identity" claims, as such, were often ambivalent. Their shifting identity claims seemed to reflect the lack of "hard-and-fast definitions" regarding what may be taken as art (see Mishler, 1999, p. 102), and for some, their own uncertainty regarding what constitutes an artist. Identity claims were based on the artworks they created (which provided evidence of their art-making skills and abilities), and also given the matrix of "professional" art-making activities in which they were involved. These included: Art making practices; Spheres and Forms of Recognition; Cultural and Relational Understandings. When the participants offered variable, often tentative self-conceptions in relation to their involvement in art, this could be attributed in part to the fact that their livelihood did not wholly depend on their art making.

### QUALITY OF LIFE AS PERCEIVED BY FRAIL ELDERS IN URBAN AND RURAL CHINA: A QUALITATIVE STUDY

L. Li[1], Y. Sui[2], L. Gao[3], *1. School of Social Work, University of Michigan, Ann Arbor, Michigan, 2. Renmin University of China, Beijing, China, 3. University of Jinan, Jinan, China*

INTRODUCTION Quality of life (QoL) is a frequently used but ill-defined concept in aging research and services. This study examines the meaning and evaluation of QoL of frail elderly persons in China. METHODS In-depth interviews based on an interview guide were conducted with 24 frail elders residing in Jinan city (n=12) and nearby villages (n=12) in Shandong, China. FINDINGS The conception of quality of life differed between frail elders in urban and rural China. Rural elders perceived basic needs, particularly eating, to be the defining feature of QoL; whereas urban elders perceived QoL to include other dimensions besides basic needs—emotions, family relationships, health, mobility, medical care, friends, purpose, leisure, and grandchildren. Most respondents, except three urban elders, were very satisfied with their lives. Cognitive strategies, especially comparison with the past, were heavily employed by the respondents to attain a sense of contentment. They also selectively focused on positive life domains when evaluating their QoL. Rural elders were more salient in using "accepting, adjusting and avoiding" strategies to regulate emotions—accepting their status as farmers, adjusting expectation, and avoiding comparison with their urban counterparts who were much better off in terms of old age security. CONCLUSION The current cohort of elderly Chinese has experienced political turmoil, starvation, and extreme hardship during their lifetime. Historical events and current contexts play a role in shaping their perception of QoL. Cognitive strategies used by Chinese elders to regulate emotions fit some of the theories developed in the West.

## SESSION 2050 (SYMPOSIUM)

### TRANSLATING PROVEN CAREGIVER PROGRAMS INTO PRACTICE: CHALLENGES, OPPORTUNITIES AND NEXT STEPS

Chair: *L.N. Gitlin, Jefferson Center for Applied Research on Aging and Health, Thomas Jefferson University, Philadelphia, Pennsylvania*
Co-Chair: *R. Birkel, Rosalynn Carter Institute, Americus, Georgia*
Discussant: *L. Anderson, Centers for Disease Control and Prevention, Atlanta, Georgia*

Families provide the majority of care to older adults with cognitive or physical impairments yet continue to be underserved or receive services that are not evidence-based. Despite proliferation of interventions proven to be effective in randomized trials, programs are not fully integrated into community-based services and practice settings. Fewer still have been evaluated for sustainability within existing funding streams. This symposium presents recent successful efforts to translate proven caregiver programs for individuals with dementia in different care settings. Highlighted will be the steps used to translate programs from the randomized trial context to full integration within a service setting, outcomes of the translational processes, approaches for sustaining programs using existing 3rd party insurance and related funding mechanisms, methodological challenges, lessons learned and next steps. Specifically, the symposium will examine national progress to date in translating proven caregiver programs, showcase successful translational efforts, identify factors that support and those that threaten translation, and examine whether programs can be sustained. Exemplars to be presented include the Environmental Skill-building Program, a home-based intervention delivered by occupational therapists in homecare agencies using Medicare reimbursement mechanisms, the REACH II caregiver support program delivered by care managers through the Veterans Administration, and three Seattle proven programs (STAR, STAR-C, and RDAD) implemented in assisted living and other dementia-care settings. The discussant will discern underlying commonalities and themes across translational efforts, examine translational challenges including interventionist training, fidelity, scalability and sustainability, and identify investigational queries with the goal of advancing implementation science concerning dementia caregiver interventions. ¬

### TRANSLATING THE ENVIRONMENTAL SKILL-BUILDING PROGRAM IN HOMECARE AS A REIMBURSABLE MEDICARE SERVICE

L.N. Gitlin, T. Vause Earland, C.V. Piersol, *Jefferson Center for Applied Research on Aging and Health, Thomas Jefferson University, Philadelphia, Pennsylvania*

Families of dementia patients in skilled homecare do not receive supportive services themselves, a key factor preventing patient disability. This is the first translation of a proven program, the Environmental Skill-building Program (ESP), for delivery by occupational therapists (OTs) within homecare agencies which also evaluated reimbursement potential through Medicare (Parts A and B). We describe the theoretical base, delivery characteristics and outcomes from the original randomized trials, the five major translational activities to move ESP from randomized trial to its delivery in homecare, and translational outcomes using the RE-AIM framework. OT adoption was high: a total of 26 OTs from 2 agencies were trained with 96% continuing to use the program. To date, over 50 caregivers receiving ESP reported improvements in knowledge, skills and well-being. As ESP sessions were reimbursed through Medicare when integrated with patient-directed therapy, it has potential for being sustained through this mechanism.

### THE NATIONAL PERSPECTIVE: PROGRESS AND LINGERING CHALLENGES IN TRANSLATING CAREGIVER INTERVENTIONS

R. Birkel, *Rosalynn Carter Institute, Americus, Georgia*

This presentation will examine the status of 65 interventions for family caregivers that have been tested in randomized controlled trials (RCTs). Interventions for Alzheimer's caregivers make up approximately two-thirds of these interventions. The review will focus on: a) availability of support materials (e.g. operation manuals, fidelity checklists, etc) to facilitate implementation in community settings, b) training and certification in delivering the intervention, and c) ongoing or completed translations of the original intervention. A second part of the presentation will be a review of current translation work of: 1) the ADDSP effort of the Administration on Aging which is funding translation of seven Evidence-based interventions (EBPs) for Alzheimer's caregivers in eleven states, and 2) The Rosalynn Carter Institute/ Johnson and Johnson initiative which has funded translation of five interventions in ten different communities in nine states. The goal is to clearly identify current strengths and challenges in translating EBPs for family caregivers.

### THE ROAD TO TRANSLATION: THE SEATTLE PROTOCOLS GO OUT INTO THE WORLD

L. Teri, R.G. Logsdon, S.M. McCurry, *U. Washington — School of Nursing, Seattle, Washington*

Since 1986, intervention protocols for training family and staff to alleviate the behavioral problems characteristic and prevalent in persons suffering from Alzheimer's Disease have been developed in clinical and community settings and subjected to rigorous randomized controlled clinical trials. In recent years, three of these protocols have been selected for state-wide translational studies and community-partnership applications. This presentation provides an overview of the theoretical, clinical and empirical background of these protocols and then focuses on the challenges and opportunities their adaptation and implementation by these state and community groups creates. STAR (Staff Training in Assisted Living Residences) in Washington; STAR-C (STAR-Community Consultants) in New Mexico and Oregon; and RDAD (Reducing Disabilities in Dementia) in Ohio are three Seattle protocols programs that are being systematically refined and implemented in very different settings. While each setting is unique, enough commonalities exist to provide information to help guide future translations of other programs.

### TRANSLATING RESEARCH INTO PRACTICE IN A HEALTH CARE SYSTEM: REACH VA

L.O. Nichols[1,2,3], J.L. Martindale-Adams[2,1], R. Burns[4,2,3], M. Graney[1,2], *1. Health Services Research, VA Medical Center, Memphis, Tennessee, 2. Preventive Medicine, University of Tennessee Health Science Center, Memphis, Tennessee, 3. Internal Medicine, University of Tennessee Health Science Center, Memphis, Tennessee, 4. Geriatrics Group of Memphis, Memphis, Tennessee*

REACH VA was the first national clinical translation of a behavioral intervention for dementia caregivers, the NIA/NINR funded REACH II intervention. VA clinical staff from 24 medical centers in 15 states delivered the intervention to stressed caregivers. Outcomes from baseline to 6-month follow-up included significantly improved burden, depression, impact of depressive symptoms on daily life, caregiving frustrations, and troubling dementia related patient behaviors. Caregivers also reported per day decreases of one hour providing care and two hours on duty. Preliminary examination of Veteran health care use shows inpatient, pharmacy, and outpatient costs declined. Staff and caregiver satisfaction and perception of benefit were high. VHA costs to deliver the intervention would be $2.93 per day. Activities undertaken to implement the program will be discussed using the PARiHS implementation framework elements of evidence, context, and facilitation. For REACH VA, all elements were strong, which lead to successful implementation from research to practice.

## SESSION 2055 (SYMPOSIUM)

### FRONTLINE WORKERS AND FAMILY CAREGIVERS: STRATEGIES FOR STRENGTHENING THE WORKFORCE

Chair: *L. Noelker, Benjamin Rose Institute, Cleveland, Ohio*

The supply, readiness and retention of frontline workers and family caregivers to deliver care and support will be critical factors in the successful expansion of home- and community-based services in states' efforts to rebalance long term care. Drawing on the work of a national expert panel on the direct care workforce, convened at the request of the Administration on Aging (AoA), this presentation will address how the Aging Network can strengthen and support these caregivers. The panel also addressed the need to assess outcomes for frontline workers and family caregivers as part of the effort to improve their readiness and retention in long term care. A broad array of policy considerations for enhancing the direct care workforce will be discussed, including partnerships of federal agencies, additional labor pools, new training initiatives, and refinements to current policies affecting the workforce.

### CAN ELEPHANTS LEARN TO DANCE? OHIO'S EFFORTS TO CREATE A BALANCED LONG-TERM CARE SYSTEM

S. Kunkel, R. Applebaum, *Scripps Gerontology Center, Miami University, Oxford, Ohio*

During its early days, the founder of APPLE was rumored to have said that IBM will develop a personal computer when elephants can dance. The analogous speculation in long-term care (LTC) is whether states with a heavy investment in institutional care can rebalance LTC. This presentation focuses on Ohio, which has a high supply of nursing home (NH) beds and associated costs, and a high ratio of NH to home care expenditures. This presentation will review the results of two initiatives designed to better balance LTC. In 2006, Ohio created a Unified LTC Workgroup to combine LTC services and finances under one umbrella. In 2009, the state passed legislation to be more aggressive about NH diversion and transition activities, setting goals for area agencies to decrease the use of NH care. The presentation will describe these efforts, and provide data about their impacts on creating a more balanced system.

### NATIONAL SURVEY OF PUBLICALLY FUNDED PARTICIPANT-DIRECTED SERVICES PROGRAMS

M. Sciegaj[1], L. Simon-Rusinowitz[2], K.J. Mahoney[3], *1. Pennsylvania State University, University Park, Pennsylvania, 2. University of Maryland, College Park, Maryland, 3. Boston College, Boston, Massachusetts*

The number of participant-directed programs has grown considerably over the past decade. With support from the Robert Wood Johnson Foundation and Atlantic Philanthropies, the National Resource Center for Participant-Directed Services (NRCPDS) at Boston College is conducting an inventory of existing programs to identify emerging state efforts to promote participant-direction. The inventory will identify these programs, describe their characteristics, and identify the extent to which participant-direction features are included along a continuum (i.e. few features to fully developed programs). This paper reviews the project goals, methods and preliminary findings regarding: 1) Medicaid programs serving elders and/or persons with disabilities; 2) Medicaid programs serving non-elder populations; and 3) Non-Medicaid funded programs.

## SESSION 2060 (SYMPOSIUM)

### ALZHEIMER DISEASE: ROLE OF IMMUNE AND INFLAMMATORY RESPONSES IN ITS DEVELOPMENT AND PROGRESSION

Chair: *T. Fulop, Université de Sherbrooke, Researche Center on Aging, Sherbrooke, Quebec, Canada*
Co-Chair: *G. Pawelec, University of Tubingen, Tubingen, Germany*
Discussant: *M. Weksler, Weill Cornell Medical College, New York, New York*

AD is the most common form of dementia. Its pathological hallmarks include profound neuronal loss, intraneuronal neurofibrillary tangles, and an increased concentration of cerebral amyloid beta peptide (Abeta). Although hallmarked by cognitive deficits, AD is accompanied by systemic inflammation. The etiological relationship between inflammation and AD is controversial. Some evidence suggests that Abeta stimulates autoimmunity leading to the development of a chronic inflammatory process. It is hypothesized that during the early phases of AD, the immune system seeks to eliminate excess Abeta by mounting acute innate and adaptive immune responses, initially beneficial for clearing the Abeta, but damaging when chronic and dysregulated in the elderly (also called "inflammaging"). Compromised immunity in the elderly, termed "immunosenescence", is characterised by changes to T and B cell subset distribution, increased autoantibodies and higher basal levels of inflammatory mediators. A major identified driving force for these changes is infection with the persistent, activating a herpesvirus, cytomegalovirus (CMV). In longitudinal studies of the very elderly, CMV infection was found to be linked to cognitive impairment, increased levels of CRP and IL 6, and mortality at 6 year follow-up. This speakers at this symposium will discuss the evidence for and against the contribution of immune and inflammatory responses to the development and progression of AD. Given the current interest in clinical trials of immunotherapy for AD, a clearer understanding of immunity and AD is crucial for designing rational and effective interventions.

### HALLMARK SHIFTS IN CIRCULATING CD4 BUT NOT CD8 T CELL SUBSETS IN MILD ALZHEIMER DISEASE

G. Pawelec[1,2], T. Fulop[2,1], *1. University of Tuebingen, Tuebingen, Germany, 2. Université de Sherbrooke, Researche Center on Aging, Sherbrooke, Quebec, Canada*

Healthy elderly commonly have fewer naïve T cells than young people, but increased numbers and clonal expansions of predominantly CD8+ late-stage memory cells. The latter are markedly enhanced in people infected with the common herpesvirus Cytomegalovirus (CMV). Age-associated changes in the CD4+ subset are usually minimal, regardless of CMV infection. However, in CMV+ patients with mild Alzheimer

Disease (AD), we also find greatly decreased percentages of naïve CD4+ cells and increased CD4+ memory-phenotype cells, as well as a reduction of CD4+CD25high T regulatory cells with a naïve phenotype. Together these data provide stronger evidence than hitherto available in favour of a more highly differentiated CD4+ as well as CD8+ compartment in AD patients, consistent with an adaptive immune system undergoing persistent antigenic challenge and possibly manifesting dysregulation as a result. We hypothesize that the source of persistent chronic antigenic stimulation potentially resulting in immune exhaustion is Aβ, exacerbated by CMV.

### ROLE OF CYTOKINES IN THE DEVELOPMENT AND PROGRESSION OF ALZHEIMER DISEASE

M. Pellicanò, G. Candore, S. Buffa, M. Bulati, S. Vasto, G. Colonna-Romano, C. Caruso, *University of Palermo, Palermo, Italy*

Many genetic studies have reported significant associations between different polymorphisms within several pro- and anti-inflammatory cytokines and AD, but there are other studies which did not replicate initial results. However, two recent meta-analyses of our group clearly demonstrate an association between IL-beta and TNF-alpha functional polymorphisms and AD, suggesting a key role for cytokines in AD. To gain insight in their role in AD, we have stimulated PBMCs from AD patients and healthy controls (HC) by beta-amyloid. The results show that it induces the over-production of the pro-inflammatory cytokines IL-1beta, IL-6, IFN-gamma and TNF-alpha, and of the anti-inflammatory cytokines IL-10 and IL-1Ra in AD respect to HC. Some chemokines as well as some growth factors are also over-produced by AD-derived stimulated PBMC. These results support the involvement of systemic immunity in AD patients. However, our study is an observational one so we cannot draw a conclusion about its contribution to AD development. However, this kind of study might be useful to obtain biomarkers of AD for monitoring the effectiveness of therapeutic interventions.

### EFFECTS OF CNS CYTOKINE EXPRESSION ON APP PROCESSING AND AMYLOID DEPOSITION

P. Das, *Mayo Clinic, Jacksonville, Florida*

Chronic inflammatory reactions are present in most age–related neurodegenerative disorders, including Alzheimer's disease (AD). In AD, it has been hypothesized that inflammatory cytokines can potentially alter APP processing and Aβ clearance mechanisms, creating "feedback loops", that promote further amyloid accumulation. We have generated data showing that over-expression of inflammatory cytokines (e.g., IL-6, IFNgamma and TNFalpha) does not significantly alter APP levels, APP processing or steady state amyloid peptide generation. Instead, they significantly "attenuate" amyloid deposition when expressed in mice prior to amyloid deposition or with moderate amyloid loads. As opposed to the pro-inflammatory cytokines, AAV mediated expression of the anti-inflammatory cytokine IL-10 significantly increased amyloid loads. Based on these data, we hypothesize that depending on the timing and context, the actions of individual cytokines may produce divergent and unexpected effects during the disease process, but it may possible to harness these immuno-modulatory effects to beneficially alter the AD phenotype.

### DIFFERENTIAL ALTERATIONS IN MACROPHAGE FUNCTIONS AND T CELL SIGNALLING FROM AMCI TO SEVERE AD

T. Fulop, N. Allard, K. Tsvetkova, *Université de Sherbrooke, Researche Center on Aging, Sherbrooke, Quebec, Canada*

Alzheimer diseases (AD) is the most common form of dementia. We propose that Amyolid beta peptide (Ab) is at the center-stage of the immune reactions leading to the development of a chronic inflammatory process. During early phases of AD, the immune system seeks to eliminate excess Ab by mounting an acute inflammatory response. The cellular immune response may play a crucial protective role. However, in the elderly, T cell immunity tends to be compromised and is further exacerbated in CMV-seropositive AD patients. The aim was to identify changes in specific aspects of the innate and adaptive immune response in patients with amnesticMCI and AD at different stages, with a focus on the macrophage and T cell functions in response to Ab. AD was diagnosed by criteria of NINCDS-ADRDA. MCI was diagnosed following guidelines. We found that macrophages originated from AD patients gradually decreased their phagocytic activity, while increased their proinflammatory cytokine production from amnecticMCI to severe AD. More the disease advanced more the processing of Ab by macrophages was decreased. 14/20 AD patients tested seropositive for CMV, as compared with only 4/13 very healthy elderly. The proliferation measured by CFSE was decreased in AD and dependent on the severity of the disease. The signalling of TCR and CD28 (Lck, LAT, SHP-1, Akt, mTOR) was also altered as more severe was the disease, related to alterations in their mobility between rafts and non-rafts correlating with decreased fluidity in T cell membranes depending on cholesterol content. Thus, macrophages and T cells may play a role in the pathogenesis and progression of AD, but in a differential manner.

### IVIG THERAPY OF MILD TO MODERATE ALZHEIMER'S DISEASE (AD) PATIENTS SHOWED SIGNIFICANT BENEFITS AS MEASURED BY NEUROIMAGING AND NEUROPSYCHOLOGICAL TESTING IN A PHASE II, RANDOMIZED, DOUBLE-BLIND, PLACEBO CONTROLLED CLINICAL STUDY

M. Weksler, P. Szabo, N.L. Relkin, *Weill Cornell Medical College, New York, New York*

Immunotherapy that targets amyloid beta peptide has been shown to clear amyloid beta from the brain and to prevent cognitive decline in murine models of AD. Dodel and his colleagues first showed the potential benefits of IVIg containing anti-Abeta antibodies in 5 AD patients. Our phase I study of 8 AD patients treated with IVIg confirmed and extended Dodel's report. Here we report the results of a randomized, placebo-controlled, double-blind phase II study of 3 groups of 8 patients with mild to moderate AD (MMSE scores 14-26) who were randomly assigned to either Baxter Gammagard liquid: 0.4 gm/kg/month or 0.8 gm /kg/month IVIg/month or placebo (saline). The plasma and CSF level of anti-Abeta peptides and Abeta antibodies were quantitated by ELISA. Cognitive and behavioral assessments using ADAS-cog, CGIC, 3MS, and ADL scales were made before and 3, 6, and 9 months of IVIg therapy. Cerebral glucose uptake was measured by PET scanning after the injection of 18-fluorodeoxyglucose before and after 6 months of IVIg therapy. IVIg infusions were associated with significant increases in anti-Abeta antibody and Abeta 40/'42 peptide levels in plasma and significant decreases in these peptides in CSF after compared to before IVIg therapy. A significant decline of 5% in glucose uptake in 4 cerebral areas compromised in AD patients was seen in saline-treated AD patients after 6 months. No decline in glucose uptake was seen over the same period in AD patients treated with IVIg. Finally, AD patients given IVIg infusions maintained ADAS-cog, ADL and 3MS scores compared with the progressive decline in the scores in AD patients given saline and these differences were significant ($p < 0.02$) after 9 months of IVIg therapy.

## SESSION 2065 (PAPER)

## AFRICAN AMERICANS AND THE EXPERIENCE OF AGING

### DOES SOCIAL DISADVANTAGE ACCELERATE AGING? EXAMINING AGE-BASED VARIABILITY IN WEATHERING AMONG BLACK AND WHITE ADULTS

J. Lin, J. Kelley-Moore, *Sociology, Case Western Reserve University, Cleveland, Ohio*

The weathering hypothesis states that socially-disadvantaged groups experience early health deterioration as a consequence of the body's repeated adaptation to stressors such as financial hardship, discrimination and marginalization. Previous research on weathering has been limited empirically (use of binary indicators of high allostatic load) and theoretically (confounding age and cohort effects in stress accumulation). Using the fourth wave of the National Health and Nutrition Examination Survey (NHANES IV), we estimate within-age variability in physiologic dysregulation among Black and White adults, as measured by a count of 10 allostatic load indicators, using Tobit models to account for the underlying distribution. Overall, we found that average allostatic load scores were greater at advanced ages but variability in these scores also increased with age. Black women had higher average allostatic load scores but less variability than other race/gender groups. Although White men had the lowest average allostatic load, variability in allostatic load was greater, particularly at the highest ages. Our examination of allostatic load by age has shown great amount of variability around the estimates, weakening the explanatory power of chronological age. The findings indicate the importance of examining weathering as a life-long accumulation of social adversities that tend to be amplified through individuals' interaction with structural circumstances, rather than presumed homogeneity in experienced disadvantage by race/gender categorization.

### CROSSING THE RACIAL DIVIDE: THE DIVERSE SOCIAL WORLDS OF AFRICAN AMERICAN ASSISTED LIVING RESIDENTS

C.L. Kemp, M. Ball, M.M. Perkins, C. Hollingsworth, E.J. Cochran-Jackson, A. Meadows, *The Gerontology Institute, Georgia State University, Atlanta, Georgia*

African American elders relocate to assisted living (AL) facilities at much lower rates than white elders, but they do reside in these settings, and are doing so with increasing frequency. Although these elders typically reside in predominately black facilities, our research shows that some reside in more integrated settings. This paper builds on our earlier work which has focused on African Americans in diverse AL settings and is the first to compare and contrast the social lives of those living in a racially segregated versus more integrated environments. Guided by principles of grounded theory we present an analysis of ethnographic data from a National Institutes of Aging study of social relationships in AL involving seven facilities in the metro-Atlanta area, including one upscale all-African American facility. Findings show that residents residing in the all-African American facility share culture and history that produce a sense of camaraderie and community that is not observed among residents residing in the predominately white facilities. Nevertheless, across settings African American residents experience a range of relationships -some are characterized by apathy or hostility, while others involve helping, sharing, friendship, and even romance. Class and racial attitudes, including in the all-African American facility,and attitudes about skin tone, influence the formation and quality of relationships. In the majority-white facilities, we find racism and lack of cultural competence on the part of white residents and providers sometimes impede relationships. Based on our findings, we discuss strategies for promoting more positive relationships among diverse groups of AL residents.

### HEALTH CARE SYSTEM DISTRUST AMONG OLDER AFRICAN AMERICAN WOMEN: ARE THERE DIFFERENCES BY SOCIO-DEMOGRAPHICS?

J.C. Wiltshire[1], E. Montague[2], G. Sarto[2], R.L. Brown[2], *1. Institute of Public Health, Florida A & M University, Tallahassee, Florida, 2. University of Wisconsin-Madison, Madison, Wisconsin*

A few studies have measured African Americans' distrust in the health care system; however, little attention has been paid to subgroup differences, especially among older adults. This study examined differences in distrust by age, education, income, and health status, using a community-base sample of 314 women aged 45 and over in Madison, WI. Data was drawn from a larger study assessing how older African American women make judgments about physician trustworthiness. A 10-item item scale with four domains (competence, confidentiality, honesty, fidelity) was used to measure health care system distrust. Structural equation modeling was used to assess differential item or domain functioning. Negative Betas (standardized) indicate less distrust and positive Betas more distrust. There were no significant differences in the overall distrust scale model. However, there were significant differences in distrust in the fidelity domain by income (b = 0.242, p=0.019) and health status (b = -0.249, p=0.002). As income increased distrust in fidelity increased. Better health status correlated with less distrust in fidelity. The confidentiality domain differed by health status (b = -0.011, p=0.049) and competence domain differed by education (b = 0.307, p=0.027). Higher education was correlated with more distrust in the competence of the health care system. These findings suggest that inferences about distrust among African Americans may be misleading if one does not considered which distrust domains are salient among African Americans.

### A CONTEXTUAL EXAMINATION OF REMINISCENCE FUNCTIONS IN AN OLDER AFRICAN-AMERICAN POPULATION

J. Shellman[1], E. Ennis[2], *1. University of Massachusetts Lowell, Lowell, Massachusetts, 2. Yale School of Nursing, New Haven, Connecticut*

Reminiscence functions have been shown to be associated with mental health and well-being in certain older adult populations. However, there is little known regarding the functions of reminiscence in older African-Americans. The purpose of this study was to examine the perceived benefits and functions of reminiscence in a sample of community-dwelling older African-Americans. The purposive sample included African-American adults (N=52) over the age of 60. Data were collected via focus groups and participant observations in senior centers and churches in an urban northeast state. Contextual data were analyzed using immersion/crystallization technique as described by Borkan (1999). The following themes representing participants' perceptions of reminiscence emerged from the data: 1) Something Like a Big Dictionary, 2) Moving On, 3) Fellowship, Faith and Family, 4) Teaching the Young and 5) A Brand New Knowledge of Ourselves. Using Webster's taxonomy of Reminiscence Functions to guide the analysis, results provide contextual support for the reminiscence functions of: Identity, Teach/Inform, Intimacy Maintenance, and Conversation in this sample of older African-Americans. However, these participants viewed reminiscing for Boredom Reduction, Bitterness Revival, and Death Preparation as negative and "leads to depression". Cultural differences in the functions of reminiscence have implications for how reminiscence is facilitated with this population. Recommendations to guide development of culturally sensitive reminiscence interventions for older African-Americans to promote their health and well-being will be discussed. Borkan, J. (1999). Immersion/crystallization. In B. Crabtree & W. Miller (Eds.), Doing qualitative research (2nd ed.) (pp. 179-194). Thousand Oaks, CA: Sage.

## SESSION 2070 (SYMPOSIUM)

### CUTTING EDGE THEORY, METHODS, AND RESEARCH ON AGING FAMILIES: A TASTE OF WHAT'S TO COME

Chair: *V.H. Bedford, University of Indianapolis, Indianapolis, Indiana, Indiana University, Bloomington, Indiana*
Co-Chair: *R. Blieszner, Virginia Polytechnic Institute and State University, Blacksburg, Virginia*

This symposium presents cutting edge ideas, new findings, and future directions concerning theory, methods, and a selection of content areas on the topic of families in middle and old age. The sub-specialty of families and aging came of age in the 1990s when a critical level of development in the field was attained. Since that time, theory, methods, and new areas have exploded in social gerontology more generally. The chairs' introduction and the five papers comprising this symposium illustrate applications of these developments to aging families. As demonstrated by these presentations, we recommend revising terminology for naming the field, using "families" instead of "family" to reflect the diversity of family forms and increased number of diverse families that have evolved. Theory is addressed by Connidis whose application of a selection of theoretical perspectives uncovers the complexity of families as they age. Research methods are introduced by Townsend who addresses innovations to study designs, sampling, measurement, and data analysis. The remaining presenters highlight three emerging areas of family gerontology research. One examines the emerging new area of gerontechnology; Kinney and Kart show how three disparate fields in gerontology can be integrated into a framework for family gerontechnology. Another examines the neglected field of older families in rural America; Keating and Fletcher accomplish this task by systematically addressing the question of whether, in fact, these families are particularly vulnerable. Finally, Silverstein and Giarusso take on the challenging topic of cultural and racial ethnic diversity in aging families.

### THEORETICAL DIRECTIONS FOR EXPLORING FAMILY TIES AND AGING: MOVING FORWARD

I.A. Connidis, *Sociology, University of Western Ontario, London, Ontario, Canada*

A key challenge in studying family ties and aging is making effective use of theoretical perspectives that were not designed with this particular topic in mind. As a sociologist, I find a valuable approach to thinking theoretically about aging and family relationships involves selecting useful concepts from complementary approaches. The utility of concepts is judged by their capacity to facilitate multi-level analysis (micro-meso-macro), highlight the link between structured social relations and individual agency, to address diversity in family life, to emphasize the dynamics of negotiating family relationships over time, and to encourage change that serves the interests of aging individuals and their family members. To this end, I propose links among life course perspectives, critical approaches, feminist frameworks, and the concept of ambivalence that set useful theoretical directions for thinking about, studying, and interpreting observations about family ties and aging.

### INNOVATIVE RESEARCH METHODS FOR FAMILY GERONTOLOGY

A.L. Townsend, *Case Western Reserve University, Cleveland, Ohio*

Over the past decade or so, a number of exciting developments have emerged related to research design, methods, and analysis. This presentation will use examples drawn from recently published research on families and aging to illustrate how a few of these cutting-edge developments have been applied in family gerontology. Two notable study design innovations that will be illustrated are data collection from multiple family members and greater use of longitudinal designs. Two analytic innovations that will be illustrated are use of multilevel modeling and latent growth curve analysis to test hypotheses about variability within and between families, as well as over time. The presentation will conclude by briefly noting a few methodological innovations that have not been as widely used yet in family gerontology, such as mixed qualitative and quantitative methods.

### FAMILY GERONTECHNOLOGY: AN EMERGENT AGENDA FOR RESEARCH, POLICY AND PRACTICE

J. Kinney, C.S. Kart, *Scripps Gerontology Center, Miami University, Oxford, Ohio*

In this presentation we introduce our conceptual framework for the emerging area of family gerontechnology, which we define as the theoretical and practical application of science and technology in service to later life families. We begin by identifying what we believe to be some of the most important concepts from three different fields: gerontology (i.e., life span development and life course perspectives, fundamental principles from environmental gerontology, the newly emerging empowerment perspective), family gerontology (i.e., solidarity and conflict, ambivalence, family integrity), and gerontechnology (i.e., potential areas of applications, uses and outcomes of various technological interventions for individual older adults and their families). Next, we propose a conceptual model that integrates these three disparate substantive areas into the family gerontechnology framework and identify major assumptions that underlie the framework. We conclude with recommendations for research, practice and policy that derive from this framework.

### OLDER RURAL ADULTS AND THEIR FAMILIES

N. Keating, S. Fletcher, *Human Ecology, University of Alberta, Edmonton, Alberta, Canada*

For many years, the discourse on rural aging families has been one of loss: of young people, of basic services, of economic viability. In combination, such trends have lead to unease about the vulnerability of older rural adults amid rising concerns that families at a distance and fragile local support systems cannot compensate for the erosion of services in rural places. The purpose of this chapter is to document vulnerability discourses about older rural adults and their families in North America and around the world. A comparative review of patterns of population aging, living arrangements, family support and filial obligation is used to evaluate the extent to which older rural adults are 'vulnerable people in vulnerable places'. By the end of the session, participants will have knowledge of how family relationships, regional contexts and rural settings can shape late-life experiences of rural residents.

### ETHNIC DIVERSITY IN AGING FAMILIES: BLURRING RACIAL BOUNDRIES, SHIFTING CULTURAL VALUES

M. Silverstein[1], R. Giarrusso[2], *1. University of Southern California, Los Angeles, California, 2. California State University, Los Angeles, Los Angeles, California*

In this presentation we discuss how ethnic background shapes the filial experiences of individuals in aging families. Ethnicity is considered a multidimensional construct that, as a result of blurred racial categories and malleable cultural values, has contested definitions. Specifically, we explore distinctions between identifying ethnicity as a value system, a racial profile, and a shared national identity, and trace the implications of such distinctions for families that contain older adults. We consider the impact of relatively recent trends related to ethnicity and their implications for filial attitudes and behaviors toward and by older family members. These trends include (1) increased representation of multi-ethnic families, (2) growth in the immigrant population and the consequent process of acculturation, (3) swelling numbers of grandparents raising grandchildren where ethnicity is considered a resource. By examining substantive issues of caregiving, intergenerational transfers, solidarity and conflict, and lines of filial responsibility, we shed light on how relatively recent societal changes have variegated the very definition of ethnicity and its potency as a social force influencing family outcomes with respect to older individuals.

## SESSION 2075 (POSTER)

## EDUCATION AND TRAINING

### GERIATRIC EDUCATION EVALUATION TOOL: THE DEVELOPMENT AND ASSESSMENT OF ACTION PLANS

M. Lee, R. Price, C. Lau, J.C. Frank, *UCLA, Los Angeles, California*

Core objectives of the California Geriatric Education Center (CGEC) are to provide faculty development for health professions faculty and training to healthcare practitioners to improve the quality of care for older adults in California. Across 2008-2009, four faculty development programs were offered by the CGEC that utilized an evaluation tool that captured long-term effects of the programs. In addition to traditional program evaluation on participant satisfaction, the CGEC also used a personal action plan as an evaluation method. An action plan is a plan proposed by participants for applying the content knowledge and skills they have learned from the program to enhance their teaching or field practices. SMART objectives were developed by each participant, which includes Specific, Measurable, Achievable, Realistic and Time-framed activities. Of the 190 faculty attendees, 129 submitted action plans. Among them, 55% (n=71) responded to follow-up surveys to date. Findings of the surveys showed that 39% (n=28) had completed their action plan, 54% (n=38) were on track to complete their action plans, and respondents had trained 4,848 students in institutions and community agencies across the State of California. Action plan demonstrates to be an ideal evaluation tool, through which not only program administrators can present program effects on the quality improvement of participants' professional practices, but participants are granted the freedom to choose the topic area, method of delivery, and framework to increase successful implementation of their plans. Exemplary action plans implemented will be used to demonstrate the action planning process and ultimate tertiary outcomes. Project funded by the U.S. Department of Health and Human Services, HRSA, D31HP08842 and U.S. Department of Education, FIPSE, P116B060029.

## STUDENT EXPERIENCES WITH PEER AND FACULTY MENTORING IN GERONTOLOGY DOCTORAL EDUCATION

P. Cummins, H. Ewen, D.C. Carr, *Miami University, Oxford, Ohio*

This presentation describes data from a longitudinal study focusing on the experience of mentoring from both the student and faculty perspectives. The guiding research question is: How do faculty and peer mentoring influence the professional growth of students in gerontology doctoral education? Doctoral students in each of four years of study and program faculty at eight gerontology doctoral programs completed online surveys. We describe mentoring experiences of students throughout their doctoral training. Results indicate that in their early years, the majority of students report having a primary faculty mentor who provides guidance on curriculum planning, networking, research and publication opportunities. Towards the end of their study, two-thirds report serving as a peer mentor to other students in their programs and ninety percent have at least one peer to whom they go to for advice on their scholarly development. Doctoral candidates have received mentoring from faculty on qualifying/comprehensive exams, dissertation topics, and job searches, which aligns with faculty reports that students taking their qualifying/comprehensive exams during their third year of study and defend their dissertation proposals in their fourth or fifth year. Faculty responses indicate that, on average, they formally mentor five students and informally mentor six students per year. In this presentation, we describe the progression of peer mentoring among gerontology doctoral students as well as the dynamic mentoring relationships that evolve as students become independent scholars. We consider ways that this mentoring process is shaping the development of future gerontological leaders.

## IMPACT OF A DEMENTIA TRAINING PROGRAM ON PSYCHOSOCIAL OUTCOMES INVOLVING STAFF-RESIDENT RELATIONSHIPS

M.Y. Savundranayagam, M. Wallendal, *Helen Bader School of Social Welfare, University of Wisconsin-Milwaukee, Milwaukee, Wisconsin*

Person-centered dementia care in nursing homes entails training staff to attend to residents' psychosocial needs. This study investigated the impact of a nine-week training program on attitudes toward dementia care, perceived distress associated with problem behaviors and communication difficulties, and perceived helpfulness of staff communication strategies. Participants (n=122) ranged in age from 20-73 years, with an average of 15.9 years of experience in long-term care. Data were collected prior to, during, and after training. Results from repeated measures multivariate analyses of variance showed no significant improvement in attitudes towards person-centered care because participants scored favorably on this factor throughout the training. However, there were significant improvements in attitudes toward resident autonomy. Participants exhibited no change in reactions to depressive behaviors or cognitive problems, but were less distressed by disruptive behaviors and communication difficulties. Participants reported on the perceived helpfulness of communication strategies used to resolve misunderstandings. Strategies were divided into effective and ineffective based on existing literature. The intervention had no effect on staff appraisals of the perceived helpfulness of effective nonverbal communication strategies and those used to express and repair misunderstandings. Appraisals of ineffective strategies such as "talk slower" and "louder" improved, but appraisals of other ineffective strategies such as "do things yourself" showed a need for further training. Intervention effects could be enhanced using targeted topics that addressed residents' psychosocial needs and staff monitoring of the application of learned skills. The links between intervention content, activities, and expected outcomes are central to successful staff training.

## FILMS AS TEACHING MATERIAL IN UNDERGRADUATE COURSE OF CLINICAL PSYCHOLOGY OF AGING: BROADENING STUDENTS' IMAGE AND UNDERSTANDING OF AGING

J. Kitayama, *Sophia University, Tokyo, Japan*

The purpose of this study is to investigate the students' experiences in a one semester undergraduate course of clinical psychology of aging in which the American and Japanese films were used as teaching aids. At each of the 8 sessions out of 12 for the semester, the lecturer selected one film, showed an edited part of it in 30-45 minutes and then lectured in the remaining time of the 90-minutes class. The themes and films are as follows: physical aspects (The Curious Case of Benjamin Button), personality (Nobody's Fool), loss experiences (About Schmidt), family issues (Tokyo Story), dementia (Iris), psychological assessment (Memories of Tomorrow), psychotherapy (Fried Green Tomatoes), death (Ballad of Narayama). After the course, 25 participants replied to the questionnaire. Through qualitative analysis, the results indicate that (a) films help the students comprehend the older persons' life, psychological characteristics or symptoms like dementia concretely and improve understanding of the lecture, (b) students' images of older people have changed through the course, (c) for the students, it was enjoyable to watch films in the class, (d) some students develop ideas on their own life and family members by the film. Analysis of the students' remarks concerning each film finds that (a) films attracted the interest of the students and enabled them to construct their view of aging, (b) students' impressions about a particular film were diverse with several independent viewpoints. It follows from these results that the films work as good educational materials and cultivate students' individual images of aging.

## INTEREST IN THE FIELD OF AGING AMONG AT-RISK HIGH SCHOOL STUDENTS: A CAREER DEVELOPMENT PROCESS

B. Costa, A. Horowitz, O.R. Burack, *The Jewish Home and Hospital for Aged, New York City, New York*

It has been anticipated that in the next 30 years there will be insufficient numbers of trained healthcare professionals to meet the needs of the growing aging population. To build the geriatric workforce we should look to those adolescents who will be entering the workforce in the near future. This study explored factors influencing adolescents in their choice of careers in aging. The participants (n=132) were high school students attending an intergenerational program within a long-term care facility targeting at-risk youth. Data were collected at the beginning and end of each academic year through self-administered questionnaires. The study was guided by the Social Cognitive Career

Theory (SCCT) model and included measurement of the following variables as potential predictors of the students' interest in an aging career: gender; prior relationships with elders; knowledge and attitudes on aging; self- efficacy appraisal; and relationships with staff and residents in the program. Interest in aging was rated on a 5 point scale (1=Not at all; 5= Very much) with a mean score of 2.9 at baseline and 2.3 at the last post-program assessment. Only one significant correlation(r=.22) emerged, with more positive relationships with nursing home staff associated with greater interest in an aging career. However, more positive evaluations of the program were significantly associated with greater interest in an aging career. The overall findings imply that relationship with the nursing home staff, how the program benefitted and influenced the participants' decision in entering aging careers are all influential factors in shaping their career decisions.

### CHALLENGING NEGATIVE STEREOTYPES OF AGING: A YEAR LONG INTERVENTION IN A MIDDLE SCHOOL SETTING

T.C. Andersen, *Neurology, Gerontology & Social Work, University of Utah, Salt Lake City, Utah*

The face of aging has continued to evolve over the last century and the need to continue to evolve in our attempts to shape not only the experience of aging, but the resources available for our aging population is an ongoing challenge. An underlying question is at what age is it appropriate to begin to challenge negative stereotypes and to encourage an increased investment in our aging population. This project has sought to instill accurate knowledge about the aging process and to increase an investment in a cohort of middle school students. Spanning a year, this project has combine two parallel modes of learning geared at engaging a class of eighth grade students in a didactic and experiential into the world of aging. Fourteen hour long class sessions were staggered throughout the year to instill accurate information about relevant topics related to the aging process. In addition to this the students have been assigned an older adult to meet with periodically and interview, culminating in a year end celebration of this collaboration. Pre and post intervention measures were gathered which included the Fact on Aging Quiz, a pre and post drawing of the student's perceptions of aging and an additional 6-item Aging Value Assessment scale. The results from the pre-post measures will be presented along with identified themes that emerged from the post project focus group, which included a sample of the students and older individuals.

### A COMMUNITY-BASED APPROACH FOR INTEGRATING GERIATRICS AND GERONTOLOGY INTO MEDICAL EDUCATION

I.L. Martinez, D.R. Brown, J.C. Mora, *Humanities, Health & Society, Wertheim College of Medicine, Florida International University, Miami, Florida*

Older adults consume the largest health care dollars in the United States, undergo 40% of surgical procedures, and represent a growing part of patient populations with risks of co-morbidities, poly-pharmacy and other challenges in clinical care. Yet, according to the American Association of Medical Colleges (AAMC) in 2002 only 56 out of the 125 allopathic schools of medicine have identifiable units in geriatrics or gerontology. The AAMC has recently identified 26 minimum graduating competencies for in geriatrics for medical students. We describe how these geriatric competencies are being systematically integrated into the new medical curriculum using a competency-based approach and community experiences, to adequately prepare students to address the complex and individual needs of their older patients. We begin by asking what we would like our students to be able to do by the time they graduate. We then match these educational objectives to course objectives and activities to ensure that they are integrated throughout the broader medical curriculum. First, students will be introduced to geriatrics during their basic sciences and clinical skills courses. They will be exposed to geriatric populations longitudinally in community settings during household visits under the auspices of the NeighborhoodHELP™ community program and through clinical experience in year two, as well as a geriatrics clerkship experience in both medicine and neurology. Students will also attend sessions during clerkships addressing common medical issues among older adults. The growing diversity of the older adult population makes it important to integrate and evaluate geriatrics education into undergraduate medical education.

### HOME CARE SERVICES PROVIDER EDUCATION: DEALING WITH CHALLENGING SOCIAL, EMOTIONAL, AND ETHICAL SITUATIONS

A. Hauger[1], B. Hauger[2], T. Wilson[3], *1. Psychology, The College of St. Scholastica, Duluth, Minnesota, 2. Gentiva Health Services, Duluth, Minnesota, 3. North Memorial Home Health Services, Robbinsdale, Minnesota*

Home care services providers encounter challenging social, emotional, and ethical situations when working in patients' homes. Their preparation for dealing with these situations varies widely. In this study, home care services providers were asked to rate the importance of having training to deal with 20 challenging situations and to rate their preferences for obtaining more information about topic areas (e.g., computer based activity or in-service workshop). Surveys, distributed through employers, were completed by home care services providers and mailed to the researchers. Respondents (N = 86) represented homemaker services, home health assistant services, nursing, physical therapy, occupational therapy, care coordination, and home health education. Length of employment in home care ranged from less than one month to 27 years (M = 8.0, SD =7.39). Respondents worked in rural areas, small towns, cities, and a metropolitan area. Ninety-six percent were females and 98% were Caucasian. Average age was 45.8 years (SD = 14.24). Having training in each of the 20 situations was rated as somewhat to very important. Seventy-five percent or more of respondents indicated it is important or very important to have training to deal with situations involving loneliness, safety, loss, death, extreme lack of home cleanliness, interactions with patients' families, and communication with sensory-impaired patients. Participating in discussions or in-service workshops sponsored by employers were preferred ways to obtain more information about these topics. Results are particularly relevant for agencies that provide home care services as well as educators who develop and deliver training.

### A FORGOTTEN CURRICULUM: TEACHING "PALLIATIVE CARE FOR DEMENTIA PATIENTS" TO GERIATRICS AND PALLIATIVE CARE FELLOWS USING ROLE PLAY, NEWS MEDIA AND THE LITERATURE

H. Herrington, *University of Alabama at Birmingham, Birmingham, Alabama*

It is estimated that over 4 million Americans have Alzheimer's disease; by 2050, that number is predicted to increase to thirteen million. Dementia is a terminal illness, estimated to account for at least 7% of all deaths in the United States each year; however, only one in ten patients will receive hospice care. Caring for patients with dementia can be exceptionally challenging for healthcare professionals as well as the patient's family and other caregivers. This care is often complicated by difficult issues such assessing and treating pain, agitation and behavior problems, difficulty estimating prognosis, answering questions related to artificial nutrition and treatment of infections at the end of life, etc. Despite the complexity of this terminal illness, Geriatric and Palliative Medicine Fellows are often ill-prepared to address these specific issues surrounding palliative care for dementia patients. This formal curriculum is designed to teach principles of palliative care in patients with dementia, focusing on issues specific to this population. Fellows will learn clinical skills and model appropriate communication skills needed to care for this special and growing population. The goal of this project is to increase knowledge in this area among Geriatric and Palliative Medicine fellows, and eventually among other healthcare professionals, in an effort to improve care in this rapidly growing patient population, with greater emphasis on comfort as the goal of care, with fewer painful, aggressive, and unnecessary medical treatments at the end of life.

### PROFESSIONAL RELATIONSHIPS ACROSS DISCIPLINES: INTERDISCIPLINARY RESEARCH TEAMS AND COLLABORATION

D. Oliver, D. Parker Oliver, *Family and Community Medicine, Univesity of Missouri, Columbia, Missouri*

The University of Missouri Interdisciplinary Center on Aging includes more than 90 faculty members (Center Fellows) representing six schools, five colleges, and 36 different departments across the University of Missouri campus. In an effort to build and sustain lasting professional and collaborative relationships across disciplines, interdisciplinary research teams that bring together senior and junior faculty as equal learners are encouraged. Currently there are 40 center fellow principal investigators leading interdisciplinary research teams that account for $46 million in aging-related research. To sustain professional relationships and collaboration, the following has been initiated: 1) a monthly research seminar featuring the work of interdisciplinary research teams, and 2) a small grants program to promote interdisciplinary scholarship and dissemination involving junior faculty and senior mentors. This poster presents a case study of a successful interdisciplinary research team which illustrates key variables that facilitate interdisciplinary collaboration and success (federal funding, publications, fun, fellowship, trust, and consensus). Attendees will 1) learn key do’s and don’ts in assembling research teams, and 2) how to sustain the team over an extended period of time.

### LONG-TERM IMPACT OF A TRANSITIONS OF CARE EXPERIENCE ON INTERNAL MEDICINE RESIDENT TRAINING IN GERIATRICS

J.M. Pavon, G.T. Buhr, *Internal Medicine, Duke University, Durham, North Carolina*

Purpose: The Transitions of Care (TOC) Experience is an innovative educational strategy, modeled after Eric Coleman’s Care Transitions Program, to teach interns about transitional care. Methods: Internal medicine interns participating in the TOC Experience were eligible for a survey study. A self-efficacy survey was completed during a debriefing session at the end of each TOC Experience, and after completion of a subsequent General Medicine rotation when the opportunity to apply the skills was expected to be highest. The survey assessed their ability to (a) identify potential threats to a well-executed transition, (b) anticipate consequences of a poorly executed transition, (c) address changes in functional status, (d) compile pre and post hospital medication records, and (e) evaluate medication discrepancies. Each skill was measured using a scale of 1 (not confident at all) to 5 (completely confident). Qualitative data were also collected. Results: After completing the TOC Experience, there was a significant improvement across all 5 areas, ($p<0.001$, Wilcoxon signed rank test). This effect on confidence was sustained at follow-up, with no significant difference between follow-up median scores and post-experience median scores across all 5 areas, ($p>0.05$). Qualitative data revealed that completion of the TOC Experience impacted the practice of the interns most strongly in the areas of medication reconciliation and inter-provider communication. Conclusion: The TOC intervention was effective in improving physician confidence in skill sets that are key to the care transition process. The increase in confidence was sustained, suggesting a long-term impact of this simple and innovative educational intervention.

### AREA GERIATRIC EDUCATION SCHOLARS: INTRODUCING YOUTH TO GERIATRIC HEALTHCARE CAREERS THROUGH LONG-TERM CARE SITE PLACEMENTS

C. Weissbach, *UPHEC, Marquette, Michigan*

The Area Geriatric Education Scholars (AGES)program has trained and placed 127 Upper Peninsula, Michigan high school juniors and seniors for 7-week summer long-term care positions since 2006. Students job shadow healthcare professionals, provide one-on-one companionship and lead group activities. A growing elderly population in this remote, rural region and a shortage of healthcare professionals (e.g. physicians, nurses, pharmacists, physical therapists) prompted the development of this effort. AGES’ success is largely attributed to its active partnership between the Upper Peninsula’s schools of health professions, 14 long-term care sites, high schools, universities and local funders. Youth completing AGES are more inclined to consider healthcare careers serving an older population and their attitudes about older people have been positively impacted by their AGES experience. Most AGES alums proceed on with studies and employment in the healthcare professions. Several have obtained their CNA credentials and work in long-term care sites post-AGES concurrent with their college studies. AGES is sponsored by the Upper Peninsula Health Education Corporation.

## SESSION 2080 (PAPER)

## EHEALTH/TELEMEDICINE

### A THEORY-BASED ONLINE HIP FRACTURE RESOURCE CENTER FOR CAREGIVERS: ITS EFFECTS ON DYADS

E. Nahm[1], D. Orwig[2], B. Resnick[1], J. Magaziner[2], M. Bellantoni[3], R. Sterling[2], *1. University of Maryland School of Nursing, Baltimore, Maryland, 2. University of Maryland School of Medicine, Baltimore, Maryland, 3. Johns Hopkins University School of Medicine, Baltimore, Maryland*

Informal caregivers are important for older adults’ successful recovery from hip fracture because they can help older adults adhere to their rehabilitation regimens and improve their health behaviors. Few resources, however, are available to these caregivers. In this study, we developed a Theory-based Online Hip Fracture Resource Center (OHRC) for caregivers, and tested its feasibility. The OHRC included seven self-learning modules, discussion boards, Ask the Experts, and a virtual library. The feasibility of the OHRC was assessed by its usage and usability; the feasibility of the future trial was tested using a one group pre-post design. Thirty-six caregiver (CG)-care recipient (CR) dyads were recruited from six hospitals. The CGs used the OHRC for 8 weeks. Most CGs and CRs were white ($n = 32, 33$) and female ($n = 25, 25$) with a mean age of 56.2+13.0 and 75.5+10.5, respectively. On average, CGs reviewed 5 modules and used the discussion board 3.1 times. The mean perceived usability score for the OHRC was 75 (12–84). Experience with the OHRC significantly improved CGs’ knowledge on the care of hip fracture patients ($t=3.17$, $p = .004$) and eHealth literacy ($t = 2.43$, $p = .002$). Changes in scores on other CG outcomes (e.g., CG strain, coping, social support) and CR outcomes (e.g., self-efficacy for exercise and osteoporosis medication adherence) were favorable but not significant. This shows that the OHRC is user-friendly and can be beneficial for CGs. Further randomized controlled trials are needed to assess its effects on CG and CR outcomes.

### IMPROVING OLDER ADULTS’ E-HEALTH LITERACY THROUGH COLLABORATIVE LEARNING

B. Xie, *College of Information Studies, University of Maryland, College Park, Maryland*

Collaborative learning features students learning from both an instructor and other students and working in small groups toward common goals. To assess its effectiveness in informal settings of older adults, an exploratory field experiment was conducted during August 2009-February 2010 in two public libraries in Maryland, focusing on e-health literacy, or the ability to obtain, process, and use electronic health information. Ninety-three older adults aged between 60-87 (Mean=68.5; SD=8.0) participated in the 4-week long collaborative learning intervention. Almost half (46%) of the participants had less than one year of prior experience with computers. Results: several key measures showed statistically significant improvements from pre to post intervention, including: computer knowledge (Pre=3.22; Post=4.13; p<.001); Web knowledge (Pre=2.69; Post=4.24; p<.001); Internet health information searching skills (number of successfully completed tasks: Pre=14.59; Post=22.31; number of assistances: Pre=1.63; Post=.59; p<.001 in both cases); computer anxiety (Pre=2.31; Post=2.07; p<.01); perceived e-health literacy (Pre=2.64; Post=4.03; p<.001); perceived usefulness of the Internet in helping to make health decisions (Pre=4.00; Post=4.53; p<.01); and perceived importance of being able to access health resources on the Internet (Pre=4.33; Post=4.60; p<.01). Other key measures (self-esteem, self-efficacy, computer interest and efficacy, and attitudes toward the aging experience) showed trends toward positive changes. Seventy percent of participants reported that what they had learned through the intervention had helped them "a lot" in taking care of their own health or caring for a loved one. These findings provide preliminary support for the effectiveness of collaborative learning in improving older adults' e-health literacy in informal settings.

### DO THE COSTS OUTWEIGH THE BENEFITS? USING A RESOURCE-ORIENTED PERSPECTIVE TO EVALUATE MOBILE PHONE APPS

B. Walker, L. Lorenzen Huber, J. Camp, *Indiana University, Bloomington, Indiana*

New technologies will only be accepted if older individuals perceive that the benefits outweigh the costs. One of the "costs" associated with new technologies is the effort required to learn how to use them. We used a resource-oriented perspective as suggested Lindenberger et al (2008) to evaluate 3-G phone apps developed by a class in gerotechnology at Indiana University during the fall of 2009. Indiana University was one of twelve universities participating in a pilot of App Inventor for Android (a programming tool that lets students easily create mobile applications and customize existing applications) sponsored by Google. The target market for this class was identified as active adults 50 and over. Students were issued 3-G Android phones and prompted to consider applications that incorporate social networking, location awareness, and web-based data collections. Projects were evaluated on three principles: 1) did the phone app either minimize environmental demand or increase environmental support; b) did it have the ability to be customized to individual needs; 3) did the app promote learning and cognitive plasticity without being too challenging. Student groups created innovative phone apps to facilitate social connection, healthy lifestyles, personal safety, health monitoring and support for daily activities. While the applications were firmly grounded in the concept of active aging, the majority of applications failed on the first principle; the support provided was less than the environmental demands created by the complexity of the phone itself. This presentation will consider the use of a resource-oriented perspective for evaluating new technologies.

### A PRIVACY FRAMEWORK FOR EVALUATING IN-HOME TECHNOLOGIES

L. Lorenzen Huber, J. Camp, K. Connelly, K. Shankar, K. Caine, W. Hazlewood, Z. Zimmerman, *Indiana University, Bloomington, Indiana*

Previous research suggests that older adults' perceived risks are much less than their actual risks in regard to data collected by in-home technologies. They are sanguine about health and safety data being shared with close family members, but more concerned about sharing financial data with anyone. They are most willing to adopt technologies perceived as useful. As part of a three-year project funded by NSF, we have developed prototypes to provide support in the domains of health, safety, finances, social support, and activities of daily living. The prototypes are on display in an older home we use for a lab. We invited groups of older adults (n=72) to tour the lab and asked them to complete a survey to validate our previous findings about 1) what types of home technologies are most acceptable, 2) with whom older adults are most comfortable sharing information, and 3) if they would control the data (occasionally turn off the devices, etc). In summary, the most popular prototypes were related to safety, while the most common person that participants would allow to access the information was an adult child. More than half of participants indicated that they would very likely turn off devices occasionally. The full results have led to the development of a new privacy framework for understanding older adults' perceptions of privacy related to in-home technologies. This session will review our findings about the interactions between granularity of data, recipient of data, sensitivity of activity, and perceptions of utility and usability.

## SESSION 2085 (POSTER)

## HEALTH RISK AND BEHAVIOR

### SOCIODEMOGRAPHIC PREDICTORS OF DIABETES DIAGNOSIS AND MANAGEMENT

P. Sevak, *Economics, Hunter College, New York, New York*

Socioeconomic and neighborhood characteristics have been documented as predictors of obesity (Grafova et al., AJPH 2008). The effect of SES and neighborhood on "clinical" measures such as hemoglobin A1c (a measure of diabetes) and cholesterol have not been studied. This project uses the Health and Retirement Study (HRS), a nationally representative survey of Americans 50 and older which in 2006 asked half its respondents to undergo blood pressure measurements and submit blood spots which were submitted to labs for measures of hemoglobin A1c and cholesterol levels. These data allow for a unique study of diabetes incidence, diagnosis, and management along with other cardiovascular risk factors, in a sociodemographic context, among the elderly population. This project studies: 1. Socioeconomic predictors of blood glucose and cholesterol levels. Multivariate OLS regressions of A1c levels show that health insurance and White race is associated with lower A1c. Neither log income nor assets are correlated with A1c. Before GSA, we will merge data zip code data on neighborhood characteristics, fast food restaurants, other restaurants, and grocery stores, to estimate the effect of these factors on biomarkers. 2. The socioeconomic predictors of being undiagnosed diabetics. Sadly, about 50% of HRS respondents with A1c levels above the clinical threshold for diabetes (6.0) do not know they have diabetes. Those most likely to know they have diabetes are retired, Black, Hispanic, with health insurance, and of higher BMI, while neither income nor assets. Analyses before GSA will merge county level data on medical access.

### TIME WILL TELL: A LONGITUDINAL STUDY OF CHEMICAL ADDICTIONS, CO-OCCURRING DISORDERS AND AGING

P.A. Greenberg[1], J. Juan[2], M. Reichl[3], *1. Community Studies, St. Cloud State University, St. Cloud, Minnesota, 2. St. Cloud State University, St. Cloud, Minnesota, 3. St. Cloud State University, St. Cloud, Minnesota*

Older adults comprise the fastest growing segment of the chemical addiction population. The data (N = 285) were gathered April 2004 through June 2007. Participants were 55 years and older, interviewed two weeks into treatment in person and then after completion by telephone every six months for up to two years. Several significant findings emerged. People who have a defined, on-going support system were more likely to maintain their sobriety. Support systems included family, friends, community, aftercare and groups such as AA and NA. For many, family in particular played a key role in recovery. Co-occurring disorders (mental health and addiction) were prevalent in this population. An overwhelming majority (87%) came into the program and/or were diagnosed during the course of their treatment. Initially some participants worked with a therapist but during the second year of the project a mental health component was incorporated into the program as well. One finding, absent from the previous literature, was how the course of addiction, treatment, relapse and recovery may differ for women and men. Men still outnumber women in treatment, women are more successful in their sobriety and women have a slightly higher rate of co-occuring disorders. The nature of addiction is also changing. For older adults alcohol is still primary but there is an incease in drugs such as heroin, cocaine and marijuana. There are still relatively few treatment programs specifically for older adults which is not reflective of need. Data from this study can assist future development.

### ADULT AND CHILDHOOD SOCIOECONOMIC POSITION (SEP) AND HEALTH BEHAVIOR IN OLD AGE

I. Kåreholt, U. Strid, *Aging Research Center, Karolinska Institutet and Stockholm University, Stockholm, Sweden*

OBJECTIVES: To study how socioeconomic position (SEP) in childhood and adulthood correlate to smoking and alcohol drinking in old age (77+). METHODS: Adult SEP was obtained from the 1968 and 1981 and childhood position from retrospective questions in these surveys. The 1968 data is combined with information about smoking and drinking in the 1992 follow-up, the 1981 data with 2002. Childhood SEP: fathers' education and social class; adult SEP: own education and social class. Health behaviors are frequency of alcohol drinking and smoking (yes/no). Ordinal logistic regressions were used, controlling for age, sex, survey year, civil status, and place of residence. RESULTS: Alcohol drinking in old age correlates to having both high childhood and adulthood SEP, largest with high SEP both in childhood and adulthood and lowest with low SEP in both childhood and adulthood. Old age smoking correlates to high own education, having fathers with high education and fathers with low social class both for women and men. High adult class position was correlated to more smoking among women and less smoking among men. Among women, smoking is most common with low childhood and high adulthood class and least common with high childhood and low adulthood mobility. Among men smoking is most common when both childhood and adulthood class are low and least common when social class is high at both stages. CONCLUSIONS: Alcohol consumption in old age correlates to high socioeconomic position whereas smoking only to high education. The correlation between smoking and social class differed between sexes.

### UNDERSTANDING STRESS AND COPING: NEW FINDINGS ON MODERATE ALCOHOL USAGE PATTERNS AMONG OLDER ADULTS

M. Horn Mallers[1], S. Neupert[2], *1. Human Services, CSU Fullerton, Fullerton, California, 2. North Carolina State University, Raleigh, North Carolina*

Given the growing concern regarding the increasing prevalence of later-life problem drinking, the present study extends current scientific understanding of the interconnections between alcohol use and daily stressor reactivity among middle-aged and older adults. While previous literature documents a strong link between affect regulation and binge drinking, little is known about the role of moderate use of alcohol on coping processes during stressful situations. Furthermore, the causal relationship between stress and alcohol use is unclear. To explore the link between stress and moderate alcohol use among aging adults, daily diary data from the National Study of Daily Experiences (NSDE), a sub-sample take from the Midlife in United States (MIDUS) study, was used. Preliminary results indicate that older adults are more likely to drink moderately than younger adults. Further, hierarchical linear models indicate that days with increased alcohol use are characterized by increased emotional reactivity to daily stressors. Such findings are critical as they lend to a better understanding of daily "functioning" including age differences in maladaptive and proactive coping, as well as harm-reduction models.

### THE RELATION OF DEPRESSIVE SYMPTOMS TO SMOKING IN MIDDLE-AGED AND OLDER WOMEN

C.K. Holahan[1], C.J. Holahan[2], D.A. Powers[3], J.K. Ockene[4], *1. University of Texas at Austin-Department of Kinesiology and Health Education, Austin, Texas, 2. University of Texas at Austin-Department of Psychology, Austin, Texas, 3. University of Texas at Austin-Department of Sociology and Population Research Center, Austin, Texas, 4. University of Massachusetts Medical School-Division of Preventive and Behavioral Medicine, Worcester, Massachusetts*

Smoking research and intervention efforts have neglected older women. Moreover, most smoking research has investigated major depression, while much of women's depressive experience involves sub-clinical depressive symptoms. This study investigated the relation of depressive symptoms (standardized composite of history of depressive symptoms and current depressive symptoms) to smoking in the Women's Health Initiative Observational Sample (N = 91,177). Participants ranged in age from 50 to 70 at baseline and selection criteria excluded women with mental illness, including major depression. Analyses controlled for age, minority status, and socioeconomic status. In logistic regression analyses, overall depressive symptoms were significantly associated with a higher likelihood of current smoking at baseline, with each standard deviation increase in overall depressive symptoms linked to a 17% increase in the likelihood of being a smoker. In addition, overall depressive symptoms were significantly associated with heavy smoking among the 5,719 participants who were current smokers at baseline. These effects were consistent for a history of depressive symptoms (statistical trend for heavy smoking) and current depressive symptoms. The associations between current depressive symptoms and smoking outcomes were independent of a history of depressive symptoms. Age and SES were significantly associated with a lower likelihood of being a current or heavy smoker. The highest likelihood of current smoking was among African Americans and Native Americans, with heaviest smoking among whites and Native Americans. The depressive symptoms effects for both current smoking and heavy smoking were consistent across age, SES, and ethnicity. Implications for reducing smoking in older women are discussed.

### A WELLNESS MOTIVATION INTERVENTION TO REDUCE STROKE RISK IN OLDER ADULTS

A.L. Silva-Smith, *Nursing, University of CO-Colorado Springs, Colorado Springs, Colorado*

Background: According to the American Heart Association, a first time stroke occurs in approximately 600,000 people in the United States each year. While stroke is a leading cause of death and long-term disability, theoretically-driven interventions to reduce stroke risk have been limited. Education-only interventions have been minimally effective in achieving behavior change among older adults. Current literature suggests that motivational factors, rather than simply knowledge needs, are instrumental in efforts to change health behaviors. Purpose: This presentation describes a theory-based motivational intervention to reduce stroke risk through healthy eating and increased physical activity among older adults. The Wellness Motivation Theory (WMT) guided development of the Promoting Older Adult Wellness (POW) intervention. Methods: The POW intervention focuses on the mechanisms that link motivational resources to physical activity and healthy eating, fostering social contextual resources and behavioral change process variables. Motivational appraisal, self-knowledge, and self-regulation are key behavioral change processes addressed by the POW intervention. Critical inputs designed to foster social contextual and motivational resources are presented and include: (a) social network support, (b) empowerment education, and (c) motivation support specific to promote physical activity and healthy eating behaviors. Summary: Expected outcomes include changes in healthy eating and physical activity, and reduced stroke risk as measured by blood pressure and body composition measures. Implementation issues are identified, including material and community resources, use of the lay health advisor role, and interventionist characteristics.

## TRAJECTORIES OF ALCOHOL DEPENDENCE AMONG THE ELDERLY IN KOREA

J. Ahn[1], S. Jang[2], *1. Hoseo University, Cheonan, Republic of Korea, 2. Chungju University, Chungju, Republic of Korea*

Alcohol problems in late life have not received much attention. In this study, trajectories of alcohol dependence and their predictors were examined using multilevel growth curve modeling of data from the Korea Welfare Panel Study (KOWEPS). A nationally representative older community dwelling sample in South Korea (N=14,295) was surveyed at baseline and 1 and 2 years later(3 waves) from 2006 to 2008. At each time point, an inventory consisting of drinking dependence (CAGE), socio-demographic factors, and psychosocial stressors was completed. The results showed that degrees of alcohol dependence increased significantly with wave. The unconditional model revealed that there existed significant random variability for participants' initial levels of alcohol dependence (intercepts) and rates of change (slope). To fit a mixed model with random effects predicting alcohol dependence intercepts and slopes, socio-demographic predictors (time-invariant covariates of participants' age, gender, marital status, education, religion) and major bio-psychosocial stressors (self-rated health, poverty, and satisfaction of social relationship at baseline) were included in the conditional model. The initial levels of alcohol abuse were predicted by the following factors: participants' younger age, male gender, lower levels of education, and being poor. The increasing slope of alcohol abuse was predicted by satisfaction of social relationship only. Base on the results found, practical implications for implementing prevention and treatment programs for alcohol problems among the elderly in South Korea are recommended.

## DO HEALTH BEHAVIORS SHAPE THE BODY-WEIGHT TRAJECTORIES OF MIDDLE AGE AND OLDER AMERICANS? RESULTS FROM A 15-YEAR LONGITUDINAL STUDY

A. Botoseneanu, J. Liang, *Health Management and Policy, University of Michigan, Ann Arbor, Michigan*

There is very little knowledge of the impact of health behaviors on how body weight evolves in middle-aged and older adults. This study examined how smoking, physical activity, alcohol use, and their changes influence the trajectory of BMI over a 15-year period from middle to late adulthood. Data came from the Health and Retirement Study which entailed a national sample of Americans aged 51 to 61 years in 1992 with up to eight repeated observations. We analyzed the trajectory of BMI by using hierarchical linear models, with time-varying covariates including (a) lagged measures of smoking status, vigorous physical activity, and alcohol consumption, and (b) between-waves measures of change in these health behaviors. BMI increased in a largely linear fashion. Smoking (b= -1.268; p <.001) and changes in smoking over time (b= - 1.056; p <.001) were both associated with lower BMI. Physical activity (b=-.555; p<.001) and its differences over time (b=-.385; p<.001) had similar relationships with BMI. Furthermore, the effects of smoking (b=-.082; p<.001) and physical activity (b=-.041; p<.001) on BMI became more moderate over time, particularly when the baseline BMI was adjusted. In contrast, alcohol use and its change over time were not correlated with BMI. Health behaviors and their changes over time, especially smoking and physical activity, are significantly associated with how BMI changes over time. This information is essential for the design and implementation of interventions aimed at reducing overweight/obesity in middle and old age.

## SOCIAL TIES AND PATTERNS OF CHANGE IN ALCOHOL CONSUMPTION DURING OLD AGE IN JAPAN

B. Shaw[1], J. Liang[2], N. Krause[2], J.M. Bennett[2], E. Kobayashi[3], T. Fukaya[3], S. Shinkai[3], *1. University at Albany, School of Public Health, Rensselaer, New York, 2. University of Michigan, School of Public Health, Ann Arbor, Michigan, 3. Tokyo Metropolitan Institute of Gerontology, Tokyo, Japan*

Recent evidence suggests that Japanese adults drink alcohol well into old age, with normative declines in drinking not beginning until after approximately age 70. Such patterns are often attributed to greater social acceptance of alcohol use in Japan, particularly in comparison with the US. While this explanation suggests that the drinking behavior of aging Japanese adults is largely shaped by their social networks, few studies have examined this relationship comprehensively over an extended period of time. This study addressed this gap by assessing the linkages between various social ties and alcohol use patterns over time. Data came from more than 4,800 Japanese adults aged 60 and over, who were observed up to 7 times between 1987 and 2006. Multilevel multinomial logit models estimated the odds of abstinence and heavy drinking relative to moderate drinking. Over time, the odds of abstinence increased, whereas the odds of heavy drinking decreased, with highly educated adults showing the most rapid declines. While co-residing with an adult child was not associated with patterns of alcohol use, being married was associated with reduced drinking, especially among women. In contrast, maintaining social ties outside of the family was associated with increased drinking. These findings suggest that even during old age, alcohol use is part of the social milieu in Japan and may be particularly influenced by social ties that are external to the family.

## TRAJECTORY OF CIGARETTE SMOKING AMONG OLDER JAPANESE, 1987-2006

J.M. Bennett[1], J. Liang[1], B. Shaw[2], N. Krause[1], E. Kobayashi[3], T. Fukaya[3], S. Shinkai[3], *1. Health Management & Policy, University of Michigan, Ann Arbor, Michigan, 2. University at Albany, Rensselaer, New York, 3. Tokyo Metropolitan Institute of Gerontology, Tokyo, Japan*

We currently know little about how health behaviors (e.g., alcohol consumption and smoking) change in later life. This is because of a lack of high quality data derived from repeated observations at the individual level over an extended period of time. Furthermore, the vast majority of research is based on data derived from the western developed nations, particularly the U.S. With the highest life expectancy at birth of any major developed nation, Japanese live about 4 years longer than Americans. In addition, Japan differs significantly from the U.S. in its core cultural values, life style, and major social institutions such as family and religion. Hence, Japan presents many conditions unobservable in the U.S., which may yield useful insights concerning the underlying mechanisms. This research examined how cigarette smoking among old Japanese evolved over a period of 19 years. Data came from a national sample of over 4,800 adults aged 60 and over in Japan with up to 7 repeated observations between 1987 and 2006. Multilevel models with ordered logit were employed to analyze intrapersonal and interpersonal differences in smoking. On average the odds of smoking declined significantly over time (OR=.860, p<.001). Older age (OR=.958, p<.001) and female gender (OR=.049, p<.001) were associated with less smoking. Although older women (OR=1.041, p<.05) tended to smoke slightly more, smoking decreased at a more accelerated rate among them (OR=.992, p<.01). There were significant gender and age variations in the decline in smoking in old age.

### LONG-TERM CHANGES IN SMOKING BEHAVIOR AMONG MIDDLE-AGED AND OLDER-AGED ADULTS WITH HEART DISEASE

J. Newsom[1], N. Huguet[1], M. McCarthy[1], M.S. Kaplan[1], B. McFarland[2], *1. Institute on Aging, Portland State University, Portland, Oregon, 2. Oregon Health and Science University, Portland, Oregon*

For those with chronic heart disease, smoking cessation is critical to prevent recurrence of heart attack, to improve overall health, and to extend longevity. Few studies have investigated whether individuals with heart disease maintain behavioral improvements over the long-term and which social and psychological factors are associated with maintaining healthy behavior. In longitudinal analyses of the Health and Retirement Study over an 18-year period, we examined smoking cessation among participants age 50 and over who did not have heart disease at the beginning of the study but who subsequently reported diagnosis of a heart condition (N = 2,221). Only 39% of smokers quit smoking following diagnosis. Of the individuals who initially quit, 23% eventually relapsed. A piecewise growth curve analysis was used to model smoking propensity prior to and following diagnosis. Results indicated modest changes in smoking propensity prior to diagnosis, a significant average decline in smoking propensity following diagnosis, and significant individual variability in smoking changes over time. A subsequent piecewise growth curve model indicated that women, those with higher education, and older participants had a decreased propensity to smoke after diagnosis. Results from these analyses suggest that increased efforts to improve long-term maintenance of smoking cessation among those with chronic heart disease are needed. Because men, those with lower education, and younger participants are at greater risk of eventual relapse, cessation programs, physicians, and other care workers could improve long-term maintenance by devoting additional resources to preventing relapse for these high risk individuals.

## SESSION 2090 (POSTER)

## HEART DISEASE AND CANCER

### HEALTH DISPARITIES IN PROSTATE CANCER SCREENING KNOWLEDGE, ATTITUDES AND BEHAVIOR

C.B. Worley[1,2], J. Oliver[2,3], R.S. Allen[1,2], T. Thomas[1], *1. Department of Psychology, University of Alabama, Tuscaloosa, Alabama, 2. Center for Mental Health and Aging, Tuscaloosa, Alabama, 3. Capstone College of Nursing, Tuscaloosa, Alabama*

Health disparities in cancer screening and prevention are well documented. In the United States, prostate cancer is the most commonly diagnosed cancer among men and the second leading cause of cancer death (ACS, 2009; NCI, 2009). Reliability and effectiveness of the prostate-specific antigen as the screen for prostate cancer has continued to be a source of disagreement within the medical community (ACS, 2009; Reynolds, 2008; Taylor et al, 2006); however, there is a consistent recommendation that men should have the opportunity to make an informed decision regarding prostate cancer screening (ACS, 2009; Reynolds, 2008; Taylor et al, 2006). African American men are less likely than White or Latino men to receive preventive services (Smedley, Stith & Nelson, 2003; Williams 2003) and are more than twice as likely to die of prostate cancer than Caucasian men (ACS, 2009). Using the HINTS national dataset, we explored factors contributing to prostate cancer awareness and screening in older men using binary logistic regression. First the data was restricted to men in the targeted age range for prostate cancer screening (aged 40-74). Older men, with more education, and those that endorsed trust in their physician were more likely to have heard about the Prostate Specific Antigen (PSA test), and to have their physician discuss prostate cancer screening with them. Older men with more education, and those that are Caucasian are more likely to have had a PSA. (Implications for health professionals and public health interventions to target older men for prostate cancer screening are discussed.

### AGE, GENDER AND SES DIFFERENTIALS VS. CLINICAL DIAGNOSTIC CRITERIA IN SELF-REPORTED HEALTH AMONG OLDER ADULTS WITH CANCER

G. Seckin, T. Turner, *University of Maryland, Baltimore County, Baltimore, Maryland*

This paper explores four different dimensions of self-reported health (cancer stage, perceived distress with physical symptoms, perceived distress with cancer treatments, and satisfaction with health status) among a convenience sample (n=350) of respondents (M age=50.23, S.D. =10.91). Patterns of associations between demographic variables, SES, perceived health control and self-reported health were examined. Analyses included t-tests and ANOVA at the bivariate and Ordinary Least Squares (OLS) regression analyses at the multivariate level. Three separate models of hierarchical multiple regressions were performed in order to estimate unique impact of patient demographic and SES characteristics and perceived control over health on self-reported health status variables. The results showed that demographic and SES characteristics create differential health patterns: a) lower income predicted higher perceived distress with physical symptoms (Slope = -.12; B= -.17, p =.002) b) older age predicted less perceived distress with cancer treatments (Slope = -.01; B= -.12, p =.019) and c) gender (female) predicted less satisfaction with health (Slope = -.36; B= -.15, p =.002). Interestingly, even though higher cancer stage predicted higher perceived distress with physical symptoms (Slope = .12; B= .17, p =.001), it did not predict perceived distress with treatments, and satisfaction with health status. Perceived control over health was a significant moderator only for satisfaction with health but not for other dimensions of self-rated health. These findings suggest that assessment of differential aspects of self-rated health among cancer patients can provide important additional information to supplement diagnostic clinical criteria to better understand patients' illness experience.

### PERSONALITY, COPING, AND PSYCHOLOGICAL WELL-BEING AMONG OLDER ADULT, LONG-TERM CANCER SURVIVORS: A PATH ANALYSIS

G. Deimling, M.L. Boehm, S. Brown, *Sociology, Case Western Reserve University, Cleveland, Ohio*

This research tests a model examining the role personality plays in mediating the relationship between cancer and other health factors and coping and psychological well-being. Recent research has indicated that personality may be more important than cancer-related factors in the utilization of coping strategies as well as the psychological well-being. Data are from a ten year longitudinal study of older adult (60+), long-term (5 yrs+) survivors of cancer (breast, colorectal prostate). Key predictors include severity of illness, extensiveness of treatment, co-morbidities, and dimensions of personality. Important covariates include race, gender, and cancer type. Focal outcomes are coping and depression. Preliminary factor analysis confirm the factor structure of the "Big Five" personality index, which includes openness to new experiences, conscientiousness, extraversion, agreeableness, neuroticism. Reliability of the coping inventory sub-groups (planning, acceptance, venting, denial, social support, religion) was strongly confirmed with all alphas ≥ .749. Looking at personality and coping, extraversion (beta= .298) and neuroticism (beta= .429) were significant path coefficients of venting as a coping strategy, while conscientiousness (beta= -.247) was a significant path coefficient of social support. Further, conscientiousness (beta= -.479) and neuroticism (beta= .556) were significant path coefficients to depression. R-squares were greater than .25 for all equations. Descriptive and regression analyses provide a clear picture of the role personality plays in how survivors react to stressful events and how this may affect survivors' psychological well-being. Results indicate the importance of considering personality with how those coping with cancer handle stressful moments in survivorship and their psychological well-being thereafter.

### DISTRESS AND COPING AMONG OLDER ADULTS: THE INFLUENCE OF MEANING AND IDENTITY IN CONFRONTING A CHRONIC ILLNESS

S. Brown, G.T. Deimling, M. Laroco, *Sociology, Case Western Reserve University, Cleveland, Ohio*

In facing the stress of a chronic illness, the meaning an individual places on the event is important to understanding their experience. Guided by a symbolic interactionist framework, this study examines the mediating role that meaning of illness and adoption of cancer-related identities play in influencing the relationship between illness, and coping and distress of older adults who experience a chronic health problem. Data were collected from a sample of older adult (M age = 70 years) long-term (5+ years) survivors identified using a tumor registry from a major Midwest cancer center (n = 230). Constructed meaning of illness was measured using an 8-item scale (modified, Fife 1995). Reliability and factor analyses indicated a unidimensionality of this indicator ($\alpha = .70$). Correlation and OLS regressions were used to analyze relationships between illness meaning and identity variables, and outcomes of coping and distress. Positive meaning of illness is correlated with adoption of cancer survivor and ex-cancer patient identities and is negatively associated with identifying as a cancer patient or victim. Multivariate analyses show, individuals who attribute a less positive meaning to the illness experience report higher levels of depression ($\beta$ = -.19), but not anxiety. Finally, giving positive meaning to the illness experience is associated with using a fighting spirit ($\beta = .34$) as a coping strategy, but unrelated to cognitive avoidance and fatalism. Overall, while chronic illness may generate stress, the meaning and mode of identification that older adults adopt appear to influence their adaptation.

### ILLNESS REPRESENTATIONS OF ACUTE CORONARY SYNDROME PATIENTS: AN EXAMINATION OF NOVEL CAUSAL ATTRIBUTIONS

T.M. Luger[1], R. Martin[1,2], H.S. Reisinger[1,2], *1. University of Iowa, Iowa City, Iowa, 2. Iowa City VAMC, Iowa City, Iowa*

Patient illness representations (or common sense models) are theorized to influence behavioral intentions and actions, in turn, influencing health outcomes (Leventhal, Brisette, & Leventhal, 2003). For patients with acute coronary syndromes (ACS), the illness representations influencing behavioral intentions and actions are especially important as these patients must implement various behavioral changes after a cardiac event, such as avoiding smoking or increasing exercise, in order to improve their health and avoid subsequent cardiac problems (Leon et al., 2005). An under-examined population of 433 veterans (1/3 African-American) with ACS were interviewed about their experiences, current health behaviors, and causal attributions of ACS. A Q-sort qualitative analysis (McKeown & Thomas, 1988) found that, apart from causal attributions to CHD risk factors like family history and poor diet, novel causal factors emerged, including alcohol consumption, provider medical mistakes, medication non-adherence, and PTSD. Identifying and addressing these factors post-ACS has the potential to improve CHD behavioral intentions and health behaviors in this population.

### THE EFFECTS OF AGE AND HEALTH ON PATIENT-PHYSICIAN INTERACTION IN TREATMENT DECISIONS FOR HIGH BLOOD PRESSURE

C.C. Gayer, J.M. Jacobs-Lawson, *Gerontology Center, University of Kentucky, Lexington, Kentucky*

Previous research has demonstrated the importance of shared decision making among patients and physicians when making treatment decisions. The present study examined the effects of age and self reported health status (SRHS) on hypertensive older adults' participation in the treatment decision making process for high blood pressure (HBP). Participants (aged 55-99; n= 267) identifying themselves as having HBP in the 2008 Health and Retirement Study completed a module regarding patient-physician interaction. Analyses consisted of a series of 2 (age) x 2 (SRHS) mixed ANOVA's. The dependent variables included patient involvement in treatment planning and decision making, as well as patient-physician interaction regarding treatment progress and options for their HBP. Analyses revealed that young-old patients (55-75) were more frequently asked their ideas about treatment, and about problems with medication and its effects, as well as helped to set eating and exercise goals than the older patients (75-99). In addition, analyses revealed a significant age by SRHS interaction on frequency of discussing health habits with the physician. For older patients SRHS was not related to the frequency of discussing health habits with their physician. For younger patients however, healthy individuals were more likely to be asked about health habits than those in poorer health. Analyses also showed that patient involvement in treatment decisions is related to health behaviors and outcomes. These results suggest that the shared decision making model, which emphasizes patient empowerment, may be underutilized in the clinical setting. Implications for clinical practice, medical ethics, and medical decision making are discussed.

### TEENAGE BODY HABITUS AND INCIDENT HEART FAILURE IN COMMUNITY-DWELLING OLDER ADULTS

E.B. Levitan[1], M. Mujib[1], M.A. Feller[1], L. Jones[1], P. Sawyer[1], A. Ahmed[1,2], *1. Department of Epidemiology, University of Alabama at Birmingham, Birmingham, Alabama, 2. University of Alabama at Birmingham, Birmingham, Alabama*

**Background:** Obesity is a risk factor for heart failure (HF) in older adults. However, it is unknown whether teenage body habitus may predict incident HF in older adults. **Methods:** Of the 5795 community-dwelling adults ≥65 years in the Cardiovascular Health Study, 5521 were free of baseline HF, and 5293 had data on baseline body mass index (BMI) and teenage body habitus, self-reported as "heavier than average", "average", and "thinner than average". Multivariable-adjusted Cox-regression models were used to estimate the association of heavier-than-average teen body habitus with centrally-adjudicated incident HF during 12 years of median follow-up. **Results:** Participants had a mean (±SD) age of 73 (±6) years and BMI of 27 (±4) kg/m$^2$; 58% were women and 15% were African American. Overall, 1790 (34%), 3011 (57%) and 492 (9%) older adults had heavier-than-average, average, and thinner-than-average teen body habitus respectively. Among those with heavier-than-average teen body habitus, 45%, 41% and 14% had baseline BMI of 18.5–24.9, 25–29.9, and ≥30 kg/m$^2$. Incident HF occurred in 20% and 21% of participants with and without heavier-than-average body habitus as a teen respectively (unadjusted hazard ratio, 0.94; 95% CI, 0.83–1.07; P=0.38 and multivariable-adjusted hazard ratio, 0.99; 95% CI, 0.87–1.13; P=0.88). Heavier-than-average teen body habitus had no association with all-cause mortality or other cardiovascular outcomes. **Conclusion:** Nearly half of the community-dwelling older adults with self-reported heavier-than-average teen body habitus achieved normal BMI, which may explain the lack of the association between teen body habitus and incident HF in older age.

### TREATMENT ADHERENCE, OPTIMISM, AND SELF-EFFICACY IN OLDER AFRICAN AMERICANS WITH HEART FAILURE

C.J. Burant[1,2], R.A. Siders[1], G. Graham[1], R. Boxer[1], *1. Case Western Reserve University, Cleveland, Ohio, 2. Lewis Stokes VA Medical Center, Cleveland, Ohio*

African Americans (AA) have higher morbidity, mortality rates, more functional decline, and more hospitalizations associated with heart failure (HF) as compared to other races. Adherence to medication and low sodium diet are important to controlling symptoms, reducing hospitalizations, and improving quality of life. The current study examined the role of optimism, pessimism, self-efficacy, and quality of life in AA patients' adherence to HF treatment regimes Data were collected from 35 older AA subjects at a HF clinic at a large Midwest university affiliated hospital. A medium effect size of <.30 for correlations was used to determine potential relationships among the variables of interest. The mean age of the cohort was 76 years (SD=7.8), 72% women, 57% were New York Heart Association (NYHA) class II, and 37% NYHA class III, 83% had systolic HF with a mean ejection fraction of 41%. Adherence was measured by the Heart Failure Compliance Questionnaire which has three components: level of importance, level of difficulty and frequency of adherence. The level of importance in adherence to medication and dietary restrictions was positively associated with self-efficacy (r=.36). The level of difficulty in adherence was negatively associated with self-efficacy (r=-.37), optimism (r=-.31), and the Kansas City Cardiomyopathy Questionnaire (KCCQ) quality of life domain score (r=.-43). Frequency in adherence was positively associated with self-efficacy (r=.47), optimism (r=.31), KCCQ scores of self-efficacy (r=.37) and quality of life (r=.34). Preliminary findings suggest that in AA patients with HF, adherence is influenced by optimism and self-efficacy and may impact quality of life.

## SESSION 2095 (PAPER)

## IMPROVING QUALITY OF CARE FOR PERSONS WITH DEMENTIA

### ADAPTING TO THE CHANGING NEEDS OF PERSONS WITH DEMENTIA: THE EXPERIENCE OF HOSPICE SOCIAL WORKERS

J. Ataie, *Portland State University, Vashon, Washington*

With strong historical roots in a strengths-based and person-in-environment approach to practice and a longstanding tradition of working in a multi-disciplinary framework, the social work profession is uniquely positioned to take a leadership role in creating a continuum of interventions and services that addresses the changing needs of persons with dementia throughout the progression of the disease (Adams & McClendon, 2006). The present study explored the subjective experience of hospice social workers working with aphasic individuals in the later stages of dementia and investigated how access to, training in, and use of a 'mobile multi-sensory stimulation toolkit' impacted that experience. Semi-structured interviews were conducted with twenty social workers (seventeen women; three men). Interviews lasted between 30 and 60 minutes and thematic analysis was used to analyze the data. Initial findings confirm the results of earlier studies reporting that health care professionals struggle with the many feelings that are brought to the surface when faced with the finite nature of human existence and experience working with individuals in the later stages of dementia as emotionally challenging and stressful (e.g., Beck, 1996). Participants reported coping strategies such as avoiding interactions and spending less time with individuals who seemingly are no longer able to have meaningful communications. However, using a 'mobile multi-sensory stimulation toolkit' assisted participants to construct and create meaningful relationships with this population which in turn resulted in an increase in time spent and facilitated a sense of well-being for both individuals with dementia as well as social workers.

### RISKS ASSOCIATED WITH ANTIPSYCHOTIC MEDICATIONS IN PERSONS WITH DEMENTIA

M. Clapsadl, J.N. Laditka, S.B. Laditka, J. Troyer, *Public Health Science, University of North Carolina at Charlotte, Charlotte, North Carolina*

Behavioral and psychological symptoms of dementia (BPSD) are commonly treated using antipsychotic medications. These medications carry substantial risks, including metabolic issues and hallucinations. Although these risks are recognized, medications are often given to people with disruptive behaviors in long-term care, especially in facilities that are understaffed or when staff are inadequately trained in non-pharmacological interventions. We reviewed evidence for pharmacological and non-pharmacological interventions for BPSD. Computerized searches using MEDLINE, PUBMED, Academic Search Premier, PsycINFO, CINAHL, Health and Psychosocial Instruments, and Sage Journals online were conducted. Studies included: qualitative studies; randomized trials; economic costs of pharmacological versus non-pharmacological treatments; environmental factors associated with problem behaviors and symptoms such as lighting, auditory, and visual issues; and benefits of non-pharmacological treatments. Thirty studies that addressed the criteria were identified. Non-pharmacological interventions for disruptive behaviors in dementia patients were associated with more positive outcomes in health and quality of life than pharmacological treatments. Antipsychotic medicines treated behaviors and symptoms, but did not improve health and quality of life. Studies indicated that treating BPSD pharmacologically may dramatically increase the economic burden of dementia. Doing so was associated with greater resource use, and high risks of institutionalization. Treating BPSD with non-pharmacological interventions may help avoid nursing home use, reduce caregiver stress, and lower overall costs. Individuals using antipsychotic drugs should be assessed frequently for medication errors, adverse events, and comorbidities. Findings suggest that the risks and benefits of using antipsychotic medicines, as well as options for non-pharmacological interventions, should be discussed with families.

### CONFLICTING NEEDS IN THE LTC ENVIRONMENT: EFFECTS OF MIXING PEOPLE WITH DIVERSE FORMS OF DEMENTIA

S.D. Koehn[1,2], J. Kozak[1,2], E. Drance[3,2], *1. Centre for Healthy Aging, Providence Health Care, Vancouver, British Columbia, Canada, 2. University of British Columbia, Vancouver, British Columbia, Canada, 3. Vancouver Community Mental Health Services, Vancouver, British Columbia, Canada*

Purpose of the study: This study explores the dynamic and constructed nature of the physical and psychosocial environments that contribute to needs-driven dementia-compromised (NDDC) behaviors of nursing home residents. We examine an opportunistic case study of a resident with fronto-temporal dementia ("Leonard") to explore how healthy others' perceptions of these environmental features were influenced by Leonard's behavior which, in turn, was influenced by people's perceptions of him as a "problem." Design and Methods: This critical constructionist case study emerged from the qualitative component of a larger mixed methods study. Data reported here were obtained through participant observations, individual interviews with staff and residents, and focus groups with family members and nursing staff. Results: Leonard's NDDC behaviors are not recognized as such by many of the healthy others with whom he co-creates his psychosocial environment. He is held responsible by staff and family members for compromising the creation of a homelike environment. He is also accused of dominating the physical environment over which he is deemed to have greater control than other residents. Implications: Leonard is a common scape-goat for many of the problems associated with the physical and social environment. His behaviors are not understood in the context of his less typical dementia and unmet needs; rather he is constructed as deviant, which undermines his selfhood as well as his quality of life. Education of staff and family members as well as broad organizational change is needed to address the issues underlying the problems for which Leonard is blamed.

### TRIADIC RELATIONSHIPS BETWEEN INFORMAL CAREGIVERS, PEOPLE WITH DEMENTIA, AND HEALTH CARE PROFESSIONALS

C. Quinn[1], L. Clare[1], R.T. Woods[1], T. McGuinness[2], *1. Psychology, Bangor University, Gwynedd, United Kingdom, 2. for dementia, London, United Kingdom*

Informal caregiving for a person with dementia often takes place within a health care triad, whose members include the caregiver, the care-recipient, and the health care-professional. However, there has been little research specifically exploring these triadic encounters. The aim of the current study was to explore how the members work together with this triadic context. Six spousal caregiving dyads and the three health care professionals who worked with the couples were interviewed. Transcripts of these interviews were analysed to form case studies, each containing the perspectives of the three members. Three case studies were selected to illustrate the similarities and differences in the views of the members of the triad. The processes emerging in these case studies were encompassed under an overarching dynamic process of 'negotiating the balance'. This describes the ongoing struggle of the members to balance the perspectives of the other members against their own needs. This balance could influence the success of the working relationship between the triad. Coalitions could occur as members worked together to tackle problems. This process of 'negotiating the balance' was a dynamic process as the balance was constantly changing. In conclusion, the findings of this study highlight the importance of exploring the perspectives of all members of the triad. This should help health care professionals to improve the quality of the support they provide to caregivers and care-recipients.

### CAREGIVER PERCEPTIONS OF THE EFFECTIVENESS OF DEMENTIA DRUGS

N. Chappell[1], K. Kobayashi[1], M. Malcure[2], *1. Centre on Aging, University of Victoria, Victoria, British Columbia, Canada, 2. University of British Columbia, Vancouver, British Columbia, Canada*

Despite the popularity of cholinesterase inhibitors (ChEI) for those with mild to moderate dementia, research is inconclusive. While evidence for the clinical effectiveness of the drugs is strongest for cognitive function, less for behaviours or mood, even here statistical effects are small and clinical significance questioned. Effectiveness from the caregivers' point of view has not been studied, either in terms of consequences for the patient or the caregiver themselves. Yet caregivers observe patients in an ongoing manner and Rockwood and colleagues find caregiver views differ from those of physicians. This paper reports the results of a study that interviewed caregivers (>400 to date in B.C., Canada) whose family member is taking ChEI. Face-to-face interviews take place at 6 months, when a clinical judgment is also made, lasting 1.5 hours. Data on 11 areas where the drugs might affect the patient (communications skills, being calmer, etc.) were factor analyzed, resulting in 1 domain with a summative alpha of .88. This scale is related to various aspects of the relationship between caregiver and patient (such as whether the patient can be left alone) but not others (such as interest in activities). The paper also identifies which caregivers are most likely to perceive the drugs as beneficial (such as those who are more religious and who were more distant from the care recipient prior to drug usage). The scale is unrelated to caregiver self-esteem, burden or depression. The paper provides, for the first time, a multi-item scale to measure caregiver perceptions of ChEI.

## SESSION 2100 (POSTER)

## LIFE COURSE CHANGE

### LIFE HISTORY ANALYSIS: A QUALITATIVE STUDY OF AGING AND HEALTH AMONG ELDERLY AFRICAN AMERICANS

S.K. Kwan, *UCLA, Los Angeles, California*

The aim of this qualitative study is to explore the concepts of aging and health among older African Americans residing in Los Angeles, California. The study focuses on culturally-relevant themes extracted from 15 transcripts and summaries derived from in-depth interviews with African Americans, aged 60 and older. Additionally, the analysis includes a comparison of those themes with a review of 24 published peer-reviewed papers that explore different cultural perspectives of aging and health among non-Hispanic White, African American, Asian and Latino elderly. The results showed that, in general, common themes shared by African American elderly are unique, culturally-influenced perspectives on independence and autonomy, family, education, and spirituality that are shaped by childhood experiences in large families and tight-knit, African American communities, as well as lifetime exposure to varying degrees of racial segregation and discrimination. These experiences influence personal views toward health in late life and resilience in coping with chronic health conditions. I conclude that aging and health are multi-dimensional concepts and that there are shared, universal perspectives between different racial and ethnic groups. The variations which exist between the African American and other racial and ethnic groups are due to cultural patterns and structural forces that are driven early childhood experiences and to exposure to racial segregation and discrimination. I suggest that researchers integrate these unique perspectives and experiences into clinical practice to optimize health-related behavior toward the management of health in late life for elderly African Americans.

### INTERGENERATIONAL COMPARABILITY OF A MEASURE OF SENSE OF CONTROL AMONG ADULTS

M. Inoue, T. Tran, *Boston College, Chestnut Hill, Massachusetts*

Purpose: This study examined the comparability of reliability and validity of a measure of sense of control between the baby-boomer (39-57 years old) and older generations (58-84 years old). Methods: We used the 2004-2006 second wave data from the Midlife Development in the United States to evaluate the intergenerational comparability of the 12-item sense of control scale developed by Lachman and Weaver (1998). Our analysis involved 1,954 boomers and 1,678 older adults. Distributions of gender and race were similar between the two groups. First, we compared the corrected-item total correlation of each item between the two generations. Second, we performed exploratory factor analysis (EFA) within each generation. Third, we tested a series of five measurement hypotheses using confirmatory factor analysis (CFA) between the two groups. Results: Our analysis revealed that nine out of 12 items from the original scale had acceptable inter-generational comparability. These items represented two dimensions: personal masterly and perceived constraints. Multi-group CFA revealed that two out of five measurement hypotheses were supported by the data. The nine-item scale had similar factor pattern and factor loadings between two generations. Item measurement errors, variance and covariance among the factors were not supported. These nine-items can be used to compare correlates of sense of control between generations, but not the latent means. Implications: Cross generational comparison of causes and effect of sense of control requires measurement invariance or comparability. This study suggests that future research should include sex and race in the study of measurement comparability of sense of control.

### DAILY ASSOCIATIONS BETWEEN QUANTITY OF NIGHTLY SLEEP AND MOOD ACROSS MIDLIFE: DOES THE LENGTH OF A NIGHT'S SLEEP BUFFER THE EFFECT OF STRESS ON DAILY MOOD?

M.E. Braun, C.S. Bergeman, *Psychology, University of Notre Dame, South Bend, Indiana*

The main objective of this study was to examine associations between daily sleep, daily stress and daily mood in middle-aged adults. Mid-life has been associated with many role changes and is rated as one of the busiest, as well as stressful, times of life. This is also when many changes in sleep take place. Few studies have investigated the relationship between sleep and mood using a mid-life age group. Seventy-two subjects aged 42 to 69, from the Notre Dame Study of Health and Well-Being, completed 56 days of daily diary measures that included daily quantity and quality of sleep, daily positive and negative mood, and daily stress. Multilevel modeling was used to examine the effects of stress on the daily sleep-mood relationship. As expected, on days when stress was high, negative mood increased and positive mood decreased when compared to days when stress was low. In addition, individuals who had the highest average total sleep time over the 56 days reported the least increase in negative mood on days when stress was high. On the other hand, for those who had the lowest average total sleep time, negative mood increased most when both daily stress was high and the amount of sleep obtained the night before was less than one's average amount. The analysis testing the effect of stress on the sleep-positive mood relationship was not significant. Future directions as it relates to an aging population will be discussed.

## LONGITUDINAL RELATIONSHIPS OF AFFECT AND FUNCTIONAL ABILITIES IN VERY OLD AGE

S.K. Wiegering[1], O.K. Schilling[1], O. Reidick[1], H. Wahl[1], F. Oswald[2], *1. University of Heidelberg, Heidelberg, Germany, 2. Goethe University Frankfurt, Frankfurt, Germany*

Although the classic Disablement Process Model (Verbrugge & Jette, 1994) regards affect as predictor as well as outcome variables of functional abilities in old age, research into the dynamics of this relationship is rare. So far, existing study findings with old and very old individuals suggest an impact of functional abilities on emotional outcomes as well as an influence of emotional variables on functional abilities. The present study aims to qualify this relationship with new data speaking to the reciprocal effects between affect variables and indicators of functional health. We used longitudinal data derived from the project ENABLE-AGE and the follow-up project LateLine, consisting of 450 aged persons at baseline (78.4% women, age 80 to 89 years), covering three measurement occasions (2002/3, 2003/4, 2009). Measures of positive and negative affect (PANAS), depression (GDS), as well as measures of functional abilities and independence concerning the management of daily activities (ADL) were analyzed by means of longitudinal structural equation modeling. Analysis of changes across the one-year time interval as well as across the 6-years interval supports both directions of the affect-function-relationship without any clear dominance. However, our results also suggest that nonlinearity may play a role, that is, adaptation to functional decline seems to reduce affective responses when functional losses accumulate within the individual.

## THE ROLE OF COGNITIVE RESOURCES IN EMOTIONAL AGING: AGE DIFFERENCES IN EMOTIONAL COMPLEXITY

S. Thomas, U. Kunzmann, *Department of Psychology I, Life-Span Developmental Lab, University of Leipzig, Leipzig, Germany*

Dynamic Integration Theory (DIT; Labouvie-Vief, 2003) posits an age-related decline in the complexity of emotional reactions to negative events. One reason for this decline has been thought to be the normative loss of cognitive resources in old age. In a first laboratory study, we investigated age differences in the complexity of emotional reactions by having young (n = 25, age range 21 – 31) and older (n = 23, age range 60 – 92) adults think-aloud about four negative emotion-evoking vignettes. On the basis of a coding system developed for the present study, two trained students evaluated the transcribed think-aloud responses according to emotional complexity. Consistent with DIT, older adults' reflections about their emotional reactions were less complex than those of young adults. In a second vignette-based study with young adults (n = 57), processing load was manipulated by a dual task paradigm. More specifically, participants reported the intensity of anger, sadness, and fear in response to each of four negative emotion-evoking situations using standardized adjective lists; in half of the trials, they were distracted by an additional resource-demanding task. Findings were again consistent with DIT, that is, under limited cognitive resources, emotional reactions became less complex (i.e., less likely to be a mix of the present three target emotions anger, sadness, and fear). Together the present evidence supports the idea that at least certain aspects of emotional complexity decline with age and the associated loss in cognitive resources.

## TIMING OF OFFSPRING DEATH IN PARENTS' LIVES AND LATE-LIFE COGNITIVE DECLINE. THE CACHE COUNTY STUDY

D. Bradford[1], K. Smith[2], S. Schwartz[1], J. Tschanz[1], T. Ostbye[3], C. Corcoran[1], K. Welsh-Bohmer[3], M.C. Norton[1], *1. Family, Consumer, and Human Development, Utah State University, Logan, Utah, 2. University of Utah, Salt Lake City, Utah, 3. Duke University, Durham, North Carolina*

The trauma of losing a child to death may result in chronic stress for parents. Such an experience may result in lifelong cumulative physiological stress effects on the brain, leading to faster cognitive decline in old age and increasing risk for dementia. We examined the association between child death and rate of cognitive decline in a population-based sample of 2841 elderly without dementia over age 65 at baseline, as a function of timing of a child death within the parent's lifespan. We collected up to four measurements of the Modified Mini-Mental State Exam (3MS), spanning 10 years. Subjects were 58% female, age M=75.5, SD=7.3 years, with education M=13.1, SD=2.8 years. Experience of earliest child death was operationalized via genealogical and vital statistics records from the Utah Population Database, classified as having occurred when subject was teen-30 years (n=204), 31-44 years (n=162), or 45-64 years (n=125) vs. no child death (n=2350). Linear mixed models of cognitive change controlled for age, gender, education, and APOE genotype. In each age category, elderly who had experienced a child death had faster cognitive decline than those who had not experienced a child death, with the fastest decline among subjects experiencing child death when teen-30 years (p=.0991). Cumulative stress associated with child death may result in faster cognitive decline in late life. There may be differential effects based on parent's age at child's death.

## PARENTING A CHILD WITH CHRONIC MENTAL ILLNESS-LIFE COURSE IMPACTS ON FINANCIAL AND OCCUPATIONAL WELL BEING AND LIFE ASPIRATIONS

S. Ghosh, *School of Social Work, Waisman Center, University of Wisconsin Madison, Madison, Wisconsin*

Research on caregiving in chronic mental illness (MI) has rarely explored the long term impact of caregiving on the financial and occupational well-being of caregivers. Most of the research has been cross-sectional, based and on purposive sampling. We use a prospective research design to assess changes in well-being as individuals become caregivers. We use three waves of the Wisconsin Longitudinal Study to study this phenomenon. Our analysis is based on data from 141 respondents with a son/ daughter with chronic MI (Bipolar and schizophrenia) and a comparison group of 1055 respondents without a child with any form of disability. Data is obtained across three life phases- early 30's, 50's and 60's, to assess changes in financial adequacy and occupational satisfaction over time. Results showed that while the caregiving and the non-caregiving group did not differ from each other in their early 30's, significant differences emerged in their 50's and 60's. The parents of children with MI reported lower rates of employment, aspirations and subjective rating of life achievements in their 50's. A decade later they also reported severe financial difficulty, a greater need to have a job that would provide health insurance and pension when compared to non-caregiving parents. The study brings into attention the chronic financial strains that caregiving parents may face over time and their changing life aspirations following the onset of disability in their children. Social workers have an important role to address the financial needs of these families to help them plan for the future.

### SOCIAL SUPPORT AND PERSONAL GROWTH: IS IT POSSIBLE TO FLOURISH FOLLOWING STRESSFUL EVENTS?

L. Pitzer, C.S. Bergeman, *University of Notre Dame, Notre Dame, Indiana*

Research has established that there is a potential for growth following adversity. Yet, not much attention has been given to the consideration of social support in explaining personal growth or decline following stressful events. Although other longitudinal studies have not found social support to be particularly predictive of growth following adversity, change in personal growth over time and the role of support has not been explicitly modeled. Associations between stressful events and personal growth over time were assessed to estimate how different supports may account for change in these associations. The sample included 337 participants (age range 53 to 92; M = 69.09, SD = 5.09) from the Notre Dame Study of Health and Well-Being (NDHWB) who reported experiencing one or more stressors over the previous 12 months (e.g., experienced a death, health problem; deterioration of living conditions; age range 53 to 92). Multilevel growth curve models revealed significant quadratic change in the association between stressors and personal growth. Interestingly, changes in personal growth not only depended on stressors (estimate = -.90, $p < .05$), but stressors also modified curvature in the personal growth trajectories (estimate = .44, $p < .01$). This association is further dependent on perceived support from friends; Slope (instantaneous rate of change; estimate = .07, $p < .05$) and curvature (estimate = -.04, $p < .05$). These results give evidence of how personal growth or decline after stressful events depends particularly on the level of perceived support from friends over time.

### THE IMPACT OF SOCIOECONOMIC INEQUALITIES AND LACK OF HEALTH INSURANCE ON PHYSICAL FUNCTIONING AMONG OLDER ADULTS

J. Kim, *The Ohio State University, College of Social Work, Columbus, Ohio*

Socioeconomic inequalities and lack of private health insurance have been viewed as significant contributors to health disparities. However, few studies have examined their impact on physical functioning across time, especially in later life. This study investigates the impact of socioeconomic inequalities and lack of private health insurance on individuals' growth trajectories in physical functioning over time. Data from the Health and Retirement Study (1994-2006) are used to estimate the effect of socioeconomic inequalities and lack of private health insurance on the initial level of physical functioning and its rate of change. Latent growth curve modeling (LGM) is used to analyze inter- and intra-individual changes in physical functioning over time as they varied according to socioeconomic status and health insurance coverage. Results show that income, assets, and having a private health insurance plan significantly predict level of physical functioning and rate of change in physical functioning over time. Interestingly, changes in economic status such as decreases in income and assets or lack of private health insurance have a greater impact on women's physical functioning than on men's. Although the initial level of physical functioning is notably lower among Blacks, they do not suffer more rapid declines in physical functioning than Whites. Antipoverty and health insurance policies should be enhanced to reduce the negative impact of socioeconomic inequalities on individuals' growth trajectories in physical functioning. Implications for practice and research are also discussed.

### AGE-RELATED TRAJECTORIES OF CHANGE IN PHYSICAL AND MENTAL HEALTH ACROSS THE ADULT LIFESPAN

J. Morack, F. Infurna, D. Gerstorf, *Pennsylvania State University, State College, Pennsylvania*

Maintaining health across the adult years is a key marker of successful aging. To help alleviate health declines in the future, it is pivotal to better understand the nature and correlates of normative health changes and the vast between-person disparities therein. Using seven-year longitudinal data (N = 8,500; M age at T1 = 44 years, range = 15 – 95; 52% women) from the Household, Income, and Labour Dynamics in Australia survey (HILDA), we applied growth models to examine trajectories of change for the physical and mental health components of the Short-Form 36 health survey. We also examined how gender, education, and personality relate to level and age-related changes in health. Our results suggest that measures of physical health already start to decline in midlife and show steep declines in old age. In contrast, measures of mental health were found to remain relatively stable across most of adult life with average decline not setting in before old age. Being a woman, lower education, neuroticism, and lower extraversion were each related to both lower levels of physical and mental health and steeper age-related declines. Our results illustrate prototypical rates of change for measures of physical and mental health and highlight the role of socio-demographic factors and personality in partially accounting for between-person inequalities. We discuss avenues for future research targeting possible pathways through which these health disparities occur (e.g., health behaviors).

### IS THE SOCIOEMOTIONAL SELECTIVITY THEORY AN ADEQUATE FRAMEWORK FOR THE UNDERSTANDING OF ASSOCIATIONS BETWEEN SOCIAL NETWORK CHARACTERISTICS AND LIFE SATISFACTION EVEN IN THE OLDEST-OLD?

A. Berg, ÅSA. Pedersen Wermelin, L.B. Hassing, B. Johansson, *Department of Psychology, University of Gothenburg, Gothenburg, Sweden*

Background: The Socioemotional Selectivity Theory, SST (Carstensen et al 1999) postulates that the perception of limitation in future time horizons across the lifespan causes changes in social preferences in order to enhance emotional regulation. However, the evidence of associations of the SST and actual time left to live in oldest-old samples is sparse. Aim: To investigate the importance of quality and size of social network for time-to-death related changes in life satisfaction (LSI-Z) over a 6-year interval. Method: The study uses data from the Swedish OCTO-Twin-study of relatively healthy individuals aged 80+ (N = 453). Results: MLM Growth curve analysis showed a significant decline in life satisfaction as individuals approached death. Quality and size of social network was significantly related to level, but not change in life satisfaction. There was a significant interaction between widowhood (used as a measure of social vulnerability) and size, but not the quality, of social network at wave 1. A large social network reduced the negative effect of widowhood on life satisfaction. Conclusion: Despite the convincing evidence for SST in younger old-age groups, our results question the validity of the SST in late life and highlight the importance of recognizing the specific condition and needs of the oldest-old.

### RESIDENTIAL TRANSITIONS: A COMPARISON OF A YOUNG ADULT AND OLDER ADULT SAMPLE

J.A. Flinn, *Frostburg State University, Frostburg, Maryland*

Although residential transitions can occur at any point in the life span, they can sometimes be seen as infrequent, albeit significant, events for older adults (Choi, 1996; Patrick & Strough, 2004). For younger adults, these transitions are often viewed as more commonplace and developmentally appropriate (Arnett, 2000). This analysis focused on a comparison of younger and older adults residential transitions. Participants' information was taken from a larger database, including 136 younger adults (M = 19.22, SD = 1.30: 58 M, 78 F) and 81 older adults (M = 73.17, SD = 7.76: 38 M, 43 F). Correlation analysis indicated a significant relationship between age and number of residences in the past 5 years, r(212) = -.26, $p < .01$, with younger adults experiencing more residential transitions than older adults in that time period. Yet despite this current period of stability, older adults were more likely to have experienced residential transition in their lifetime than younger adults, F(1, 210) = 55.99, p<.05. Finally, when evaluating a problem-solving vignette addressing the issue of residential relocation, there was no significant different between younger and older adults in rating the importance of the issue. In all, the findings seem to support the developmental pattern demonstrated in previous research. Additional results, including motivation for residential transition among older adults, will be discussed.

### LIFE EVENTS AND PERSONALITY INFLUENCING LONELINESS AMONG CENTENARIANS: FINDINGS FROM THE GEORGIA CENTENARIAN STUDY

R.B. Hensley[1], P. Martin[2], J. Margrett[2], M. MacDonald[3], L. Poon[4], *1. Psychology, The College of Saint Scholastica, Duluth, Minnesota, 2. Iowa State University, Ames, Iowa, 3. Kansas State University, Manhattan, Kansas, 4. University of Georgia, Athens, Georgia*

The purpose of this study was to analyze the role that both life events (life-time positive events and life-time negative events) and personality(Neuroticism, Trust, Competence, and Ideas) played in participants of the Georgia Centenarian Study. These variables were analyzed to determine whether they predicted loneliness. Analyses indicated that life-time negative events significantly predicted loneliness, β = .229, p. < .05. In essence, the higher the number of life-time negative life events, the higher the loneliness score. Moreover, Neuroticism, Competence, and Ideas, were all significant predictors of loneliness, β = .448, p. < = .001, β = -329, p. < = .001, β = .286, p. < = .001, respectively. The higher the level of Neuroticism and intellectual curiosity, the higher the level of loneliness, whereas the lower the level of Competence, the higher the level of loneliness. In addition, both life-time positive and life-time negative life events were significant predictors of Neuroticism, β = -.228, p. < = .05, β = .238, p. < = .05. The higher the number of life-time positive events, the lower the level of Neuroticism, and the higher the number of life-time negative events, the greater the level of Neuroticism. These results indicate that life-time negative events indirectly affect loneliness via Neuroticism. These results not only add to our understanding of the link between personality and loneliness, but also provide new insight into how life events influence loneliness as well.

### PERSON'S BELIEFS ABOUT DEVELOPMENTAL CHANGE

D. Grühn, Y. Cheng, *Psychology, NC State University, Raleigh, North Carolina*

Normative beliefs about personality development influence people's attitudes and behaviors towards different age groups. For example, do people believe that some attributes are more common for certain periods of the lifespan than for others? Do people expect changes in personality at certain life periods? There is a vast amount of research on attitudes towards older. Less is known, however, about attitudes toward different ages. Are adolescents, for example, perceived differently from young adults? To answer these questions, the authors investigated normative beliefs about personality development in young, middle-aged, and older adults. Participants specified the age-relevance for 1,017 adjectives covering a broad spectrum of personality characteristics. Age-relevance was determined by asking for each adjective whether or not it is typical for (a) any age decade from 0 to 99 years and (b) any 3-year-bin from 0 to 30 years. The pattern of findings differed for positive and negative person characteristics. Whereas the total number of ascribed positive characteristics peaked in young adulthood and declined thereafter, the number of ascribed negative person characteristics peaked during adolescence, remained fairly low during middle adulthood, and increased again in old age (70+ years). As a consequence, the most positive profile was ascribed to young olds (60 to 69 years), whereas the most negative personality profile was ascribed to the oldest old. Findings are discussed in the context of how normative beliefs about developmental change may change actual development.

### FAMILY SIZE MODERATES THE ASSOCIATION BETWEEN OFFSPRING DEATH AND RATE OF COGNITIVE DECLINE. THE CACHE COUNTY STUDY

M.C. Norton[1,5], D. Bradford[1], K. Smith[2], S. Schwartz[4], J. Tschanz[5], T. Østbye[3], C. Corcoran[4], K. Welsh-Bohmer[3], *1. Family Consumer & Human Development, Utah State University, Logan, Utah, 2. University of Utah, Salt Lake City, Utah, 3. Duke University, Durham, North Carolina, 4. Utah State University Department of Mathematics and Statistics, Logan, Utah, 5. Utah State University Department of Psychology, Logan, Utah*

A proposed mechanism for Alzheimer's disease (AD) is central nervous system injury through lifelong cumulative effects of stress. Death of a child is a non-normative experience often generating chronic stress. Offspring death has been linked with long-term increased risk for depression, mortality, malignancy, myocardial infarction, and cognitive impairment. In a population-based study of dementia, we followed 2841 elderly without dementia (58% female; age M=75.5, SD=7.3 years; education M=13.1, SD=2.8 years) with up to four measurements of the Modified Mini-Mental State Exam (3MS), over 10 years. Using genealogies and birth/death records from the Utah Population Database, we classified subjects as experiencing offspring death (n=491) vs. no offspring death (n=2350) prior to subject age 65, in "small" (1-2 children) vs. "large" (3+ children) families. Linear mixed models of cognitive change controlled for age, gender, education, and APOE genotype. Effect of offspring death was associated with significantly faster cognitive decline, but only among subjects with small families (p interaction = .002). Cumulative stress from offspring death may result in faster cognitive decline in late life. However, large families appear to provide some degree of buffering. Continuing work will examine timing of offspring death in terms of both parent's age and child's age at the time of the death of the child, as well as the effect of offspring death later in life.

## SESSION 2105 (SYMPOSIUM)

### NOVEL INTERVENTIONS TO DECREASE TRANSITIONS TO ACUTE CARE

Chair: *S.L. Szanton, School of Nursing, Johns Hopkins University, Baltimore, Maryland*
Discussant: *P. Archbold, American Academy of Nursing, Washington, District of Columbia*

A key objective of the public health agenda is to reduce unnecessary hospitalizations and hospital re-admissions. However, while most health care research is conducted in institutional settings, most decisions about managing chronic conditions that make older adults vulnerable to hospitalization are made by older adults within their home settings. This symposium highlights novel, interdisciplinary research and practice models implemented in older adults' homes. The four presenters included in this symposium are conducting studies or clinical practices in older adults' homes to prevent transitions between home and institutional settings. Dennison and colleagues present the Navigator study. This study intervention recruits African American older adults with heart failure (HF) while they are in the hospital for a HF admission and provides a home educational and behavioral intervention, including tele-health to improve self care and prevent repeat re-hospitalization. Szanton and colleagues present the CAPABLE study. This study intervention provides bio-psycho-social-environmental services to older adults with ADL limitations to prevent hospitalization, nursing home admissions, and falls. Ornstein and colleagues present lessons from the largest geriatric physician house-calls program in the U.S. This program provides complete medical and mental health care to older adults to prevent emergency hospitalization. Tanner and colleagues present the CHEERS study which reports risks among older adults that lead to poor transitions and loss of independence when living in the community setting.

### THE MOUNT SINAI VISITING DOCTORS PROGRAM: A HOME-BASED PRIMARY CARE PROGRAM SERVING THE URBAN HOMEBOUND

K. Ornstein[2,1], L. DeCherrie[1], T. Soriano[1], *1. visiting doctors program, mount sinai, New York, New York, 2. columbia university, new york, New York*

The Mount Sinai Visiting Doctors program, a joint program of Mount Sinai Medical Center's Departments of Medicine and Geriatrics, is a multidisciplinary teaching, research, and clinical care initiative serving homebound adults in Manhattan since 1995. Caring for 1,000 patients annually, the program's providers make more than 6,000 urgent and routine visits each year, making it the largest program of its kind in the country. Services include 24-hour physician availability, palliative care, social work case management, collaboration with nursing agencies, in-home specialty consultation, and transitional care coordination by nurse practitioners. The patients served are primarily frail elderly individuals with complex needs, many who have previously received inadequate or inconsistent medical care. The program is designed to reduce lengthy and unnecessary hospitalizations for the homebound. Program participation is associated with decreased symptom burden for patients, increased vaccination coverage and advanced directives documentation, and decreased burden and unmet needs for caregivers.

### NURSE-LED HEART FAILURE CARE TRANSITION INTERVENTION (THE NAVIGATOR STUDY)

C.R. Dennison, *School of Nursing, Johns Hopkins University, Baltimore, Maryland*

Heart failure (HF) affects over 5.7 million Americans and costs $37.2 billion annually, with African Americans (AAs) and older adults disproportionately affected. Deficiencies in quality exist for patients undergoing transition across HF care settings, resulting in conflicting recommendations regarding HF self-care and medication regimen, inadequate follow-up, and inadequate preparation to coordinate care. To address these gaps, we have developed an innovative care model to improve HF care transition. The HF care transition intervention (HFCTI) is delivered by a nurse-community heath navigator team to AAs with HF and their caregivers. HFCTI components include medication and symptom self-care support, telemonitoring, and a personal HF care record. In a randomized controlled trial, we are testing the effect of the HFCTI on care transition, HF knowledge, HF self-care, and healthcare utilization. Key learnings from the intervention refinement phase, which included patient focus groups, clinician stakeholder assessments, and telehealth device feasibility testing, will be presented.

### A MULTI-COMPONENT PILOT TO ENHANCE AGING-IN-PLACE CAPACITY FOR LOW-INCOME OLDER ADULTS

S.L. Szanton[1], E. Tanner[1], E. Agree[1], C. Boyd[1], C. Weiss[1], J. Guralnik[2], L.N. Gitlin[3], *1. School of Nursing, Johns Hopkins University, Baltimore, Maryland, 2. National Institute on Aging, Bethesda, Maryland, 3. Thomas Jefferson University, Philadelphia, Pennsylvania*

One significant health disparity is in low-income older adults' ability to safely "age in place." Increased risk of disability and decreased functionality of low-income homes lead to a wider gap between function and environmental stress than those of higher income. The Community Aging in Place –Advancing Better Living for Elders (CAPABLE) pilot is a client-centered, multi-disciplinary home-based intervention to increase capacity to "age in place" for low-income older adults. CAPABLE is comprised of a previously proven occupational therapy intervention (ABLE program), a client-centered nurse intervention and safety/modification handyman services. Each service synergistically builds on the others by increasing the participants' bio-psycho-environmental capacity to function at home. This is theorized to avert costly health utilization by increasing medication management, problem-solving ability, strength, balance, nutrition, and home safety, while decreasing isolation, depression, and fall risk. The goal of the pilot is to assess feasibility, titrate intervention dose, and develop tri-service coordination.

### THREATS TO INDEPENDENCE AND AGING-IN-PLACE AMONG HIGH RISK OLDER

E. Tanner, *School of Nursing and Center on Aging and Health, Johns Hopkins University, Baltimore, Maryland*

Adults care coordination is critical to improving transitional care, reducing admissions and maintaining independence in older adults with co-morbidities. The CHEERS study examines threats to independence when community-dwelling older adults lack comprehensive care coordination. The sample (n=553) is 76.1% female, 1.8% white, with a mean age of 78.5. Fifty eight% reported functional dependence; 61.5% lived alone; 91.4% reported ≥ 2 chronic illnesses and 36% were depressed (GDS-SF>5). Logistic regression indicated loneliness, family support, functional status and diabetes were significant predictors of depression. Those with increased functional dependence had an increased odds of depression (OR=1.5). In contrast, those with increased family support had lower odds of depression (OR=0.69). Loneliness, family support, functional status, and diabetes were related to depression in older adults at risk for poor transitions of care. Care coordination strategies to promote aging-in-place should be developed to assist older adults with such risks.

## SESSION 2110 (SYMPOSIUM)

### PHYSIOLOGICAL STATUS RELATED TO QUALITY OF LIFE IN OLDER ADULTS

Chair: *K.F. Tennant, Ohio University - Nursing, Athens, Ohio*
Co-Chair: *S.Y. Hawkins, Yale University, New Haven, Connecticut*
Discussant: *J. Uriri-Glover, Arizona State University, Phoenix, Arizona*

Most studies of life at older ages have found that a person's health is associated strongly with their quality of life (Gabriel & Bowling, 2004; Netuveli, et. al., 2005; Wiggins, et. al., 2004). All of these studies relied on respondent's self-reports of health status, functional limitation, activities of daily living and so forth, which leaves the possibility that some third variable was influencing the self-reports of both health and quality of life (QOL). This third variable may indeed be objective measures of physiological status such as blood pressure, glycemia, fatigue and cognition. Therefore, conducting collaborative nursing research that includes physiological measures along with health status can contribute to the body of gerontological knowledge and ultimately improve the quality of life of older adults. The purpose of this research symposium is to explore research related to a variety of physiological processes that impact the QOL of older adults. Two presenters in this symposium will discuss factors related to specific physiological challenges in vulnerable populations including: malglycemia in older adults with cancer and fatigue in rural elderly. The other two papers will explore the relationship between cognition and physical activity and the mother/daughter relationship in managing hypertension. All of these papers represent research conducted by participants of the Hartford Institute for Geriatric Nursing Summer Scholars Program. Research outcomes will be directed toward innovative interventions for geriatric nurses and interdisciplinary professionals to help older adults manage their health and enhance their QOL.

### MONITORING GLYCEMIC STATUS FOR INFECTION CONTROL IN OLDER ADULTS WITH CANCER

M.J. Hammer, *College of Nursing, New York University, New York, New York*

Patients with cancer are susceptible to infections due to immunosuppressive states from the malignancies and related treatments. Evidence is emerging about the contribution of abnormal glycemic status, newly termed malglycemia (defined as hyperglycemia, hypoglycemia, or increased glycemic variability), to infections and related complications in patients with hematological malignancies receiving hematopoietic cell transplantation. New investigations are evaluating the influence of malglycemia in other cancer populations. Older age is a risk factor for both malglycemia, particularly hyperglycemia, and infections. Furthermore, there is a higher prevalence of diabetes and cancer in older adults compared to younger groups. Ultimately, glycemic control may significantly contribute to infection control and prevention in patients with cancer, particularly among older adults with cancer. Understanding the many contributors to malglycemia and monitoring glycemic status in older adults with cancer may be essential tools for better infection control.

### THE LIVED EXPERIENCE OF UNEXPLAINED FATIGUE IN RURAL ELDERLY

K.F. Tennant[1], B. Clark[2], J. Gau[3], D. Russ[4], *1. Nursing, Ohio University, Athens, Ohio, 2. Ohio University, Athens, Ohio, 3. Ohio University, Athens, Ohio, 4. Ohio University, Athens, Ohio*

Fatigue is a common complaint among the elderly and is strongly associated with the loss of independence. Fatigue is subjective and quantified differently among studies. Therefore, comparative research between different instruments and the correlation between quality of life (QOL) measures and physical functions will help us understand the impact of fatigue on older adults. This pilot study used a mixed method design: a non-experimental, exploratory design and a qualitative, grounded theory approach. Data was collected from older adults (70+ years) using twelve functional assessment instruments including the Fatigue Severity Survey (FSS); the FACIT Fatigue Scale; and a qualitative interview (four open-ended questions) developed by the researchers. Data were analyzed using correlation and regression models to explore the relationship between fatigue scores and QOL measures. Preliminary results suggest that rural Appalachian older adults with higher scores of fatigue have a poor QOL.

### COGNITION AND PHYSICAL ACTIVITY LEVEL AMONG OLDER ADULTS IN CONTINUING CARE RETIREMENT COMMUNITIES

E.P. Howard, *1. Northeastern University, Boston, Massachusetts, 2. Institute for Aging Research Hebrew SeniorLife, Boston, Massachusetts*

Using 1,970 older adults residing in continuing care retirement communities, this project examined the interplay between cognitive status and physical activity level, identifying those willing to seek help. The largest stratum (50%) had good cognitive and physical activity traits. Phenotypes within this stratum were content individuals (25.6%), cognitive strivers (10.5%) and physical strivers (13.9%), with strivers interested in improving their performance. The second stratum was older adults with good cognitive and poor physical activity (45%). Three phenotypes in this stratum were sedentary (17.4%), cognitive strivers (7.3%), and physical strivers (20.3%). Sedentary individuals were content with their cognition and physical activity level and not interested in improvement programs. The final stratum was poor cognition (5%) with two phenotypes, cognitive strivers (2.4%) and resigned (2.6%) or not interested in improving cognition. Targeting older adults with interest in improving cognition and physical activity level, regardless of current status is supported by this analysis.

### TRANSITIONS IN OLDER MOTHERS AND ADULT DAUGHTERS: HOW HIGH BLOOD PRESSURE BEHAVIORS ARE MODIFIED

C. Shawler, *School of Nursing, University of Louisville, Louisville, Kentucky*

The purpose of this study was to examine effects of self-rated health, comorbid health conditions, and blood pressure on Body Mass Index (BMI) and low-salt diet adherence. The sample was older mothers (n=51) with high blood pressure (mean age 77+ 7.2) and their adult daughters. Measures for this analysis were the Cantril ladder, Charleson Cormorbidity Questionnaire (CCQ), BMI, and low-salt diet adherence. Dyadic data were analyzed using Actor-Partner Interdependence Model (APIM) with distinguishable dyad-based regression. Significant findings included actor effects for both mothers and daughters for CCQ and low salt diet, daughters' actor effect of self rated health and BMI, partner effect of mothers' CCQ with daughters' low salt diet and partner effect of daughters' diastolic blood pressure and mothers' low salt diet. Implications for research and clinical practice include the importance of acknowledging that high blood pressure management involves both members of the mother-daughter dyad.

# SESSION 2115 (POSTER)

## PRODUCTIVE ACTIVITY AND CIVIC ENGAGEMENT

### EVALUATION OF A REGISTRY OF OLDER VOLUNTEERS PARTICIPATING IN AGEING RESEARCH

N.M. Peel[1], N.A. Pachana[2], *1. The University of Queensland, Herston, Queensland, Australia, 2. The University of Queensland, St Lucia, Queensland, Australia*

The University of Queensland 50 + Registry provides a pool of potential older volunteers for participation in a diverse range of University-based research. Data from a prior survey of Registry researchers indicated that solicitations for participants came roughly equally from student researchers and academics. However, academic researchers were better placed to pay for Registry access costs. Similarly, data from participants showed they were very positive about their experiences, and appreciated the opportunity to contribute to research into ageing issues. However, having more participants in the data pool would boost participation rates while avoiding participant burnout. Two initiatives addressed the issues of better access for student researchers and a broader participant pool. Access to the Registry was made free, with costs of newsletters and minor personnel time gradually covered by commercial sponsorship of the newsletter. An unexpected benefit of moving solicitation of participants from direct mailout to simply responding to researcher "ads" placed in an informative and engaging newsletter was to give participants a greater ability to take control of their own participation. This also allowed participants to give the newsletter to others, thereby increasing research participation as well as requests to be added to the Registry. Maintenance of such research registries can be expensive and time-consuming; better models are clearly needed. Such Registries can not only enhance University-based research efforts, particularly for student-led research, but also involve the community more fully in the research process.

### DAILY ACTIVITIES OF URBAN, OLDER ADULT VOLUNTEERS: FINDINGS FROM THE BALTIMORE EXPERIENCE CORPS® TRIAL

J.M. Parisi[1], M. Carlson[1], Q. Xue[2], T. Seeman[5], L.P. Fried[4], E. Tanner[3], E.J. Tan[2], G. Rebok[1], *1. Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, 2. Johns Hopkins School of Medicine, Baltimore, Maryland, 3. Johns Hopkins School of Nursing, Baltimore, Maryland, 4. Columbia University, Mailman School of Public Health, New York, New York, 5. University of California Los Angeles, David Geffen School of Medicine at UCLA, Los Angeles, California*

Remaining active may potentially reduce disability in later adulthood. Individuals most likely to benefit may be high-risk older adults; including African American elders and those with less education; however, little is known about engagement within these populations. Within the context of Baltimore Experience Corps®, a volunteer program designed to increase physical, social, and cognitive activity, this research characterizes participation in activities for study participants prior to randomization to the trial. For these analyses, older adults (N = 675; M = 67 years, SD = 5.95) were selected if they completed the Lifestyle Activity Questionnaire and measures of global cognition (MMSE) and verbal performance (WRAT). Over the past year, the most frequently reported activities were daily activities (e.g., preparing food), watching television, and listening to radio. Participation in specific activities was significantly related to cognition, such that individuals demonstrating better performance on cognitive measures (MMSE and WRAT) reported taking courses and using a computer to a greater extent. Additionally, individuals with higher MMSE scores more frequently engaged in volunteering and work; whereas, those with higher WRAT scores more frequently discussed local or national issues. Furthermore, individuals with greater education participated in a wider variety of activities ($r = .14$, $p < .01$); whereas, individuals in poorer health (self-reported) reported less participation in activities ($r = -.20$, $p < .001$), as well as demonstrated less variety in choice of activity ($r = -.15$, $p < .001$). In conclusion, individual differences in cognition, health, and education may influence activity patterns in adulthood.

### PREDICTING PROSOCIAL ENGAGEMENT AMONG OLDER ADULTS IN THE HEALTH AND RETIREMENT STUDY

G. Harris[1,3], H. Shin[2,3], R.S. Allen[1,3], *1. The University of Alabama, Department of Psychology, Tuscaloosa, Alabama, 2. The University of Alabama, School of Social Work, Tuscaloosa, Alabama, 3. The Center for Mental Health and Aging, Tuscaloosa, Alabama*

Faced with an aging population, social services struggle to offer programs that encourage productive participation of older adults in society. Interest in understanding older adults' prosocial behavior is growing. According to an Independent Sector survey, 44% of adult Americans actively volunteer at a variety of organizations, and numerous Americans participate in informal helping behavior. However, little research has examined the characteristics of older adults who engage in these forms of prosocial behavior. Using data from the 2008 wave of the Health and Retirement Study, we sought to examine how demographic and psychological factors as well as micro and macro social factors impact informal helping and formal volunteering. A secondary data analysis of a sample of 3479 community dwelling older adults was conducted for this study. Results of two binary logistic regression analyses revealed a different pattern of factors predicting the two forms of prosocial behavior. Helping behavior and volunteering were more likely to be reported by males, participants with more education, those with higher self-rated health, better cognitive ability, those who attend church more frequently, participants with higher positive affect and participants who scored higher on an Extraversion personality factor. Helping, but not volunteering, was more likely to be reported by Caucasians (when compared with African Americans and participants reporting a race/ethnicity other than African American or Caucasian), younger respondents, and those with a greater sense of neighborhood social cohesion. Knowing the characteristics of people who engage in prosocial behavior may assist social services in recruiting potential helpers and volunteers.

### OLDER ADULTS' AND TEACHERS' PERCEPTIONS OF PARTICIPATION IN INTERGENERATIONAL COMMUNITY PROGRAMS

T.L. Young, M. Janke, *School of Aging Studies, University of South Florida, Tampa, Florida*

Intergenerational programs involving school age children can also benefit older adults and teachers. To maximum and increase the benefits of participation, it is necessary to understand older adults' and teachers' concerns related to adults' involvement in these programs. However, little is known regarding older adults' concerns and even less literature explores teachers' concerns with adults' involvement. Therefore, this study examined perceptions of teachers' and older adults' concerns related to their participation in an intergenerational program prior to and after completion of their participation. The sample included older adults (n=195) and teachers (n=58) involved in The Linking Intergenerational Networks in Communities (LINC) Project, a statewide collaborative program offered in seven communities in South Carolina. Descriptive analyses and t-tests were conducted to examine the data. Findings suggested that prior to program participation older adults' greatest concerns were related to their ability to carry out LINC activities, their attendance, and the youths' responsiveness. Teachers were more concerned about the adults' ability to carry out LINC activities, communication with them, and the students' responsiveness. At the end of the program, older adults reported the school environment and youths' behavior as the main problems associated with their involvement. Teachers reported students' responsiveness and the older adult's health and attendance as major problems during the program. No significant differences in means were found among teachers' assessments of concerns and problems over time. Implications for assessing and incorporating participants' concerns prior to program implementation and the impact of their perceptions on program efficacy will be discussed.

### REVISITING RACE AND GENDER AS CONTEXTS FOR UNDERSTANDING HOW RESOURCES AFFECT PRODUCTIVE ACTIVITY

B. McIntosh[1], N. Danigelis[2], *1. School of Business Administration, University of Vermont, Burlington, Vermont, 2. Department of Sociology, University of Vermont, Vermont*

Interest in elders' productive activity has grown over the last half-century (Maddox, 1963; Butler and Gleason, 1985; Freedman, 2007). Currently, more attention is directed toward paid work, but productive activity also involves unpaid work in the home (e.g., care giving) and unpaid work outside the home (e.g., volunteering) (Arno et al., 1999). Survey data from the 1986 Americans' Changing Lives Study (ACL) showed that time use demands fall differently on race and gender subgroups, however, and are dependent in part on available resources (Danigelis and McIntosh, 1993). Difference of means and OLS regression results from diary data in the 2006 & 2007 American Time Use Surveys (ATUS) identifies current productive activity patterns among older (aged 65+) white males (N=1,329), black males (N=155), white females (N=1,780), and black females (N=226). Specifically, white females spend the most time in all productive activities followed in order by white males, black females, and black males. This contrasts with the 1986 ACL findings where the order was white females, black females, black males, and white males. Once resources like health and income are controlled, overall productive activity comparisons show that, within gender, whites do more productive activity than blacks, but the difference is significant only for women. Within race, women are significantly more productive than men for both whites and blacks. The ACL data showed the race difference among women to be non-significant; all other findings agreed. Comparisons between ACL survey and ATUS diary data are discussed in terms of method, theory, and social policy.

### APPROACHING CIVIC ENGAGEMENT OF MINORITY ELDERS: FROM INSTITUTIONAL TO SOCIAL CAPITAL AND BACK AGAIN

L. Holley, K. Kosloski, *Department of Gerontology, University of Nebraska at Omaha, Omaha, Nebraska*

This presentation describes evaluation and responsive re-design that has driven evolution of a series of service learning projects intended to enhance civic engagement of minority elders over eight consecutive semesters since 2006. Supervised by the same professor, each semester self-directed student teams conducted projects with four nonprofit organizations; each organization serves a different minority (African, Chinese, Latino and Native Indian Americans). Per semester, total community participants ranged from 43 to 60 older adults and 39 to 64 children. The initial approach was institutional and informational; it engaged elders in focus groups that reviewed public information about

Medicare and Medicaid. Evaluation of outcomes indicated modest increases in elders' awareness and interest, but revealed barriers that had to be addressed antecedent to their civic engagement, e.g. elders were socially isolated, felt culturally irrelevant, and trusted few public institutions. These findings suggested redirection of interventions toward building relevance and "social capital" (McBride, 2006-7; Holstein, 1999; Skocpol, 1999; Verba, 1995). The next projects were social activities for the elders. Evaluation of the age-segregated social activities then led to the current and most effective intervention - intergenerational activity in which elders collaborate to transfer their ethnic culture to the younger generation. Although a different format was effective for each group, engaging older minority adults in intergenerational transfer of culture was effective in all groups. The final step in this phase of intervention is working with elders and the organizations that serve them to institutionalize their planning and evaluation processes and ensure sustainability of the intergenerational activity.

### PREDICTING VOLUNTEER PARTICIPATION IN HEALTH CARE SETTINGS AMONG SENIOR VOLUNTEERS IN KOREA

H. Shin, E.L. Csikai, *The University of Alabama, Tuscaloosa, Alabama*

The rapidly aging population in Korea includes increases among healthy older adults and older adults who need assistance. Older adults are encouraged to remain connected with their communities through volunteer programs as one way to enhance healthy aging and through these activities it may be possible to meet needs of older adults in various health care settings as well. However, little is known about the willingness of senior volunteers to work in such settings with older adults rather than in settings involving work with children and families. In this study, a face-to-face questionnaire was conducted with 90 senior volunteers (ages 61-84) at one Korean community center. Variables measured were willingness to volunteer in health care settings with older adults, such as in hospitals, hospices, and nursing homes, and the factors that influenced their preferences. Only 34.4% of the senior volunteers indicated that they were willing to volunteer in health care settings with older adults. In addition, those who were willing to volunteer in a hospital, hospice, or nursing home reported only a moderate level of willingness. Attitudes toward older adults and levels of fear/anxiety about death and dying were not significant predictors of willingness to volunteer in health care settings with older adults. The results of this study may provide insight into important factors to address in the development of strategies to involve seniors in volunteer activities and to meet increasing demands on the health care systems.

## SESSION 2120 (SYMPOSIUM)

### RELIGIOUSNESS AND SPIRITUALITY IN END-OF-LIFE CONCERNS

Chair: *J.H. Patrick, Psychology, West Viginia University, Morgantown, West Virginia*
Co-Chair: *D. VonDras, University of Wisconsin, Green Bay, Wisconsin*
Discussant: *B. Hayslip, University of North Texas, Denton, Texas*

Similar to other attitudes, beliefs and behaviors, religiousness and spirituality may change over time and in concert with life events. This symposium examines the ways in which religousness and spirituality influence coping with normative and non-normative life events related to end-of-life concerns. Thus, this collection of papers discusses the theoretical underpinnings of religiousness as a coping resource, normative age differences in the way religiousness mediates death anxiety, and the ways in which religiousness influences adults in non-normative roles, including veterans and caregiving grandparents.

### SPIRITUALITY AND RESILIENCE AMONG DISABLED VIETNAM VETERANS

E. Covan, *Health and Applied Human Sciences, UNC Wilmington, Wilmington, North Carolina*

Vietnam veterans and wise therapists who treat them for Post-Traumatic Stress Disorder report that resilience following combat induced trauma depends on social connections with those who have shared similar experiences. Veteran expressions of spirituality reflect social engagement as discussed by Stancza and Miller in their work on spiritual and social transformation in Mainstream American Religious Traditions (2004). Aging veterans attend reunions and organize pilgrimages to Vietnam Memorials to foster connectivity. Life histories of a small sample of veterans will be discussed to explain why hospitalized strangers who complete treatment programs leave as "surviving therapy brothers," anxious to bear witness and to devote the rest of their lives to helping other veterans. How such resilience persists, even among veterans who are considered to be 100% disabled by United States Department of Veterans Affairs and among those who are terminally ill, will be discussed.

### ATTITUDES AND PREFERENCES OF AFRICAN AMERICAN CUSTODIAL GRANDPARENTS ON ADVANCE CARE PLANS

C.S. Huang[1,2], M.R. Crowther[1,2], R.S. Allen[1,2], *1. Department of Psychology, University of Alabama, Tuscaloosa, Alabama, 2. Center for Mental Health and Aging, University of Alabama, Tuscaloosa, Alabama*

Studies show that African Americans are less likely to make advance care plans than Whites. This tendency is also true of African American custodial grandparents. With the rapid increase of this population, there is a need to better understand the role of caregiver status and culture in advance care planning. The present study examined advance care plans among 22 female African American custodial grandparents (mean age=55). We found that 74% have plans regarding who will provide care for grandchildren if they become incapacitated but only 11% had a living will completed. None had discussed ACP with pastors; and only 21% with physicians. The findings suggest that custodial grandparents think about advance care plans but need assistance discussing a plan and subsequently implementing a plan. Methods to enhance advance care plans for this population along with culturally sensitive methods to increase the utilization of advanced care plans will also be discussed.

### RELIGIOUSNESS, RELIGIOUS DOUBTS, AND DEATH ANXIETY AMONG ADULTS

J. Henrie, J.H. Patrick, *Psychology, West Virginia University, Morgantown, West Virginia*

Consistent age and gender differences in death anxiety have been demonstrated, with females (e.g., Harding et al., 2005) and younger individuals (e.g., Rasmussen & Brems, 1996) having higher death anxiety. Using three groups, younger adults (N = 523, 73.8% female, age 18 to 30 years, mean age = 20.05), middle-aged adults (N = 89, 79.8% female, 31 to 56 years, mean age = 46.57), and older adults (N = 44, 75% female, 56 years or older, mean age = 62.82), two hierarchical regressions were conducted to determine if those relations were mediated by religiousness and spirituality. The relations were partially mediated. Religious beliefs and doubts were significant predictors in both regressions. Organizational religiousness was only significant when using the DAS-E (Templer et al., 2006). Spirituality and religious meaning were not significant in either regression. Results are discussed in terms of age differences in the use of religiousness/spirituality as a resource.

## SESSION 2125 (SYMPOSIUM)

### SITUATING STIGMA IN THE SOCIAL CONTEXT OF SENIOR HOUSING

Chair: *J.K. Eckert, Center for Aging Studies, University of Maryland, Baltimore County, Baltimore, Maryland*
Discussant: *M. Ball, Georgia State University, Atlanta, Georgia*

Stigma and the Cultural Context of Residential Settings for the Elderly is a large-scale, ethnographic study (NIA funded) examining the experience and social construction of stigma in seven diverse senior housing settings in the Mid-Atlantic region of the U.S. Moving to restricted senior housing settings (active adult communities, IL, AL and CCRCs) is on the rise and is often associated with circumstances that may be potentially stigmatizing, e.g., not being able to live alone and/or maintain one's home because of physical or cognitive decline. One goal of multi-level senior housing is to soften the potentially negative effects of stigma associated with physical and cognitive decline by fostering aging in place as care requirements change. While the provision of multiple levels of care in one setting offers the promise of aging in place, it also creates personal and social challenges for residents who struggle to manage conditions that may threaten their autonomy and residential stability. This symposium examines how older adults define stigmatizing traits in themselves and others and how such traits influence social dynamics and personal behaviors in three types of settings: an active adult community, IL with AL, and CCRC. While guided by the theoretical frameworks of Goffman, Link and Phelan among others, the focus of the study is to identify the emergent definitions and components of stigma operating in these settings. Understanding the social construction of stigma in specialized adult settings offers the possibility of improving the ability of residents, family and staff to counter their negative effects.

### 'I WOULDN'T SAY THEY'RE SENILE; IT'S OLD AGE' – DIMENSIONS OF STIGMA IN SENIOR HOUSING

A. Frankowski[1], E. Roth[1], J.K. Eckert[1], L. Morgan[1], R. Rubinstein[1], S. Zimmerman[2], *1. UMBC, Baltimore, Maryland, 2. Univ of North Carolina, Chapel Hill, North Carolina*

Contemporary theorists, building on Goffman's classic definition of stigma as a spoiled identity with 'marked' individuals being easily discredited or discreditable, consider the process of stigma to be situationally specific, dynamic, complex, and nonpathological. Thus, as a socially constructed phenomenon, the consequences of stigma are a function of the meaning that the situation has for the people with valued and devalued identities. In this paper we explore the complexity of identifying stigma in situations where some social groups tolerate generalized societal stigmas while other social groups distance themselves from them. Focusing on residents, management, and direct care staff, we examine the stigma-oriented cultures of five senior housing sites – their interactional and symbolic systems – to explore the situational dimensions of stigma which are related to attitudes toward aging, dementia, and frailty; socio-economic status; and senior housing residents' transitioning to higher levels of care.

### "SWEETIE" AND THE SOUR EFFECT OF AGEISM IN LONG-TERM CARE

E. Roth[1], A.D. Peeples[1], J.K. Eckert[1], D.J. Dobbs[2], *1. Center for Aging Studies, UMBC, Baltimore, Maryland, 2. University of South Florida, Wesley Chapel, Florida*

Ageism is perhaps the most insidious aspect of stigma in long-term care. It is a well-documented cultural and social reality in mainstream North American culture. And despite efforts to counteract this negative force in senior housing, especially efforts by the assisted living movement, these settings are not immune (Butler). At times infantilizing and condescending, a setting's rules, policies and practices often reinforce ageism. In this presentation we describe some of the patterns of ageist attitudes and behaviors exhibited by staff and administrators, and examine individual and group's varied interpretations and reactions. We also recognize the ways seniors generalize and deride young staff members. We will explore the impact ageism has had upon the people who work and live in these senior care housing settings.

### CUL-DE-SAC LIFE AND THE POTENTIAL FOR STIGMA IN AN ACTIVE ADULT COMMUNITY

L. Keimig, E. Roth, *University of Maryland Baltimore County, Baltimore, Maryland*

While active adult communities (AAC) for ages 55+ have developed rapidly in recent years, little is known about how individuals in these settings contend with changes in physical functioning and cognition over time. This research explores the experiences of neighbors aging together in an AAC. Our findings indicate that residents openly help one another in times of need, up to a point. When neighbors sense that their support may no longer be enough, they seek to involve adult children or nurses to arrange home care, or a move to assisted living. As such, a sense of vigilance exists in this setting that is at once caring and potentially stigmatizing. While living in a place where everyone is aging leads generally to tolerance and empathy for age-related changes; at times, decline may be met with denial, to defer relocation. Implications for policy initiatives concerning the reality of aging-in-place will be addressed.

### FROM CLASHES TO CLIQUES: TAMING THE DINING EXPERIENCE IN SENIOR HOUSING COMMUNITIES

M.C. Nemec, A. Frankowski, J. Schumacher, L. Keimig, R. Hrybyk, S. Goldman, *Center for Aging Studies, University of Maryland, Baltimore County (UMBC), Baltimore, Maryland*

A common transition in older adults' lives is relocation to senior housing communities where food and meal time represent a vital component of everyday life. Residents are thrust into communal dining rooms where they are faced with eating alone, an assigned seat, or choosing dining companions. Varied management styles, community rules, corporate regulations and the complexity of personalities complicate this experience. In this paper, we explore the social interaction in the dining room of five senior housing communities observed over a 2-1/2 year period. Our preliminary findings indicate that (1). Residents in multi-residential senior housing communities struggle with the loss of control, social anxiety, and potential alienation/isolation, all exacerbated by meal times; and (2). The actions of management, staff, and other residents result in residents feeling disempowered. The challenges of dining room interaction as well as suggestions for a positive meal time experience will be discussed.

### "IT'S PART OF THE BRAIN, IT'S NOT THE PERSON": CULTURAL DIFFERENCES IN STAFF PERSPECTIVES OF RACIAL STIGMA IN SENIOR HOUSING COMMUNITIES

B. Harris-Wallace[1], S. Goldman[1], E. Roth[1], A. Frankowski[1], S. Zimmerman[2], *1. University of Maryland, Baltimore County, Baltimore, Maryland, 2. University of North Carolina, Chapel Hill, Chapel Hill, North Carolina*

Scholars have examined at length the relationship between racial prejudice and stigma. A common theme within our work addresses the issues of cultural diversity and sensitivity in senior residential housing communities, and suggests that race/ethnic differences play a role in social relationships in these settings. Drawing from in-depth interviews with staff and administrators, this presentation will explore differing staff perspectives in how stigma related to race/ethnicity presents in various senior housing environments. Preliminary findings indicate that while staff members are encouraged to be understanding of resident prejudices, they are also acutely aware of the fear and negative labels/comments residents assign to minority groups. Conclusions address the extent to which stigmatizing interpersonal and intergroup traits that influence social dynamics in the setting can be reduced and suggests possible interventions to address potential and actual conflict areas, such as education and training.

## SESSION 2130 (PAPER)

## SOCIAL SUPPORT: CULTURAL VARIATIONS

### ETHNICITY AND DETERMINANTS OF COMMUNITY SUPPORT IN BRITAIN

R. Willis, K.F. Glaser, D. Price*, King's College London, London, United Kingdom*

In Britain, as in the USA, there is a persistent belief that minority ethnic groups provide greater levels of informal support than do the white majority population. Academics in Britain usually dismiss this as a stereotype. However, in the USA there is a tradition that cultural values of minority ethnic groups may be related to support transfers with neighbours and friends. Other determining factors for support transfers, notably socio-economic status, have also been noted to differ between ethnic groups. This study reports a secondary analysis of the Home Office Citizenship Survey. This is a nationally representative dataset of England and Wales, containing a minority ethnic boost sample. Respondents aged 55 and over who gave practical help and support to non-relatives, and who received help and support from non-relatives, were studied. The Andersen behavioural model was used to structure the statistical analysis. A four-stage logistic regression analysis was used to predict informal support transfer. Five of the minority ethnic groups had significantly lower odds of giving informal support to non-relatives when compared to the White British reference group, and controlling for need, predisposing and enabling factors. In contrast, only one minority ethnic group had significantly lower odds of receiving informal support from non-relatives. The direction of the ethnic group findings opposed the assumption that minority ethnic groups provide greater levels of community support in comparison to the White British population. Other significantly predictive factors were illness, disability, gender, socio-economic status, and marital status.

### THE CHANGING UTILIZATION OF SOCIAL SUPPORT AMONG COMMUNITY-DWELLING CHINESE OLDER ADULTS IN CHICAGO CHINATOWN – A QUALITATIVE STUDY

E. Chang[1], M.A. Simon[2], E. Wong[3], K.A. Skarupski[1], B. Wong[3], X. Dong[1]*, 1. Rush Institute for Healthy Aging, Rush University Medical Center, Chicago, Illinois, 2. Northwestern University Medical Center, Chicago, Illinois, 3. Chinese American Service League, Chicago, Illinois*

Background: Understanding the effectiveness of social support among Chinese older adults is instrumental in designing culturally appropriate service delivery programs to this population, who may be at higher risk of psychosocial distress. Methods: This study aims to qualitatively assess Chinese older adults' perceptions and utilizations of social support. Data were collected via four focus groups, each consisting of 9-10 Chinese elderly (age 60+) immigrants, residing in Chicago's Chinatown. Results: Similar to previous studies, we found that family support is identified as the most desirable relationship that occurs through elders' social network. However, among this population, support from family remains least satisfactory due to unfulfilled expectations. Some elders hesitate to turning to adult children for fear of becoming "an old burden" to their adult children, and fearing the loss of their parental role if they play the role of "a pauper." Still others are "active help seekers" in that they have replaced family support with community support. Thematic analysis further demonstrates that positive aspects of social support are often associated with community resources, whereas negative aspects are linked with family conflicts and disputes. Local community social service agencies that offer cultural and linguistic services become the immediate and primary resource of support when family care— albeit preferred— is not obtainable. Discussions: Future investigations are needed to understand the cultural and generational shift in social support and its relationship to mental health interventions in the immigrant Chinese aging population.

### SOCIAL SUPPORT AND ONSET OF DISABILITY AMONG COMMUNITY-DWELLING OLDER ADULTS

Y. Fujiwara[1], H. Yoshida[1], M. Nishi[1], H. Amano[1], H. Yoshida[1], S. Watanabe[3], T. Suzuki[2], S. Shinkai[1]*, 1. Research Team for Social Participation and Community Health, Tokyo Metropolitan Institute of Gerontology, Tokyo, Japan, 2. National Institute for Longevity Sciences, Ohbu, Japan, 3. Obirin University, Tokyo, Japan*

Background/Purpose : Previous studies have reported that social support (SS) independently predicts health outcome in older population. However, the association between type of SS and onset of disability remains unknown. Methods: We examined a prospective cohort of 312 initially non-disabled persons aged 65 years and over in urban Koganei city (1991), with an interview regarding SS. Eight items were used to measure received SS: 4 emotional support items, "Do you have the person who (1) listens to your private worries; (2) cares for you; (3) encourages you; (4) relaxes you?"; 4 instrumental support items, "Do you have the person (1) whom you can ask some help in a daily life; who provides care when you are sick in bed (2) for several days; (3) for a long time, (4)who lends you money?" The participants were asked to rate the degree of each type of support from family members (FM), and friends or neighbors (FN) ("yes," or "no," scored 0-4), respectively, demographic variables, medical history, health habits, and a medical examination. Cox proportional hazard models were used to examine independent association between four types of SS and onset of disability in basic activities of daily living (BADL), controlling for important confounders. Results: Of 312 subjects who responded to all items of the baseline survey, 105 persons had onset of disability, during a median follow-up of 7.7 years. Participants who answered 'poor SS (scored<3)' in instrumental SS by FM [n=71, hazard ratio (HR): 1.56, 95% CI: 1.05-2.31], emotional SS by FN [n=87, HR: 1.61, 95% CI: 1.08-2.39], and instrumental SS by FN [n=198, HR: 2.23, 95% CI: 1.43-3.48] had increased risk. Conclusion: SS, especially from friends or neighbors, might predict onset of disability in BADL among community-dwelling older adults.

### TOWARD A CONTEXTUALLY VALID MEASURE OF SOCIAL SUPPORT AMONG MIDDLE-AGED AND OLDER AFRICAN AMERICANS

D. Lehman*, Mather LifeWays, Evanston, Illinois*

A gap in the literature on social support among middle-aged and older African Americans and limitations in scales measuring social support among this group indicate a need for a new measure of social support that is sensitive to the cultural context in which this population lives. The literature indicates that social support is a multidimensional, fluid phenomenon, i.e., it has many dimensions and each dimension may have significance for individuals and communities at different periods in time and in different geographical locations. The specific goals of this research were to (1) identify the domains and dimensions of support among middle-aged and older African Americans, ages 38 to 65, that potentially moderate the effects of psychosocial factors on health outcomes; (2) use the research findings to construct a new, contextually valid scale that measures social support among this population in a southern urban community; and (3) document the methodological process by which the first two goals were achieved. The iterative research process consisted of thirty-one methodological steps in nine phases over a four-year period. Data obtained from a content analysis of popular magazines, five types of interviews, a semi-structured questionnaire, a visual assessment of the community, and participant observation were analyzed for recurrent themes associated with social support. The findings were used to construct scale items that reflect culturally-relevant domains and dimensions of social support that are not typically assessed in traditional scales.

## SESSION 2135 (POSTER)

## SPIRITUALITY AND RELIGION

### IS THE ABSENCE OF SPIRITUAL WELL-BEING AT THE FACIT-SP EQUIVALENT TO SPIRITUAL DISTRESS IN OLDER PATIENTS?

S. Monod, E. Martin, E. Rochat, A. Martin-Durussel, C.J. Bula, *Service of Geriatric Medicine, University of Lausanne, Lausanne, Switzerland*

**Objective**: Although initially developed to assess spiritual well-being, the FACIT-Sp is increasingly used to assess the other end of the spectrum, i.e. spiritual distress. This study intends to investigate whether the FACIT-Sp could really contribute to this aim in older patients. **Method**: Patients (N=135, 81.4±7.1 years, 68.3% women) aged 65 years and over, with MMSE score>19, admitted consecutively in post-acute rehabilitation were enrolled. The FACIT-Sp (12 items, score 0 to 48, high spiritual well-being defined as score≧36) was administered and comments were systematically retrieved. **Results**: Overall, 32(23.7%) patients had high spiritual well-being. FACIT-Sp internal consistency was good (Cronbach's $\alpha$ 0.85) and a confirmatory factorial analysis was consistent with Meaning and Faith proposed subscales. Qualitative analysis showed that negative answers (score=0) to "My illness has strengthened my faith or spiritual beliefs" (N=76/135) could equally reflect the absence of impact (49/76, 64.5%) or a negative impact (religious struggle, 27/76, 35.5%) of illness on faith. However, former patients had significantly higher FACIT-Sp scores than the latter (30.3±5.6 vs 20.9±7.9, P<.001). Similarly, among patients (N=73/135) with negative answers (score<3) to "I feel a sense of purpose in my life" those mentioning their "old age" to explain their answer (N=34/73, 46.6%) had higher FACIT-Sp scores than those who did not (26.4±7.7 vs 22.5±8.1,P=.02). **Conclusion**: The FACIT-Sp identifies older people with high spiritual well-being but could underestimate well-being in some older patients. Low scores on some items could have very different meanings and interpretation of FACIT-Sp global scores below the usual cut-off should be cautious.

### FAITH AND DOUBT IN LATER LIFE

E. Farrington[1,2], J. McNamara[1], L. Noreika[1], T. O'Connor[1], T. Smith[1], S. Tedesco[1], A. Futterman[1], *1. Psychology, College of the Holy Cross, Worcester, Massachusetts, 2. Yale School of Nursing, New Haven, Connecticut*

Using standard measures of religious commitment and questioning, we developed norms for individuals who demonstrate deep faith (i.e., high ends religiosity) and persistent doubt (i.e., high quest religiosity) using a random sample of 350 community-dwelling older adults in Worcester, MA. We then assessed the faith and doubt of another sample of 80 adults using both standard measures and open-ended interviews. This sample consisted of elders living independently and in assisted living facilities, as well as a sample of Jesuit priests. Differences observed between the young-old (60-75) and old-old (75 and older) noted in the random sample were replicated in the quantitative analyses and interviews of the new sample. In the young-old, a positive correlation (r=.42) was noted between measures of faith and doubt and young-older adults were apt to question their strong faith. By contrast, in the old-old a negative correlation (r= -.20) was noted between measures of faith and doubt, and old-older adults who expressed deep faith were less likely to question. In general, faith originates in childhood, parental and religious models, and is maintained in marital and family relationships. Questioning and doubt occurs in reading of scriptural text, conversation, and considerations of the meaning of life. In young adulthood, questioning deepens faith as one reflects on the meaning of life. In late life, those with deep faith frequently expressed resistance to questioning their faith for two reasons, 1) intense focus on religious activities themselves, and 2) that questioning "diminishes" religious participation.

### GENDER AND ETHNIC DIFFERENCES IN OLDER AMERICANS' USE OF PRAYER FOR MAJOR CHRONIC DISEASES

E. Tait, J.N. Laditka, S.B. Laditka, *Public Health, University of North Carolina at Charlotte, Charlotte, North Carolina*

Prayer for health is the most common complementary and alternative medicine (CAM). Little research examines ethnic and gender variation in prayer for chronic conditions. We examined prayer for health among women and men ages 50+ with arthritis (n=3,224), cancer (n=1,220), or depression (n=325) using data from the 2007 National Health Interview Survey (10,104 respondents). Analyses included multivariate logistic regression, accounting for the survey design and weighted for national representativeness. Ethnic groups were non-Hispanic African Americans, Hispanics, Asian Americans, and non-Hispanic Whites (Whites). Controls included age, education, marital status, health insurance, comorbidities, body mass index, and region. In adjusted results, among those with depression, the odds that women would pray for health were over 4 times greater than the odds for men (Odds Ratio, OR 4.10, 95% confidence interval, CI 2.02-8.31). Among those with cancer, African Americans and Hispanics were much more likely to pray for health than Whites (OR 8.20, CI 2.71-24.85; OR 3.02, CI 1.65-5.56, respectively), and women were considerably more likely to pray for health than men (OR 2.32, CI 1.65-3.27). Among those with arthritis, African Americans were much more likely than Whites to pray for health (OR 3.36, CI 3.37-4.97), and women were more likely than men to do so (OR 2.05, CI 1.66-2.51). Religion and spirituality are important to many older people. The results suggest considerable ethnic and gender variation in prayer for health. CAM is often substituted for conventional therapies; further research should examine if substitution is associated with variation in prayer for chronic diseases.

### THE EFFECTS OF RELIGIOSITY ON POSITIVE ASPECTS OF CAREGIVING AFTER CONTROLLING FOR COGNITIVE FUNCTIONING OF DEMENTIA PATIENTS

M. Stephens, K. Vo, F. Moise, V. Samarina, E. Rogers, R. Gomez, *Palo Alto University, Palo Alto, California*

In an attempt to understand the impact of caregiving, Resources for Enhancing Alzheimer's Caregiver Health II (Schulz et al., 2001), is a nationwide initiative to help understand the impact of Alzheimer's Disease on caregivers. This study proposes to examine the previously collected data looking at the effects of religiosity (positive coping, negative coping, and active participation) on positive aspects of caregiving after controlling for cognitive functioning of dementia patients. Six hundred and thirty-seven dementia caregivers were included in this study. Correlational analyses indicated that positive aspects of caregiving were significantly related to dementia patient cognition, positive religious coping, and religious participation. It was not significantly correlated with negative religious coping. The regression analysis examined 4 possible predictors of positive aspects of caregiving as described by the caregiver. The regression model explained 12% of the variance. The ANOVA results were significant p<.001 F(4,641)= 21.8. The MMSE score was significant (Beta=-.105, p<.005). This suggests that those carereceivers caring for adults with a lower MMSE score will report less positive aspects of caregiving. Positive religious coping was significant (Beta=-.374, p<.000). This indicates that after controlling for dementia patient cognition, there is still an effect of religiosity on positive aspects of caregiving, specifically positive religious coping. These findings suggest that those who have higher levels of religious coping have less positive feelings about caregiving. One possible reason for this is that those with increased burden of caregiving, may depend on religion more for coping.

### GRANDPARENT INFLUENCES ON COLLEGE STUDENTS' RELIGIOUS BELIEFS, BEHAVIORS, AND QUESTIONS: WHAT ROLE DOES DEMENTIA PLAY?

S. McFadden[1], A. Tornow[1], R. Subramony[2], *1. Psychology, Uniersity of Wisconsin Oshkosh, Oshkosh, Wisconsin, 2. Northern Illinois University, DeKalb, Illinois*

College students whose grandparents do not have dementia (GPnD; n = 91) and students with at least one grandparent with dementia (GPD; n = 86) completed surveys that included questions answered with brief paragraphs. Question 1 asked about "any influence—either positive or negative—of grandparents" on their religiousness and/or spirituality. Question 2 asked about "any religious questions" arising from the relationship with the grandparent. For both questions, the GPD group was asked to think about the grandparent with dementia while the GPnD group was asked to reflect on "your grandparent(s)." Question 3 asked the GPD group about how they think young adults are affected by grandparents with dementia; the GPnD group responded to a more general question about grandparents' influences on young adults. We explored grandparent influence using a grounded theory approach and QSR NVivo 8.0 qualitative analysis software. Results indicated that the perceived level of emotional closeness affected influence in both groups. In the GPnD group, emotional closeness produced trust, respect for grandparent role-modeling, and acquisition of knowledge and wisdom. The GPD group's perception of emotional closeness was associated with questions about life meaning, increased religious behaviors like prayer, and a sense of the need for recognizing life's human vulnerabilities and strengths. The GPnD group was more likely to state lack of influence or negative influence on their religiousness/spirituality, the latter due to grandparent pressure. Their responses about religious questioning were more general, whereas the GPD group stated more specific existential questions about life meaning.

### PROFESSIONAL GERONTOLOGISTS VIEW THE FUTURE OF RELIGION AND SPIRITUALITY

J.W. Ellor[1], S. McFadden[2], *1. School of Social Work, Baylor University, Waco, Texas, 2. University of Wisconsin-Oshkosk, Oshkosh, Wisconsin*

Sociologists and psychologists have studied religion for over 100 years, but "spirituality," a term associated by social scientists with "spiritual well-being" at the 1971 White House Conference on Aging, has gained popular appeal and research attention. This research used an online study of 458 members of the American Society on Aging and the National Council on the Aging asking about their perceptions of the future role of religion and spirituality in their work and personal lives (mean age = 56; range = 23-90). The sample included nurses, social workers, business persons as well as all of the major service delivery areas affecting older adults. Participants rated their personal present and future sources of meaning, with "relationships" with others drawing the strongest agreement for the present and future as a source of meaning (M = 6.64 and 6.66 on a 7-point Likert scale). Participants describing themselves as religious and spiritual (R+S; n = 252) differed significantly from those who are spiritual but not religious (SnR; n = 153) on t-tests comparing responses to items about their anticipation of future personal religious/spiritual acts and experiences, as well as their beliefs about whether religious organizations are prepared to meet religious and spiritual needs of baby boomers ($p < .001$). Neither group appears to believe that religious organizations are prepared to meet the spiritual and religious needs of aging baby boomers, although the SnR group disagrees significantly more strongly than the R+S group ($p < .001$).

### THE INFLUENCE OF RELIGIOUS ATTENDANCE, PRIVATE RELIGIOUS ACTIVITY, AND SOCIAL PROVISIONS ON HEALTH STATUS AMONG AGING MALE OFFENDERS

A.J. Bishop[1], G. Randall[2], *1. Human Development and Family Science, Oklahoma State University, Stillwater, Oklahoma, 2. Bradley University, Peoria, Illinois*

The purpose of this investigation was to explore the interaction of religious attendance (RA), private religious activity (PRA) and social provisions (SP) on perceived health status and a count of self-reported health conditions using data from 261 male offenders in Oklahoma state correctional facilities, aged 45 years and older. Hierarchical regression analyses were computed to examine the influence of perceived stress (PS), social provisions (SP), and depressive affect (DA), on self-reported health outcomes (e.g., perceived health and number of health conditions). We controlled for the influence of confounding variables age, race, education, and physical activities of daily living. The second block included predictors of interest, including all possible interactions. For models predicting perceived health status, two interactions were significant, RA x SP ($\beta$ =.21; $p < .05$) and PRA x SP ($\beta$ =.19; $p < .05$); R2 = .25 and .24 respectively. For self-reported health conditions, only RA x SP was significant ($\beta$ =-.14); R2 = .29. The results have implications relative to further exploration of buffering effects which may impact the overall health status of aging prison inmates.

### THE EFFECTS OF RELIGIOUSNESS ON PHYSICAL AND MENTAL HEALTH AMONG THE ELDERLY IN TAIWAN

H. Hsu, *Asia University, Taichung, Taiwan*

Objective: The purpose of this study was to examine the effect of different religious activities on self-rated health and depressive symptoms over time among the elderly in Taiwan, especially among those who experienced different degrees of disability, economic status, or life stressors. Method: A longitudinal data set from 1999 and 2003 that included 3,537 elderly Taiwanese people was used. Hierarchical linear modeling was used for analysis. Results: Religious activities or religious coping was not significantly related to self-rated health when controlling for other variables. Some religious activities, such as praying or reading scriptures, could reduce depressive symptoms over time, but more religious coping might accompany more depressive symptoms. For the elderly with more physical function problems, religious activities reduce depressive symptoms over time, and religious coping could be related to better self-rated health over time but also to increased depressive symptoms. Conclusion: Religious activities may be beneficial to mental health. The elderly should be encouraged to learn and use positive coping strategies when they face the stressors of old age.

## SESSION 2140 (SYMPOSIUM)

### POLICY SERIES SYMPOSIUM: SUBJECTIVE WELL-BEING AFTER AGE 50 IN THE USA AND UK

Chair: *J. Smith, University of Michigan, Ann Arbor, Michigan*
Discussant: *L. Nielsen, NIA, Bethesda, Maryland*

Science and policy makers have much to gain by comparisons of subjective well-being in populations from countries with different age structures, rates of population aging, and social systems. Recent concerns about population aging, for example, have triggered a debate about the efficacy of an aging society to optimize opportunities for people to experience quality years after retirement and at the end-of-live. This symposium provides findings relevant to this debate from two large nationally representative studies of older adults, the Health and Retirement Study (HRS) and the English Longitudinal Study of Ageing (ELSA). These studies are designed to maximize sampling comparability and minimize methodological differences. Speakers representing each study present cross-sectional findings from the 2008 waves for life satisfaction as well as perceived life quality, meaning, and social integration. These indices of subjective well-being provide evaluative information that complements social and economic indicators of life quality. At an individual level, subjective well-being is manifested in personal decisions, behavior and physiological functioning. New evidence about mind-body interactions suggest that subjective well-being has important long-term implications for brain activation, immune functioning, physiological dysregulation, morbidity, and longevity. We focus on age cohort differences and gradients of subjective well-being associated with health and wealth and discuss the similarities and differences found in the US and UK. The session also includes reports of new developments in examining the experience of well-being on a daily basis in large surveys and determining how daily activities contribute to overall satisfaction with life.

### WELL-BEING DISPARITIES IN THE HEALTH AND RETIREMENT STUDY: THE IMPORTANCE OF HEALTH, WEALTH, AND AGE

L. Ryan, D. Weir, J. Smith, *Institute for Social Research, University of Michigan, Ann Arbor, Michigan*

Subjective well-being (SWB) is both an important outcome for older adults, as well as an established predictor of health and longevity. Previous research finds that disparities in SWB exist, especially across various social gradients. The present study aims to examine and illustrate SWB disparities by age, health status, and wealth using data from the 2008 wave of the Health and Retirement Study (HRS), a large nationally representative sample of American adults aged 50+ (N=7069). We examine four indices of SWB to identify differential disparities in emotional well-being (Positive Affect, Negative Affect), cognitive appraisals of well-being (Life Satisfaction), and social integration (Loneliness). Higher SWB is associated with greater wealth and better health. Age shows more complex relationships, such that highest SWB was found in the young old (age 60-69), compared to the middle-aged and oldest old. Implications of these subjective well-being gradients for health and society are discussed.

### PREDICTORS OF WELLBEING IN THE ENGLISH LONGITUDINAL STUDY OF AGEING (ELSA)

M. Bartoszek, A. McMunn, A. Steptoe, *Epidemiology & Public Health, University College London, London, United Kingdom*

Relationships between socio-demographic and health-related factors and wellbeing were examined among 7,297 participants aged 50 plus from the English Longitudinal Study of Ageing (ELSA). Initial analysis was conducted using the Diener Satisfaction with Life Scale to measure wellbeing. Measures of health included subjective reports of health and physical functioning, as well as objective biomarkers of disease risk (c-reactive protein, fibrinogen and waist-hip ratio). Mean life satisfaction increased with age up to age 80, increased with increasing wealth, was lower among those who reported poor health or limitations in physical functioning, and was lower among women. Relationships between biological markers and life satisfaction were less clear, as unfavourable biological profiles were observed among respondents reporting low as well as high life satisfaction. These analyses will be extended to include the UCLA loneliness scale and a measure of quality of life, the CASP19, which includes measures of control, autonomy, self-realization and pleasure.

### WELL-BEING EXPERIENCED YESTERDAY: LINKING TIME, ACTIVITIES AND AFFECT IN HRS

J. Smith, R. Gonzalez, L. Ryan, S. Becker, D. Weir, *University of Michigan, Ann Arbor, Michigan*

Behavioral indicators of well-being, such as the time individuals allocate in a day to activities that provide pleasure, complement survey measures of life satisfaction and emotional well-being. In 2009, HRS conducted a mail-out survey on Health and Well-being with a representative subsample (approx. N = 5200). The survey included questions about the affect experienced yesterday while doing eight activities and the time spent on the activities. The activities ranked highest for negative affect were managing money, watching TV and being alone: Socializing and time spent at work or volunteering ranked highest for positive affect. Participants who reported more activities also reported that they smiled or learned something interesting yesterday. We report differences in activities and experienced well-being associated with socioeconomic status, marriage, and health. Findings from this study will shed light on differences in the time and activity investment strategies of older adults and how these contribute to subjective well-being.

### ECOLOGICAL MOMENTARY ASSESSMENT OF POSITIVE AND NEGATIVE AFFECT IN ELSA

A. Steptoe[1], E. Leigh[1], A. McMunn[1], M. Kumari[1], J. Nazroo[2], *1. University College London, London, United Kingdom, 2. University of Manchester, Manchester, United Kingdom*

Ecological momentary assessments provide information about experienced affect that is complementary to standard measures of well-being and distress. 4324 participants in the English Longitudinal Study of Ageing (mean age 64.3, range 52 to 79 years) were asked to rate momentary affect on 4-point scales at four times over a day: on waking, 30 minutes later, 7:00 pm and at bedtime. The completion rate was 90.8%. Experienced happiness was unrelated to age, gender, or socioeconomic status (SES), but was greater in married individuals and reduced in participants with limiting long-standing illness. Anxiety by contrast was greater in younger respondents, in women, and in lower SES individuals. Loneliness was associated with reduced positive and greater negative affect independently of age, gender, SES, marital status, limiting long-standing illness and CESD depression. These findings suggest that illness and loneliness are strong determinants of experienced well-being in the everyday lives of older individuals.

## SESSION 2145 (SYMPOSIUM)

### TECHNOLOGICAL INTERVENTIONS FOR MENTAL HEALTH AND MEMORY

Chair: *A. Shah, University of Alabama, Tuscaloosa, Alabama*
Co-Chair: *R.S. Allen, University of Alabama, Tuscaloosa, Alabama*
Discussant: *M. Marsiske, University of Florida, Gainesville, Florida*

As older adults are increasingly using technology, this symposium attempts to introduce gerontologists to preliminary research on innovative technological interventions to improve older adult's quality of life. Four individual papers discuss how technology is being used to accomplish this goal. The first study as part of this symposium presents the results of a pilot study assessing telephone delivered cognitive behavioral therapy to improve the quality of life of older adults. Such an intervention would have great promise in overcoming barriers to care faced by older adults such as transportation and mobility limitations. Presentation of the second study will begin with information on the development of an audio-based cognitive behavioral therapy intervention for depression in older adults and the preliminary results of a randomized controlled trial assessing its efficacy. The third paper is on a computer-based intervention for depression in older adults. The preliminary results of a randomized control trial assessing the efficacy of this intervention will also be presented following a discussing of computer-based interventions and the development of this intervention. These two interventions show potential value in increasing the availability of alternative treatments for depression in older adults. The final study presents pilot data assessing the effect of the Nintendo DS game Brain Age on cognitive functioning in older adults. Numerous games are marketed to older adults and advertised to improve cognitive functioning without the research and evidence to support these claims. If the game Brain Age is found to be effective at staving off cognitive decline, it would provide an alternate effective tool for older adults.

### PILOT STUDY OF THE FEASIBILITY OF TELEPHONE COGNITIVE BEHAVIORAL THERAPY FOR VULNERABLE, RURAL OLDER ADULTS

E. DiNapoli, *University of Alabama, Tuscaloosa, Alabama*

The specific aim of this project is to provide information on the feasibility of delivering telephone-administered cognitive behavioral therapy (T-CBT) to rural, vulnerable older adults. The present study investigated the effects of T-CBT on quality of life (QOL) in a low-resource, ethnically diverse and vulnerable sample of rural dwelling elders. This cost-effective treatment would overcome barriers to traditional treatment approaches such as mobility and transportation limitations. There is a paucity of data on T-CBT in this population, thus warranting a small pilot study to evaluate its effectiveness. In its very limited sample, the pilot data indicates that CBT can be delivered successfully via telephone medium, to older adults.

### DEVELOPING AND ASSESSING AUDIO-BASED COGNITIVE BEHAVIORAL THERAPY FOR DEPRESSION IN OLDER ADULTS

A. Shah, M.P. Morthland, F. Scogin, A. Presnell, *University of Alabama, Tuscaloosa, Alabama*

This section of the symposium will discuss a current study that uses an audio-based intervention, delivered to community-dwelling and primary care older adults who endorsed symptoms of depression. Older adults have limited treatment options due to the number of barriers in obtaining adequate depression treatment. The goal of this study was to increase alternative treatments options by developing and testing the efficacy of a self-administered audio-based cognitive behavioral therapy (ACBT) for older adults with depression. An audio-based treatment can circumvent some barriers that older adults may face because it is low-cost, easily reproducible, self-paced, and less reliant on vision. Older adults age 55 and above who met eligibility criteria were randomly assigned to either the immediate treatment or delayed treatment group. Assessments of mood were provided at baseline and posttreatment. The intervention development process and the preliminary results will be discussed.

### DEVELOPING AND ASSESSING THE EFFICACY OF COMPUTER ASSISTED COGNITIVE BEHAVIORAL THERAPY FOR DEPRESSION IN OLDER ADULTS

M.P. Morthland, A. Shah, F. Scogin, A. Presnell, *Psychology, The University of Alabama, Tuscaloosa, Alabama*

The issue of limited access to mental healthcare, particularly for older adults and individuals in remote locations, has been emphasized in the literature and by national health agencies (e.g., HHS, Office of Rural Health Policy, 2007). Computer-assisted therapies are the most recent form of self-administered treatments (SAT). There is ample support in the literature that SATs, in the form of bibliotherapy, are efficacious for treating depression in older adults. There is also evidence that computer-assisted therapy (CAT) is similarly efficacious. These results, however, have not been replicated using portable CATs and older adult samples as the focus of research. This section of the symposium will discuss a current study that uses a portable CAT intervention, delivered to community-living older adults who endorsed symptoms of depression. Preliminary results will be discussed as will the general topics of CATs and older adults' usage of technology.

### TEACHING OLDER ADULTS TO PLAY VIDEO GAMES: A PILOT STUDY

A.H. Presnell, *Psychology, University of Alabama, Tuscaloosa, Alabama*

This presentation will discuss a three phase piloting project of that focused on the use of the Nintendo DS device and Brain Age video game. The project used a group of students, a group of college faculty members, and a focus group of older adults to look at issues in the use of the device and game. The first two phases were used to design an introduction and group of helpful tips for use when introducing these products to older adults. The older adults served as a focus group to work out, more completely, the necessary information and support needed to use the device as a cognitive intervention. This paper will discuss the comments and information gained from the focus group and look at generalizations that can be taken from the project for future projects involving novel technology and the older adult.

## SESSION 2150 (SYMPOSIUM)

### TRANSITIONS OF INFORMAL CAREGIVING ACROSS THE CANCER TRAJECTORY

Chair: *Y. Kim, Psychology, University of Miami, Coral Gables, Florida*
Discussant: *T. Blank, University of Connecticut, Storrs, Connecticut*

Cancer care involves several transitions not only for the patients but also for family caregivers, influencing diverse aspects of their quality of life. This symposium deals with these concerns. It presents comprehensive views of addressing cancer care at different transitional points for diverse subgroups of caregivers. Dr. Given illustrates the efficacy of nurse-delivered intervention for advanced cancer patients and their family caregivers in symptom management during the transition from formal to informal caregivers. Dr. Raveis identifies patterns and predictors of engagement in cancer care for older minority survivors among family caregivers recruited from community centers in a metropolitan city. Dr. Lee also highlights the significance of cultural strength and resources in elderly cancer caregivers' quality of life, particularly for Asian American immigrants and refugees. Dr. Kim further pinpoints the importance of understanding caregivers' unmet needs at different transitional phases of cancer care, comparing unmet needs of bereaved caregivers with those of former caregivers 5 years after the relatives' cancer diagnosis. Discussant identifies the unique challenges each patient-caregiver dyad deals with across different transitions of cancer care. The findings from diverse subpopulations of patients and caregivers will be contrasted and compared. The implications of these findings for how best to approach cancer care across the disease trajectory, both to improve overall quality of life of patients and family caregivers, and to suggest future directions for research, will be also discussed.

### UNMET NEEDS OF BEREAVED CAREGIVERS COMPARED WITH FORMER CAREGIVERS 5 YEARS AFTER THE CANCER DIAGNOSIS

Y. Kim[1,2], C. Carver[1], R. Spillers[2], *1. Psychology, University of Miami, Coral Gables, Florida, 2. American Cancer Society, Atlanta, Georgia*

Caregivers' needs may vary across different phases of the illness trajectory. This study examined the extent to which bereaved caregivers experience their needs as not being met, compared with caregivers whose care-recipients were in remission, at the 5-year mark since their relatives' cancer diagnosis. The prevalent unmet needs categories among bereaved caregivers (n=179) were understanding health care system (65.4%) and rebuilding relationships with family members and close friends (63.7%); among former caregivers (n=1108), those were managing psychosocial (35.6%) and medical (26.9%) concerns. Among individual items, "taking care of one's own health" (44.7%) was cited most frequently as an unmet need among bereaved caregivers, whereas "taking part in their usual social activities" (29.6%) among former caregivers. Results suggest need for further investigation of demographic, caregiving, quality of life correlates of unmet needs at different transition phases of cancer care and development of programs to assist bereaved caregivers in meeting their needs.

### FAMILY CAREGIVING TRANSITIONS: ADDRESSING THE CARE NEEDS OF OLDER ADULTS DURING THE CANCER SURVIVORSHIP PERIOD

V.H. Raveis[1], J. Tobin[2], D. Kraus[1], K.E. Faber[1], R. Zhao[2], M. Carrero[1], I. Estrada[1], *1. New York University, New York, New York, 2. Clinical Director's Network, INC, New York, New York*

Cancer incidence increases dramatically with age; 60% of cancer survivors are 65 and older. Completion of active treatment does not end a cancer illness event, especially for older patients who face lengthier recovery and more complex rehabilitation. Restoration to pre-illness functioning is not always possible. In an ongoing study of older (60+), minority, post-treatment cancer patients and their family caregivers recruited from Community/Migrant Health Centers in the NY metropolitan area, the majority of cancer survivors were experiencing pain (60%) and fatigue (65%). Family helped with shopping (70%), housekeeping (68%), cooking (56%), medical appointment travel (62%), obtaining illness-related information (61%), home health care (34%) and managing formal care (31%). These findings indicate that the transition to survivorship does not end elderly patients' care needs. Cancer- and treatment-related symptoms can persist that require further care provision. However, this phase of the illness course has not been targeted in caregiver programs and services.

### TRANSITIONS IN CANCER CARE: FAMILY CAREGIVERS INVOLVEMENT IN SYMPTOM MANAGEMENT

B.A. Given[1], P. Sherwood[2], C.W. Given[1], A. Sikorskii[1], *1. Michigan State University, East Lansing, Michigan, 2. University of Pittsburgh, Pittsburgh, Pennsylvania*

Responsibility for cancer care has transitioned from formal to informal caregivers. The purpose is to describe an intervention designed to increase family caregivers involvement in cancer patients symptom management. The effect on caregivers emotional health is examined. Methods: Both caregivers and care recipients were recruited. Inclusion criteria for patients were ≥40 years of age, cognitively intact, diagnosis of a stage III or IV tumor. Dyads were randomized to a nurse-delivered intervention (N=88) versus a coach-led group (N=81). Data were collected at baseline, 10, and 16 weeks, including caregiver symptom involvement, depressive symptoms, burden, and patients symptom experience. Results: Caregivers with lower depressive symptoms provided assistance at 10 weeks if they received the nurse interventions. Significant effects were found only for sense of self-esteem ($p=0.04$). Conclusions: A nurse-delivered intervention increases caregivers' level of assistance in symptom management for those caregivers with low depressive symptoms.

### CULTURAL STRENGTHS AND RESOURCES THAT CONTRIBUTING TO ELDERLY CANCER CAREGIVERS' QUALITY OF LIFE

H. Lee, H.Q. Kivnick, *University of Minnesota, St. Paul, Minnesota*

Although cancer is the leading cause of death among Asian Americans (AA), research focused on caregiving issues in this population is scant. This study seeks to explore culturally-based strengths and resources that enhance elderly cancer caregiver's quality of life. Using qualitative research methods, we conducted face-to-face in-depth interviews with five elderly Korean and five non-Latino white caregivers who resided in the American Midwest. Grounded theory was used to analyze the data into thematic categories and dimensions, utilizing Atlas ti 5.0. Six major themes for cultural strengths and resources that contributing to caregiver's quality of life were produced. These are: (1) strong family support, (2) religion/spirituality, (3) positive outlook, (4) personal medical network, (5) extensive knowledge on cancer; and (6) support from health professionals. Identified strengths and resources can be served as baseline information to develop community and culture-specific cancer caregiving intervention strategies for specific cultural and ethnic populations of elders.

## SESSION 2155 (SYMPOSIUM)

### MILD COGNITIVE IMPAIRMENT (MCI) AND THE AGING BRAIN: MEASURING MEMORY IN THE SHADOW OF DEMENTIA

Chair: *S. Katz, Sociology, Trent University, Toronto, Ontario, Canada*

This paper traces the emergence of Mild Cognitive Impairment (MCI) over the past decade as a recent disease category and its current research focus as a potentially transitory stage between normal and pathological cognitive aging. MCI articulates psychogeriatric care with neuroscientific and pharmaceutical advances, public anxieties about cognitive deficits, and ethical controversies about cognitive enhancement in a 'hypercognitive' society. Hence MCI is also an ideal opportunity to think about the social patterns that connect aging and memory, the social determinants of health, and the biopolitics of dementia. Discussion considers the significance of these questions to the wider dialogue between scientific and cultural communities about growing older today and into the future, and the ways in which cognitive health is measured in relation to 'successful aging' and the image of a 'good old age.'

### DISABILITY AT THE CROSSROADS OF GERONTOLOGICAL PERSPECTIVES ON A GOOD OLD AGE

C.F. Mendes de Leon*, Rush University Medical Center, Chicago, Illinois*

Gerontology has always aspired to be an inter-disciplinary field of inquiry, which has motivated attempts from a variety of scholarly perspectives to define and measure a good old age. I will argue that the concept of disability has been at the crossroads of these attempts, as commonly used theoretical frameworks of disability illustrate. Disability has unified a broad spectrum of gerontologic research, which has informed clinical care, social services, and health care policy. However, its central place in gerontologic thinking has also led to highly variable and often poorly conceptualized definitions. This raises the question whether merely absence of disability is a satisfactory and sufficient definition of a good aging, or whether cultural or moral considerations are essential to inform the meaning and measurement of a good old age.

### WHAT IS A "GOOD OLD AGE"? LESSONS OF A LIFE-COURSE PERSPECTIVE

R. Settersten, J. Hendricks*, Human Development and Family Sciences, Oregon State University, Corvallis, Oregon*

Concepts and measures of a "good old age" are grounded in the life course. We compare notions of a "good old age" to parallel constructs in middle and early adulthood, probing commonalities and differences. We explore how a "good old age" is a culmination of prior life but somewhat beyond individuals' control. Old age is embodied with great possibility, yet realizing its potentials depends on some Big Ifs that cannot be predicted/controlled. These Big Ifs reflect life, health and resources: if we are healthy, can manage financially, live independently, and have relevant social support. As these contingencies come undone, so too does the prospect of a good old age. For individuals and families, a good old age—and the Big Ifs on the horizon—are conditioned by social class, familial/social resources, cohort and gender among other factors. Calculations of a good old age must consider social costs offsetting personal benefits.

### THE LONGEVITY DIVIDEND: CHALLENGES TO OUR UNDERSTANDING OF A GOOD OLD AGE

S. Olshansky*, University of Illinois at Chicago, Buffalo Grove, Illinois*

Questions about how a 'good old age' are measured from a biological perspective on aging include the search for explanation for why aging occurs from an evolutionary perspective; why there can be no death or aging genes; and why the absence of such genes means we have reason to be optimistic that interventions that slow aging are plausible. It is important to recognize that current efforts to attack the diseases associated with aging — and not aging itself — could inadvertently make us older longer, and that the time has arrived to focus our attention on slowing aging. The benefits of a successful effort to extend healthy life in this manner —referred to as the Longevity Dividend — will change our understanding and appreciation of old age.

## SESSION 2160 (SYMPOSIUM)

### AGING WITH OSTEOARTHRITIS: RESULTS FROM THE EPOSA STUDY

Chair: *L. Schaap, EMGO institute for health and care research, VU University medical center, Amsterdam, Netherlands*
Co-Chair: *D.J. Deeg, EMGO institute for health and care research, VU University medical center, Amsterdam, Netherlands*

Osteoarthritis (OA) is one of the most frequent causes of pain, loss of function and disability in older persons. In the literature, prevalence rates vary greatly and across countries. It is not known whether this variation is solely explained by differences in study design and OA definitions used or also by actual cross-national variations. Unravelling the mechanism behind this variation adds to understanding the causality of OA and may provide indications for preventive measures. Literature on the social consequences of OA is lacking. The European Project on OSteoArthritis (EPOSA) aims to study the determinants and consequences of OA in four population based studies across Europe (i.e. Progetto Veneto Anziani (Pro.V.A.), Italy; Longitudinal Aging Study Amsterdam (LASA), Netherlands; Ages in Peñagrande, Spain; Hertfordshire Cohort Study (HCS), United Kingdom; n=8601, mean age 72.7 [SD 8.4], 97.4% community-dwelling). During this symposium, the first results from the EPOSA study will be presented. Attendees will learn about OA definitions based on self-reported, clinical and radiographic information and how these different definitions correlate with physical functioning. The role of muscle strength in the association between BMI (dynapenic obesity) and OA will be discussed as well as the link between OA, diabetes and the metabolic syndrome. Also, the need for formal care in persons with OA will be investigated across countries. The discussant will consider the cross-national differences in each of the presentations.

### DEFINITIONS OF OA BASED ON SELF-REPORT, CLINICAL AND RADIOGRAPHIC INFORMATION

G. Peeters, *EMGO institute for health and care research, VU University medical center, Amsterdam, Netherlands*

Consensus regarding the diagnosis of Osteoarthritis (OA) in clinical practise or the international literature is lacking. Definitions that are available, such as the ACR and EULAR criteria, are complex and not yet the standard in population-based epidemiological studies. In EPOSA, post-harmonization algorithms were used to develop definitions for knee, hip, hand and non-specific OA based on self-reported, clinical and radiographic information (not all definitions were available in all countries). The definitions were validated by analysing the agreement and associations with known OA-related health outcomes. In two of the three countries, prevalences rates based on clinical judgement were lower than based on self-report (79% agreement). Associations with OA and various health outcomes were confirmed, but different effect sizes were found for the three OA definitions.

### HOW USEFUL IS A RADIOLOGICAL DIAGNOSIS OF OA WHEN ASSESSING PHYSICAL FUNCTION?

E.M. Dennison, *MRC Epidemiology Resource Center, University of Southampton, Southampton General Hospital, Southampton, United Kingdom*

While several studies suggest radiographic diagnosis of knee osteoarthritis (OA) is a poor predictor of physical function, it is unclear whether this also applies to hip OA. Data from EPOSA included self-reported OA, clinical judgement and radiography (where available). Physical function was measured using chair rises, walk test and tandem stand. Self-reported/ clinical diagnosis of OA at the hip or knee were associated with impaired chair stands performance ($p<0.001$), and summary physical performance ($p<0.01$). Radiographic hip OA was associated with chair stand performance (men $p=0.02$; women $p=0.008$), physical performance score ($p=0.009$ both sexes), tandem stands among men ($p=0.006$). However, a clinical diagnosis of OA at the hip or knee was the best predictor of all scores. While a clinical diagnosis or self-report of OA predicted physical performance better than radiographic diagnosis for hip OA, this distinction was less apparent at the hip than the knee.

### THE ASSOCIATION BETWEEN BMI, GRIP STRENGTH AND SELF REPORTED OSTEOARTHRITIS AMONG OLDER PERSONS

L. Schaap, *EMGO institute for health and care research, VU University medical center, Amsterdam, Netherlands*

Obesity is one of the strongest and best-established risk factors of knee OA, but the associations with hip and hand OA are unclear. Recently the term dynapenic obesity was introduced to identify persons with a combination of high BMI and low muscle strength, who have an increased risk of negative outcomes, such as decline in physical functioning. Whether dynapenic obesity is associated with an increased risk of OA has never been studied. Data from Italy and the Netherlands revealed a strong association between BMI and OA of the knee, hip and hand (e.g. OR for knee OA 1.7 (95%CI 1.4 – 2.0) in overweight persons and OR 2.1 (1.7 – 2.5) in obese persons compared to the reference group). Dynapenic obese persons (high BMI and low grip strength) were at greater risk of having OA than persons with a normal weight and a high grip strength.

### DIABETES, CHRONIC DISEASES AND OA ACROSS EUROPEAN COUNTRIES

S. Maggi, *National Research Council (CNR), Aging Branch, Institute of Neuroscience, Padova, Italy*

Clinical evidences of an association between diabetes and osteoarthritis are lacking. We investigated the prevalence of diabetes and its association with chronic diseases and osteoarthritis in 7215 subjects >65 years and older. The prevalence of diabetes was 10.3% in Italy (I), 10.3% in the Netherlands (N), 16.1% in Spain (S), and 6.4% in United Kingdom (UK) ($p<0.001$). Compared with non diabetic, cases were more frequently female in I, older in S, with higher BMI in all countries but S, less frequently smokers and drinkers. Compared to those without diabetes, cases were more frequently affected by cardiovascular, cerebrovascular and peripheral artery diseases, by cognitive impairment and depression symptoms. In I both self-reported and clinical osteoarthritis prevalence were higher in diabetic subjects than in controls, while in the other countries no differences were observed. These results show differences in diabetes prevalence and in the association between diabetes and osteoarthritis across European countries.

### ASSOCIATION OF OA WITH HOME CARE SERVICES ACROSS EUROPEAN COUNTRIES

A. Otero, *Department of Preventive Medicine and Public Health, Unit of Primary Care and Family Medicine, Faculty of Medicine, Universidad Autonoma de Madrid, Madrid, Spain*

The aim was to assess the association between osteoarthritis (OA) in elderly population with home care services received. Data from European Project on OA (EPOSA), belongs to Italy, Netherlands and Spain were studied (n=5364). Formal home care services was defined as receiving personal or domestic professional assistance. Clinical OA was defined in accordance with the EPOSA Project. Age, sex, marital status, education, and disability were used as co-variables. 12,3% of the population studied received formal care services at home with a big variation across countries (Netherlands 36,6%, Spain 12,3%, Italy 7%). A strong association between clinical OA and disability was observed. In the multivariate analysis the formal care received shows association with OA (OR=1.26; 95% CI:1.02,1.56), country, age, sex education and marital status. The variability observed of formal care received by the elderly populations in different countries needs insights in cultural aspects and in organization of their care systems.

# SESSION 2165 (PAPER)

## CARDIOVASCULAR DISEASE AND PREDICTORS OF OUTCOMES

### SERUM β2-MICROGLOBULIN AND CAUSE-SPECIFIC MORTALITY IN A GENERAL POPULATION OF OLDER ADULTS

S. Shinkai[1], Y. Fujiwara[1], H. Yoshida[1], M. Nishi[1], H. Amano[1], H. Yoshida[1], T. Suzuki[2], *1. Tokyo Metropolitan Institute of Gerontology, Tokyo, Japan, 2. National Institute of Longevity Sciences, Ohbu, Japan*

Background/Purpose: The clinico-epidemiological relevance of moderately elevated serum β2-microglobulin (β2-M) has not been examined extensively. We reported that the serum concentration of β2-M is a strong predictor for total morality in a general older population (Arch Intern Med 2008). This study determined the association between serum β2-M and cause-specific mortality. Methods: 1,048 initially non-disabled older adults aged 65-89 in two communities in Japan were followed for 8 years. Mortality was categorized into three major causes of death. The Cox proportional hazard model was applied for determining independent association between serum β2-M and mortality, controlling for demographics, conventional mortality risk factors (medical history, alcohol drinking and smoking status, BMI, Hb, Alb, HbA1c, total and HDL-cholesterol, systolic BP, usual walking speed), and renal function (proteinuria, eGFR, cystatin C) and inflammation measures (WBC, CRP, TNF-α, IL-6). Results: During a median follow-up of 7.7 y, 58 cancer, 82 cardiovascular and 71 other causes mortality occurred. As compared with individuals having β2-M concentrations of less than 1.6 mg/L (lowest tertile), those having β2-M concentrations of 1.6-1.8 (middle tertile) and >1.8 mg/L (highest tertile) showed adjusted hazard ratios of 1.50 (95% CI: 0.75-3.00) and 1.34 (95% CI: 0.57-3.17) for cancer mortality, 3.12 (95% CI: 1.33-7.29) and 4.24 (95% CI: 1.75-10.3) for cardiovascular mortality, and 2.53 (95% CI: 1.11-5.77) and 4.16 (95% CI: 1.76-9.79) for mortality from other causes, respectively. Conclusion: Serum β2-M concentration is a novel and strong predictor for cardiovascular mortality in a general population of older adults, independent of renal function and inflammation measures.

### CARDIAC BIOMARKERS DO NOT PREDICT 6 MONTH MORTALITY IN FRAIL ORTHOPAEDIC-GERIATRIC PATIENTS

C.P. Chong[1,2], W. van Gaal[1,2], J. Ryan[1], L.M. Burrell[2], J. Savige[1,2], K. Lim[1,2], *1. Northern Clinical Research Centre, The Northern Hospital, Epping, Victoria, Australia, 2. Austin and Northern Health, The University of Melbourne, Melbourne, Victoria, Australia*

Background: Cardiac injury after orthopaedic surgery is problematic. The aim was to determine if Troponin I and N Terminal pro-Brain Natriuretic Peptide (NT-proBNP) predicted 6 month mortality after emergency orthopaedic-geriatric surgery in a frail population. Methods: Prospective observational study in Australia screening 383 consecutive patients. Forty-four patients were eligible for this study, 33 consented who either received high level care, had severe dementia or an illness with a prognosis of less than 12 months. Troponin I and NT-proBNP were tested peri-operatively and patients followed up at 6 months. Results: Mean age was 85.8± 9.6 years and 93.9% had a fractured neck of femur. The incidence of a pre-operative troponin elevation was 33.3% and post-operative elevation 60.6%. Mortality within 30 days of surgery was 15.2% (5/33 patients), rising to 39.4% (13/33) at 6 months with 46.2% (6/13) dying of a cardiac cause. Median pre-operative NT-proBNP was 1651.50 pg/l and median post-operative NT-proBNP was 3038.50pg/l. Troponin I and NT pro-BNP did not predict 6 month mortality or cardiac complications. Predictors of 6 month mortality were number of comorbidities OR 2.0 (95% CI 1.1-3.8, p=0.033) and pre-morbid atrial fibrillation OR 7.7 (95% CI 1.2-47.8, p=0.028). Conclusions: Troponin I and NT-proBNP were not predictors of 6 month mortality or cardiac events in an older frailer population of patients undergoing orthopaedic surgery. These patients sustained substantial cardiac morbidity and mortality at 6 months after surgery. The control of symptoms, rather than prolongation of life with cardiological intervention, may be more appropriate for this patient group.

### CORONARY ARTERY BYPASS GRAFTS AND ASSOCIATED POSTOPERATIVE STROKE AND READMISSION AMONG OLDER ADULTS

B.F. Ekezue, J.N. Laditka, S.B. Laditka, *UNC Charlotte, Charlotte, North Carolina*

Off-pump coronary artery bypass grafting (CABG) has been suggested to improve outcomes in high-risk patients. As a result, increasing age is a factor in selecting the off-pump procedure. Despite the expectation that the off-pump procedure will improve outcomes, evidence for these better outcomes is mixed and incomplete. There is little research on postoperative stroke and readmission following off-pump and on-pump CABG. Using the 2007 State Inpatient Databases for California and Florida, we evaluated the effect of on-pump (n= 18,474) and off-pump (n= 3,740) CABG on the risk of postoperative stroke and 7-day, 15-day, and 30-day readmission for patients age 65 and older. Analyses included descriptive statistics and multivariate logistic regression, which adjusted for age, gender, ethnicity, median household income, 16 comorbidities, and CABG volume. In multivariate results, persons ages 85 and older were more likely than those aged 65-74 to have off-pump CABG (odds ratio, OR 1.64, 95% confidence interval, CI 1.39-1.93). There was no significant difference between the CABG techniques in the risk of postoperative stroke. Off-pump CABG had higher likelihood of 7-day (OR 1.52, CI 1.13-2.04) and 15-day readmission (OR 1.26, CI 1.10-1.43). Results suggest off-pump CABG may not lower the risk of postoperative stroke, but is associated with early readmissions. Although the results may be affected by unmeasured frailty or illness levels at the older ages where off-pump CABG is more common, the results underscore the need for further research on the expectation that off-pump GABG improves outcomes.

### CORRELATION OF PERCEIVED EXERTION WITH HEART RATE DURING AEROBIC EXERCISE IN OLDER MEN WITH ALZHEIMER'S DISEASE

F. Yu, K. Bil, *School of Nursing, University of Minnesota, Minneapolis, Minnesota*

Background: Older adults reap many physical and health benefits from regular aerobic exercise, including improved cerebral structure and function. Aerobic exercise may be a salient intervention for mitigating cognitive and physical declines in older adults with Alzheimer's disease (AD). Safe aerobic exercise, however, is understandably challenging for this population due to decreased motivation, insights and awareness, impaired cognition and increased behavioral and psychological symptoms. Hence, it is important to identify appropriate methods to monitor exercise responses to ensure safety. Method: The purpose of this study was to examine the correlation of subjectively-reported perceived exertion with heart rate (HR) – the objective measure of exercise response during aerobic exercise in four community-dwelling older men with severe AD. The aerobic exercise was 2-month, moderate intensity cycling on a recumbent stationary cycle supervised by a personal trainer 3 times a week. During each exercise session (10-30 minutes), HR was measured by a Polar® HR monitor and perceived exertion was reported using the Borg Rating of Perceived Exertion Scale every 5 minutes. Results: There were 597 HR-perceived exertion data pairs for the four subjects (mean age 70 years, education 17 years, Mini-Mental State Examination –MMSE- Score 8). The Pearson's r for HR and perceived exertion was .571 which is significant at p = .01, 2-tailed, controlling for age, education and MMSE. Conclusion: Objectively-measured HR and subjectively-reported perceived exertion is moderately correlated in older men with severe AD, indicating that the Borg RPE scale can be used for monitoring exercise responses in this population.

## SESSION 2170 (SYMPOSIUM)

### ETHNICITY, ACCULTURATION AND HEALTH

Chair: *R.M. Tappen, College of Nursing, Florida Atlantic University, Boca Raton, Florida*
Discussant: *C.L. Williams, College of Nursing, Florida Atlantic University, Boca Raton, Florida*

The demographic trend toward increasing proportions of minority elders within the older populations raises questions about their culturally-derived health beliefs, levels of health literacy and present physical and mental health status. This symposium addresses some of these issues, drawing upon two large databases and two smaller samples from the southern U.S.: metropolitan Miami-Dade county and environs, metropolitan Atlanta and the state of Florida, encompassing both rural and urban areas. These regions which have substantial populations of multigenerational African Americans and first generation Afro-Caribbean and Hispanic American older adults. The first paper describes marked contrasts in levels of identification and involvement in the heritage culture and mainstream American culture across these ethnic groups. The second paper addresses differences in physical function and self-reported physical and mental health. Again, the effect of ethnic/cultural group membership is marked. The attention to mental health continues in the third paper on results from two well-known measures of depression which evidence effects of both ethnic group membership and acculturation, particularly a contrast of the Afro-Caribbean to the other groups, including European Americans. The two final papers address specific health-related concerns: health literacy in older African Americans and knowledge gaps and deep personal concerns about cognitive impairment, particularly in the African American and Hispanic American groups. Discussion will focus upon theory-based explanations for the differences found, implications for practice and directions for further research.

### BIDIMENSIONAL ACCULTURATION IN OLDER AFRICAN AMERICAN, AFRO-CARIBBEAN AND HISPANIC AMERICAN ADULTS

R.M. Tappen, *College of Nursing, Florida Atlantic University, Boca Raton, Florida*

Much attention has been directed to acculturation and biculturalism in Hispanic Americans of various ages but much less to African Americans, Afro-Caribbeans and European Americans. We used the bidimensional Cross Cultural Measure of Acculturation to estimate identification and involvement with heritage culture and mainstream American culture in 438 lower income individuals age 54 to 100 (M = 72.88, SD = 10.08). Levels of education ranged from 0 to 24 (M = 10.75, SD = 4.15). The four ethno/cultural groups differed on both mainstream and heritage dimensions F(3,434) = 369.94 and 22.46 respectively, p <.0001. Controlling for age and education differences, all pairwise comparisons were signicant for the mainstream dimension. Regressions indicated large effects for education and ethnic group, not for age or gender, yielding an R2 of .44 for the mainstream dimension, and R2 of .09 for heritage culture, suggesting that ethnicity is a primary factor in predicting acculturation.

### COMPARISON OF DEPRESSIVE SYMPTOMATOLOGY IN COMMUNITY DWELLING OLDER ADULTS FROM FOUR ETHNIC GROUPS

C.L. Williams, *Christine E. Lynn College of Nursing, Florida Atlantic University, Boca Raton, Florida*

This descriptive comparison utilized two samples of community-dwelling older adults. Sample 1 (N = 666) consisted of 326 African American, 105 European American, 167 Hispanic American and 68 Afro-Caribbeans. There were significant differences in depression measured by Geriatric Depression Scale with African American and Afro-Caribbean subjects scoring lower than the others. The second sample of 509 consisted of 75 African American, 163 European American, 166 Hispanic and 105 Afro-Caribbeans. In this sample depression was measured by Cornell Scale (CSDD). The European American group was significantly more depressed than the other three groups. The Afro-Caribbean group was least depressed of the ethnic groups. Afro-Caribbean group had low levels of depression despite being measured by self report in study 1 (GDS) and by trained observers in the study 2 (CSDD). Regression analysis indicated that identification with the heritage culture and ethnic group membership predicted levels of depressive symptomatology.

### FUNCTION AND HEALTH STATUS ACROSS FOUR ETHNIC GROUPS

C.P. Buscemi, *Florida International University, Miami, Florida*

Differences in health status have been observed across ethno/cultural groups in the U.S. Four hundred twenty-eight lower income community dwelling adults age 54 to 100 were surveyed. Reported IADL levels were lowest in the European Americans, highest in the Afro-Caribbeans. Results on the physical health subscale of the SF-8 controlling for age, education, cognition and level of acculturation evidenced the same trend and significant differences by ethnic group. Age was a significant predictor of mental health but again ethnic group membership was the strongest predictor with Afro-Caribbeans evidencing most positive scores, followed by the African American and Hispanic Americans. European American scores were again the lowest. The 'healthy immigrant' effect which suggests that the healthiest individuals are those who choose to migrate is a possible explanation for positive Afro-Caribbean self-rated health.

### HEALTH LITERACY AND HEALTH SEEKING BEHAVIORS AMONG OLDER AFRICAN AMERICANS

T.R. Sanchez-Jones, *College of Health and Human Services, Kennesaw State University, Kennesaw, Georgia*

An estimated 90 million Americans lack the skills to manage their health or navigate the complex health care system due to low health literacy. Those at greatest risk are old, poor, members of ethno/cultural minorities, live in the south, reside in urban areas and lack education. The purpose of this study was to understand older African Americans' use of health care information and the health care system. Mixed methods were used with a purposive sample of twenty older African Americans. Assessment of health literacy was done with the Test of Functional Health Literacy in Adults, Rapid Assessment of Adult Literacy in Medicine and the Newest Vital Sign. The participants found to have the lowest health literacy were male, had lower incomes and fewer years of education. Participants found it difficult to "think aloud" about their responses to these measures. Those with low health literacy described difficulty managing their chronic conditions.

### PERCEPTIONS AND CONCERNS ABOUT MEMORY LOSS

S.E. Gibson, *College of Nursing, Florida Atlantic University, Boca Raton, Florida*

Seventy-eight multiethnic adults age 46 to 80 were interviewed prior to participation in cognitive screenings. Of these, 24 were African American, 20 Afro-Caribbean, 10 Hispanic and 20 European Americans.

The remainder was Asian and Native American. The majority across ethnic groups associated the term Alzheimer Disease (AD) with memory loss, forgetfulness and confusion. More Hispanic Americans expressed uncertainty over the cause or effects of the disease. One suggested the brain "probably collapsed," another thought it was related to tremors. African Americans expressed the highest concern for their own possible impairment, some saying they depend on others to remember things and do not leave their neighborhood for fear of getting lost. In summary, we found awareness of AD high but more misunderstandings in the Hispanic American group and highest personal concern in the Africa American group.

## SESSION 2175 (PAPER)

## EXERCISE: INTENSITY AND FUNCTION

### IMPACT OF HIGH-INTENSITY RESISTANCE TRAINING ON BODY COMPOSITION OF ELDERS

M. Powers, T. Lake, M. Tecmire, E. Bounds, M. Gray, *University of Cental Oklahoma, Edmond, Oklahoma*

Despite some evidence to support improved body composition following high-intensity resistance training, the results remain inconsistent especially among those of advanced age. The purpose of this study was to assess the impact of high-intensity resistance training on body composition over a 24-week training period. Twenty-five female volunteers (age = 81.64±4.82) were randomly assigned a high-intensity resistance training group (HI) or an active control group (AC). Both groups trained two days per week. The HI lifted free weights at 80% of their one-repetition maximum, while the AC performed the same exercises with no external weight. Body composition was assessed using an iDXA total body scan which measured fat mass (FM), lean tissue mass (LTM), bone mineral content (BMC), and percent body fat (%BF) before and after the intervention. The results indicate a significant group-by-time interaction for FM, F = 5.77, p = .025. FM decreased by 1.88 pounds in the HI, while increasing by 0.48 pounds in the AC. No significant effects were observed for %BF, LTM, or BMC. However, LTM increased by 1.19 pounds in the HI, while decreasing by 0.26 pounds in the AC. These results support the hypothesis that high-intensity resistance training does have a positive impact on body composition especially fat mass. Although non-significant, the slight increase in LTM is extremely important for maintaining independence since LTM is expected to decline in the absence of resistance training. Further study is recommended with a larger sample size, longer training duration, and the inclusion of males.

### AEROBIC TRAINING RESTORES ARTERIAL BAROREFLEX SENSITIVITY IN OLDER ADULTS WITH TYPE 2 DIABETES, HYPERTENSION AND HYPERCHOLESTEROLEMIA

K. Madden[1,2], C. Lockhart[1,2], T. Potter[1], D. Cuff[1,2], *1. Medicine, University of British Columbia, Vancouver, British Columbia, Canada, 2. VITALiTY (Vancouver Initiative to Add Life To Years) Research Laboratory, Vancouver, British Columbia, Canada*

**OBJECTIVE:** Lowered baroreflex sensitivity (BRS) predicts cardiovascular mortality and occurs with both increasing age and diabetes. We examined whether aerobic exercise could restore arterial baroreflex sensitivity in adults with a "worst case scenario" cardiovascular risk profile (diabetes, geriatric age group, hypercholesterolemia, and hypertension). **METHODS:** 45 older adults (mean age 71.5±0.7) with diet-controlled or oral hypoglycemic-controlled Type 2 diabetes, hypertension, and hypercholesterolemia were recruited to each of 2 groups: an aerobic group (AT, 3 months vigorous aerobic exercise), and a nonaerobic group (NA, no aerobic exercise). Exercise sessions were supervised by a certified exercise trainer 3 times per week. Baroreflex function was assessed using the spontaneous baroreflex method. **RESULTS:** The AT group demonstrated an increase in BRS that was not demonstrated in the NA group (+60.9±23.5 versus +2.2±7.9%, p=0.010). **CONCLUSIONS:** Our findings indicate that a relatively short aerobic exercise intervention can restore arterial baroreflex function in older adults at high cardiovascular risk.

### EFFECT OF STANDING POSTURE DURING WHOLE BODY VIBRATION TRAINING ON MUSCLE MORPHOLOGY AND FUNCTION IN OLDER ADULTS

R. Orr[1], M. Mikhael[1], F. Amsen[1], D. Greene[2], M.J. Seibel[3], M.A. Fiatarone Singh[1], *1. Faculty of Health Sciences, The University of Sydney, Lidcombe, New South Wales, Australia, 2. Australian Catholic University, Strathfield, New South Wales, Australia, 3. Concord General Repatriation Hospital, Concord, New South Wales, Australia*

Aim This study examines the effects of standing posture during low magnitude whole body vibration (WBV) exercise on muscle morphology and function in older adults. Methods In a 6-month randomised controlled trial, 19 adults (50-80 years) were allocated to: WBV with flexed knees (FK), WBV with locked knees (LK), or sham WBV (C). Exposure was intermittent WBV:rest (1min:1min) for 20 minutes, three times/week. Primary outcomes included upper and lower body muscle function (strength, power and velocity). Secondary outcomes were muscle morphology, balance and gait velocity. We report three month outcomes. Results Sixteen subjects completed three months of exposure. Relative (%) upper body contraction velocity improved significantly after WBV with FK compared to LK (FK 16.0%, LK -7.6%, p=0.01). Absolute (p=0.05) and relative (p=0.03) lower leg strength significantly improved with both standing postures (LK 14.4%; FK 10.7%). Only LK differed significantly from C in relative leg strength gains (p=0.02). Relative upper body strength (LK 15.1%, p=0.02; FK 12.1%, p=0.04) increased significantly following WBV compared to control. Potentially clinically meaningful but statistically non-significant improvements in lower leg muscle cross-sectional area (p=0.13) were observed with LK compared to the other groups. No significant effects of WBV on functional performance were observed. Conclusions WBV may improve muscle strength and contraction velocity in some muscle groups in older adults. Hypothesised differential adaptation to standing posture was observed only for upper body contraction velocity, making recommendations regarding WBV inconclusive. The efficacy of WBV for musculoskeletal health in older adults warrants continued investigation in robust future studies.

### DON'T COUNT ON YOUR PAST EXERCISE: IMPACT OF PREVIOUS AND LIFELONG VERSUS NEWLY-DEVELOPED EXERCISE PATTERNS ON THREE YEAR MORTALITY IN CHINESE OLDER ADULTS

Q. Feng[1], Z. Zhen[3], P.W. Duncan[1,2], Y. Zeng[2,4], J. Purser[1,2], *1. Division of Physical Therapy, Duke University, Durham, North Carolina, 2. Division of Geriatrics, Duke University, Durham, North Carolina, 3. Shanghai University of Finance and Economics, Shanghai, China, 4. Peking University, Beijing, China*

Benefits of exercise have been long documented, but few studies consider past exercise history along with current exercise status to examine the health impacts of lifelong exercise patterns in later life. We investigate how exercise subtypes defined by historic and current exercise status differently influence three-year mortality. Using the Chinese Longitudinal Healthy Longevity Survey (CLHLS), we followed survival of 16,020 Chinese elders (65+) over three years. Four exercise subtypes were indentified: 1) people who have never exercised regularly; 2) people who previously exercised regularly but are not currently; 3) people with no previous regular exercise who exercise regularly now; and 4) people who have exercised regularly in the past and present. Using Cox proportional hazards, we estimated mortality risks, controlling for age, gender, ethnicity, income, education, living environment and arrangements, self-reported health, comorbidities, self-reported and performance-based physical disability, visual problems, cognitive impairment, depression, weight, knee height, previous labor, fruit intake, vegetable intake, smoking, drinking and religious participation. Compared with people who never exercised, exercise in the past without ongoing current exercise conferred no protection against mortality (HR 1.01 [0.93, 1.10]); By contrast, people maintaining exercise had a much lower mortality risk (0.86 [0.80, 0.93]), while newly-developed exercise patterns surprisingly conferred the greatest protective effect (0.81 [0.70, 0.94]). Our results demonstrate the unreliability of the past exercise practice alone in health prediction in contrast with current regular exercise or newly initiated regular exercise. These results may have important implications for physical activity recommendations.

## SESSION 2180 (SYMPOSIUM)

### SMALL-SCALE, HOMELIKE CARE ENVIRONMENTS FOR PEOPLE WITH DEMENTIA: AN INTERNATIONAL PERSPECTIVE

Chair: *H. Verbeek, School for Public Health and Primary Care, Maastricht University, Maastricht, Netherlands*
Co-Chair: *J. Hamers, School for Public Health and Primary Care, Maastricht University, Maastricht, Netherlands*
Discussant: *L.K. Evans, University of Pennsylvania School of Nursing, Philadelphia, Pennsylvania*

Long-term care for people with dementia is increasingly organized in small-scale and homelike environments. This cultural change emphasizes values such as quality of life, wellbeing and preserving autonomy. In many countries, small-scale, homelike care settings have been developed. Despite this expansion, little is known about residents' experiences and effects of these homelike care environments on residents. Insight in these features is essential to improve dementia care and contribute to future planning and realization of care settings. This symposium presents findings from four recent studies, performed in different populations and countries. The first presentation focuses on residents' experiences of home in US long-term care and how to measure this in residents with cognitive impairments, such as dementia. Results are presented from two mixed-methods longitudinal studies examining changes in physical, psychosocial and cognitive wellbeing, as well as perceptions of "at-homeness" in older adults experiencing residential transition. The second presenter addresses results from a longitudinal study in Germany into the effects of small-scale living on newly admitted residents. Quality of life and various outcomes of physical and psychological health are presented. The third presentation discusses results from a large longitudinal study (n=260) in the Netherlands, investigating effects on residents. Results focus on cognition, ADL functioning, quality of life and neuropsychiatric symptoms. Finally, findings are presented from the Living Arrangements for people with Dementia (LAD-) study. Effect of the variety of group living home care (n=136 facilities) on the amount of required staff and the quality of life of residents is addressed.

### METHODS AND MEASUREMENT OF PERSON-ENVIRONMENT FIT IN SMALL HOUSES

S.L. Molony*, Nursing, Yale University, New Haven, Connecticut*

This paper uses findings from two mixed-methods longitudinal pilot studies examining changes in physical, psychosocial and cognitive well being, as well as perceptions of "at-homeness" in older adults experiencing residential transition. Study 1 enrolled rural-dwelling older adults who elected to move to a small house (SmH; n=15) or remain in a usual-care nursing home (NH; n = 10). Study 2 enrolled urban-dwelling minority PACE program members living in community (n = 10) or nursing home (n=7) who experienced either residential stability, or residential transition to a supportive housing environment, including six nursing home residents who were being de-institutionalized. The studies used quantitative measures with diverse response formats, biobehavioral measures, and qualitative interviews. Cognitive and sensory impairments were prevalent among subjects, posing measurement challenges. We will share strategies and recommendations to enhance data quality in future studies within and across innovative LTC environments.

### HEALTH OUTCOMES IN RESIDENTS OF SHARED HOUSING ARRANGEMENTS IN BERLIN: RESULTS OF THE DEWEGE-STUDY

K. Wolf-Ostermann[1], T. Fischer[2], A. Worch[1,2], J. Nordheim[2], I. Wulff[2], A. Pannasch[1,2], S. Meye[1]*, 1. Alice Salomon University, Berlin, Germany, 2. Charité Universitätsmedizin Berlin, Berlin, Germany*

Objectives Shared Housing Arrangements (SHA) are a Specific German Kind of Small-Scale Living Facility for Care-dependent Persons, being served by Community Care Services and disconnected from Residential Facilities. Methods Using a Longitudinal Design, New Residents of Small-Scale Living Arrangements Suffering from Dementia (MMSE < 24) were surveyed for one Year. Measures include ADL Functioning, BPSD, Additional Social Factors and QoL (Qualidem). SHA-Residents are also compared to Residents of Special Care Units (SCU). Results Persons moving into SHA tend to have Better Cognitive Function than those moving into SCU. Need-driven Behaviours were frequent in Both Groups as were Impairments in Physical Functioning. Psychotropic Drugs were slightly more often prescribed for Residents in Nursing Homes. Conclusion Data indicate that both Types of Facility attract a slightly different Population. The Study Results will add some Clarification as to whether or not Claims of Improvement of Quality of Life in SHA are viable.

### SMALL-SCALE LIVING FACILITIES IN THE NETHERLANDS: EFFECTS ON RESIDENTS

H. Verbeek, S. Zwakhalen, E. Van Rossum, G.I. Kempen, J. Hamers*, School for Public Health and Primary Care, Maastricht University, Maastricht, Netherlands*

In the Netherlands, small-scale living facilities (SSLF) for people with dementia are rapidly increasing. A small number of residents, usually 6 to 8, live together in a homelike environment and are encouraged to participate in daily activities. Nursing staff actively participates in the household and have integrated tasks. Little research has been conducted yet into effects on residents. This study used a longitudinal, quasi-experimental design, in which residents in SSLF (n=125; mean age 82 years) were compared with those in traditional nursing homes (TNH) (n=135; mean age is 83 years). No baseline differences were found for cognition, ADL-functioning and global deterioration. In both groups, neuropsychiatric symptoms (mean NPI-NH score 16.2 for SSLF; 15.7 for TNH) were quite low and quality of life relatively high. Longitudinal analyses are presented to investigate effects in more detail and investigate whether SSLF contributes to a improvement of QoL for residents with dementia.

### THE EFFECT OF VARIETY IN GROUP LIVING HOME CARE ON THE AMOUNT OF REQUIRED STAFF AND QUALITY OF LIFE OF RESIDENTS

A. Pot[1,2], B. Willemse[1], D. Smit[1], J.D. Lange[1]*, 1. Program on aging, Netherlands Institute of mental health and Addiction, Utrecht, Netherlands, 2. Department of Clinical Psychology, Faculty of Psychology and Education, VU University, Amsterdam, Netherlands*

A large variety of group living home care appears, ranging from group living homes in an archetypical house to large arrangements where group living home care (GLHC) is provided. The question rises what the effect of the variety in GLHC is on the amount of staff required in the future and the quality of life of the residents. The Living Arrangements for people with Dementia (LAD-) study is designed to answer this question among others. In this study 136 living arrangements were included. Organizational characteristics including staff ratio, quality of life (Qualidem) and functional status of residents are assessed (N=1366 residents). The amount of staff ratio in smaller and larger arrangements providing group living home care differs. In smaller group living homes more nursing staff is required. Considering the quality of life of the residents in small and large arrangements providing GLHC differences are found in benefit of the small arrangements.

# SESSION 2185 (PAPER)

## TRANSITIONS OF CARE

### TRANSITIONS OF CARE: HOSPITAL TO HOME CARE – CHALLENGES OF TEAMING ACROSS SILOS

J. Cotter[1], S. Barsness[1,2], M.A. Tetterton[2], *1. Gerontology, Virginia Commonwealth University, Richmond, Virginia, 2. Virginia Association for Home Care and Hospice, Richmond, Virginia*

Transitioning through levels of care has been identified as a significant challenge for patients, families, and healthcare professionals. Medicare reimbursement is designed for acute care and not the management of chronic and/or multiple conditions. As a result, hospital discharge planners' goals are driven by a system that does not sufficiently recognize the chronic care needs and co morbidity in a growing older population. In post-acute transitions, hospital discharge planners play a significant role. The purpose of this study is to explore the special challenges when referring to home care. Constructs from structural lag theory are used to explore the reasons for difficulty in transitions. Two focus groups were held – one with 10 home health liaison and assessment nurses and one with 10 discharge planners/care coordinators and individual interviews were held with members of both groups to identify key issues in transitions of care. A survey of 145 hospitals and 244 Medicare certified home health agencies will be reported upon that explores attitudes toward issues such as increasing patient acuity at discharge, time crunch issues of discharging a patient, patient freedom of choice of home health providers, role of hospitalists, coordination of multiple home and community based services, capacity of home care agencies, and role of patient. Session leaders will discuss suggested improvements needed for a smoother transition of care from hospital to home care. The session will explore future research needs and the education needed for hospital based providers and for community based providers.

### GIVING A VOICE TO THE PATIENT: TELEHEALTH IN HOME HEALTH CARE

E. Chichin, D. Bobe, M. deLisser, B. Gallagher, *Jewish Home Lifecare, New York, New York*

Burgeoning health care costs and older persons' desire to age in place mandate creative approaches to home health care. Using telehealth technology can supplement clinician pain assessment, giving a voice to patients, enabling them to report symptoms in real time and enhancing quality of care. Health buddy units, small monitors with Q&A dialogues in English or Spanish, were placed in home care clients' homes. Patients answered simple questions about their pain, rating it on a scale of 0-5, with scores greater than 3 triggering a "red alert" and a call from a nurse. Pending the call's outcome, a case conference was held with the care team and a palliative consultant to decide upon modification of the care plan and need for a consultant visit. Over three months, 25 out of 207 patients required case conferences. Analysis of conference notes revealed that arthritis was the cause of pain in 48% (n=12) of cases. Other musculoskeletal conditions accounted for 32% (n=8) of the conferences, and three patients had experienced pain after a fall. Two patients had no pain on follow-up, and three had concomitant psychiatric histories. In 44% of cases, patients had medication available that was effective when taken, but additional patient education was needed and continues to be provided. Recommendations in remaining cases included modification of medication or referrals to physical therapy, psychiatry or social work. Implications of findings and replication strategies and will be discussed.

### ESTABLISHING GOALS OF CARE – FACILITATING CARE TRANSITIONS: INTERDISCIPLINARY LESSONS FOR MANAGING THE ACUTELY ILL, EXTENDED STAY ELDERLY PATIENT

B. Ohta[1,2], D. Shine[1,3], *1. New York University Langone Medical Center, New York, New York, 2. New York University Silver School of Social Work, New York, New York, 3. New York University School of Medicine, New York, New York*

Problems related to acute care patient transitions tend to be multidimensional and multidisciplinary. Nowhere is this experienced more dramatically than among the population of elderly patients which comprises a new level of patient acuity, that of the "chronically-acutely" ill (multi-system organ failure, intractable infections, high-tech/intensive care intervention). The ability to manage patients at this highest acuity level, and the patient's/family's desire to do so, places patients and providers in a dire stalemate of continued aggressive care with limited hope of recovery or transition. The current study explored factors affecting treatment decisions and care transitions, and the effectiveness of interventions available through: 1) proactive interdisciplinary action; 2) culturally sensitive communication; and 3) expanded use of the care continuum, from the long term acute facility to hospice care services (n=300+). This approach has demonstrated progressively improved and significant reductions in the number of extended stay patients ($p< .01$), as well as reductions in associated acute care bed days. It has facilitated culture change fostering greater acceptance/utilization of hospice care services (29% increase), end-of-life/goals-of-care discussions, and DNR/comfort-care orders. Additionally, lessons learned have led to the development of a unique, interdisciplinary, electronic-documentation approach regarding goals-of-care and Advance Directives. For patients and families who enter the acute care setting from a perspective of "doing everything", proactive medical management, exploration of options throughout the continuum, and skilled interdisciplinary communication are essential. Study implications underscore the critical need for broad and integrative approaches to managing the highest complexity of patient care acuity among our frailest elderly patients.

### TRANSITIONS OF CARE FOR OLDER PATIENTS WITH MOBILITY DEFICITS: PATIENT AND CAREGIVER PERSPECTIVES

A. Dossa[1], B. Bokhour[1], H. Hoenig[2], *1. Center for Health Quality, Outcomes, and Economic Research, Bedford VA, Bedford, Massachusetts, 2. Durham VA, Durham, North Carolina*

Older patients with chronic complex disease and mobility deficits are frequently discharged from the hospital with continuing community nursing and rehabilitation services. Quality transition of care is essential for these patients to achieve optimal outcomes such as preventing readmissions and improving functional status. Research on transitions has focused primarily on the medical issues, rather than on problems for patients who have undergone rehabilitation therapy in the hospital with follow-up therapy at home. Our qualitative pilot study examined transition experiences of nine medical and surgical patients 70 years and older, and their caregivers following hospital discharge. We conducted 90-minute face-to-face semi-structured interviews two weeks post-discharge, and two 30-minute telephone interviews at one and two months post-discharge. Audio-recordings of the interviews were transcribed verbatim and analyzed using grounded thematic analysis to identify emergent themes. Our findings included the following patient experiences: Patients reported difficulty accessing hospital staff and lacked information on who to call for post-acute care problems; they lacked follow-up from the physician about pain issues and post-acute coordination and scheduling of rehabilitation therapy; they reported discrepancies between surgeon, home care therapist, and out-patient therapist regarding therapy protocol, they reported home equipment safety issues and delay in receiving equipment; and reported lack of communication between rehabilitation staff and the physician or surgeon. Improved systems are needed to address patient concerns after discharge from the hospital and to facilitate recovery at home, particularly with regards to better coordination and communication between patients, hospital providers, and home care providers.

## SESSION 2190 (SYMPOSIUM)

### VA GREC SYMPOSIUM: FACILITATING THE TRANSITION OF FRAIL VETERANS TO THE COMMUNITY

Chair: *J. Schnelle, Center for Quality Aging, Vanderbilt University Medical Center, Nashville, Tennessee, Tennessee Valley GREC, Nashville, Tennessee*
Discussant: *J. Powers, Center for Quality Aging, Vanderbilt University Medical Center, Nashville, Tennessee*

A primary objective of VA community living centers and Post Acute Rehabilitation units is to facilitate the transition of veterans to home. This symposium will describe research relevant to the rehabilitation of veterans receiving care in these settings. The first presentation will review recommendations for research and education released in July of 2010 by a consensus group for the World Health Organization and the International Association for Geriatrics and Gerontology (Morley). This presentation will provide the background information to understand the importance of the research described by the symposium participants that follow. The second and third speakers will focus on the importance of nutrition. More specifically, the second speaker will describe the role of nutrition and associated inflammatory markers in preventing functional decline (Sullivan) The third speaker will describe an intervention to prevent unintentional weight loss in community living centers. (Simmons). One aspect of this nutrition intervention was to offer residents more dining choices, which is consistent with national and VA efforts to promote culture change in long term care. The fourth presentation will provide data describing the importance of sleep in a VA post acute care rehabilitation unit (Alessi). The final presenter will describe an innovative observational protocol to measure staff behaviors related to pressure ulcer prevention and management of staff in three VA community living centers (Dellefield). The overall objective of the symposium is to describe current approaches to preventing or addressing barriers to the successful transition of veterans from post acute and community living centers to home.

### A STAFF TRAINING AND MANAGEMENT INTERVENTION TO IMPROVE NUTRITIONAL CARE IN VA NURSING HOMES

S.F. Simmons, *1. Division of General Internal Medicine & Public Health, Vanderbilt University, Center for Quality Aging, Nashville, Tennessee, 2. VA GRECC, Nashville, Tennessee*

Unintentional weight loss is a common problem among long-term care (LTC) residents, and one that can lead to adverse and costly clinical outcomes. The primary objective of this translational research project was to train LTC staff how to identify residents in need of feeding assistance and effectively monitor daily care delivery. A multiple baseline design was used to evaluate the effectiveness of the staff training and management intervention in two VA facilities. Primary outcome measures were feeding assistance care processes provided by staff during and between meals and residents' oral food and fluid intake. Research staff trained LTC staff in the implementation of program protocols during a 12-week intervention period and monitored program maintenance during a 12-week follow-up period. Facilitators and barriers to LTC staff improvements in nutritional care will be discussed in the context of this translational research effort.

### DEVELOPMENT OF A NONPHARMACOLOGICAL INTERVENTION TO IMPROVE SLEEP PATTERNS AMONG OLDER ADULTS UNDERGOING INPATIENT POST-ACUTE REHABILITATION

C. Alessi[1,2], J. Martin[1,2], L. Fiorentino[2], C. Chung[2], K. Josephson[1], S. Jouldjian[1], *1. VA Greater Los Angeles Healthcare System, Los Angeles, California, 2. David Geffen School of Medicine at University of California, Los Angeles, Los Angeles, California*

Older people who suffer functional decline related to acute hospitalization often undergo inpatient rehabilitation to improve functional status. We previously performed a descriptive study among adults aged > 65 years (N=245) admitted to inpatient post-acute rehabilitation units and found that less daytime sleeping during the post-acute rehabilitation stay was associated with greater functional recovery (even after adjusting for other important predictors of functional recovery); a relationship that persisted at 3-months follow-up. Based on these findings, we are currently performing a randomized, controlled trial testing a multi-modal behavioral sleep intervention in a Veterans Administration inpatient rehabilitation unit (N = 214 participants). This inpatient intervention combines elements of behavioral strategies for insomnia with efforts to limit daytime in-bed time, increase daytime bright light exposure and other measures. Here we present data on the process of this intervention, including practical aspects of implementing this type of intervention in an inpatient rehabilitation setting.

### OBSERVATIONAL PROTOCOL MEASURING NURSING BEHAVIORS: CLINICAL SUPERVISION & PRESSURE ULCER PREVENTION

M.E. Dellefield[1], M. Shively[2], C. Harrington[3], C. Der-Martisorian[4], J. Schnelle[5], *1. research, VASDHS, San Diego, California, 2. VASDHS, San Diego, California, 3. UCSF, San Francisco, California, 4. UCSD, San Diego, California, 5. Vanderbilt, Nashville, California*

Preventing pressure ulcers (PUs) in frail veterans receiving institutional care may increase the likelihood of their transition home. We pilot tested an observational protocol to measure in real-time RN clinical supervision and RN and CNA direct care associated with PU prevention. Work sampling and trained observers using personal assistive devices (PDAs) were used. Protocol reliability and validity was tested and demonstrated. Counts and frequencies were used in data analysis. Many observed RN and CNA clinical behaviors could not be linked to PU prevention behaviors or an identifiable clinical domain. RNs were rarely observed providing clinical supervision. Findings suggest that RNs and CNAs may benefit from performing more targeted preventive nursing behaviors. Using staff self-report with observation to collect data could increase observers' abilities to link nursing behaviors to specific clinical domains. Increased RN performance of clinical supervision targeted to pressure ulcer prevention in frail veterans is recommended.

### WHO/IAGG RECOMMENDATIONS FOR NURSING HOMES

J.E. Morley, *1. St Louis VAMC, St Louis, Missouri, 2. Geriatrics, Saint louis University, St louis, Missouri*

In June 2010 the WHO/IAGG committee on nursing homes met. This symposium will provide a summary of their recommendations to improve future care in nursing homes.

### CHANGES IN ACTIVITIES OF DAILY LIVING, NUTRIENT INTAKE AND SYSTEMIC INFLAMMATION IN ELDERLY PATIENTS

D.H. Sullivan[1,2], K.K. Garner[1,2], L. Johnson[1,2], P.K. Roberson[2], M.M. Bopp[1,2], R. Dennis[1,2], *1. Central Arkansas Veterans Healthcare System, Little Rock, Arkansas, 2. University of Arkansas for Medical Sciences, Little Rock, Arkansas*

In order to evaluate the interrelationships among recovery of physical function, systemic inflammation, and nutrient intake, 275 older [age 78.9 + 7.5 yrs] patients admitted to a recuperative care unit were evaluated. Walking endurance [WalkEndur] and markers of inflammation were measured at admission and discharge [median length of stay = 24 days (IQR = 16-44d)]. Complete nutrient intake assessments were performed daily. By univariable analyses, the change in WalkEndur was positively correlated with nutrient intake and inversely with multiple indicators of inflammation. When all covariates were included in a multivariable least-squares regression analysis, the strongest correlate of WalkEndur change was change in protein intake followed by change in albumin, tumor necrosis factor soluble receptor 2, and IL-6 (model $R^2 = .18$, $p<0.001$). These results suggest that both inflammation and nutrient intake appear to be important independent determinants of functional recovery among older recuperative care patients.

## SESSION 2195 (SYMPOSIUM)

### A ROADMAP FOR ACCREDITATION IN GERONTOLOGY/GERIATRICS

Chair: *D.C. Burdick, School of Social and Behavioral Sciences, The Richard Stockton College of NJ, Pomona, New Jersey*
Co-Chair: *A.O. Pelham, San Francisco State University, San Francisco, California*
Discussant: *F. Whittington, George Mason University, Fairfax, Virginia*

Gerontology programs face serious, primarily structural, challenges to survival. The discipline, academic programs, students, graduates, and the public all suffer because programs are not accredited. The Association for Gerontology in Higher Education (AGHE) is arguably the most appropriate provider of accreditation based on its Standards and Guidelines first written in 1989, its Program of Merit (POM) began in 1998, and its emerging Consultation Program. The POM is a step towards accreditation, yet is currently un-recognized by university administration as equivalent to accreditation, and thus underutilized. Consequently, gerontology programs lack bargaining power and capital in fighting for scare and diminishing college and university resources to support basic needs. Over time, this has weakened academic gerontology programs. Several have vanished, many others are at risk. Unfortunately, this is happening when workforce demands for credentialed/skilled professionals in aging are soaring and the public seeks quality services. The 2010 Tibbitts Awards Lecture by Frank Whittington at AGHE's Conference highlighted the interconnectedness of AGHE's health with the well-being of academic gerontology programs and the ability to address the growing exigencies of an aging society. It issued a clear and convincing call to action. This symposium responds to that challenge, beginning with elaboration on the proposed causal relationship between no accreditation and the weakening and unfulfilled promise of gerontological education. Next alternative accreditation models are explored – from other interdisciplinary fields, from international perspectives, through a macro-level social construction lens, and finally through the perspective of AGHE's past groundwork and future plans for the evolution of POM.

### FRAMING THE ISSUES AND ONE VISION FOR A ROAD MAP TOWARDS ACCREDITATION

A.O. Pelham, *San Francisco State University, San Francisco, California*

Academic gerontology programs face serious challenges with mostly structural causes. This presentation proposes that the lack of recognized national accreditation has directly caused hardship for the discipline, gerontology programs, graduates, and the public. Programs routinely queue up at the end of budgetary lines for diminishing university funds, in part, because they cannot hold up accreditation standards for even minimum support for urgent needs such as faculty lines, staff support, curricular and professional development. Over time, these opportunity costs weakened academic gerontology programs. Some have not survived (demonstrated by fewer programs in the AGHE Directory from the 2000 to the 2009 editions), many are at risk (as demonstrated by numerous anecdotal reports and concerns expressed at the 2010 AGHE Annual Meeting. Program accreditation must proceed for our discipline and programs to survive. An initial road-map for accreditation will be presented – a theme which will be magnified and illuminated in subsequent presentations.

### SOCIALLY CONSTRUCTING THE REALITY OF ACCREDITATION: A MACRO LEVEL VIEW

C.L. Estes, *University of California, San Francisco, San Francisco, California*

What do current social science perspectives contribute to understanding both the issues and debate of academic gerontology program accreditation? Bringing the unique and long view of a former AGHE president and social theorist to the discussion, academic program accreditation is analyzed from a macro political economy perspective. Particular attention is given to the vastly changing environment of academic programs in gerontology where diminishing resources and budget cuts face higher education for years to come. Academic programs in gerontology are stressed and struggling nationwide. What are the larger political and economic forces behind this disquieting trend? A macro critical theory analysis will contribute to both an understanding and way forward in terms of recommendations for the future policy of AGHE.

### VALUES AND IMPORTANCE OF ACCREDITATION: LESSONS FROM EUROPE

R. van Rijsselt, *Windesheim University of Applied Sciences, Amersfoort, Netherlands*

In Europe each individual national government is responsible for the quality assurance system in higher education. The quality systems vary largely in terms of indicators and the underlying educational policy. The development of one European Educational Area presupposes the unification and elaboration of these quality systems. In the context of the Bologna Agreement forty-five EU countries agreed in Berlin in 2003 on a coherent set of quality indicators based on the agreements between the European Quality Bodies (collaborating in ENQA), the educational institutes and student bodies. The further development of transatlantic educational programs (including double and dual degrees) requires a good understanding of educational models as well as the underlying quality assurance models. In this presentation the European experiences related to accreditation are elaborated and compared with the US. Furthermore, the necessity of accreditation for (inter)national gerontology programs is stressed.

### ACCREDITATION: A MULTIDISCIPLINARY PERSPECTIVE

R. Maiden[1], J.L. Howe[2], *1. Alfred University, Alfred, New York, 2. Mount Sinai Medical School, New York, New York*

A key challenge facing gerontologists in the 21st century is ensuring there is an appropriately trained workforce providing quality services to meet the pressing needs of an older population that is becoming larger, more ethnically diverse, and more educated than previous generations. The 2008 Institute of Medicine report advocates that providers of services receive minimal levels of training and education to provide quality services for older adults. One method of ensuring that individuals receive training sufficient to meet the needs of older people is through accrediting programs. We will discuss how professions such as social work and psychology have addressed accreditation concerns including those related to competency development and minimum practice and education requirements. For example, the PsyD Program in School Psychology at Alfred University successfully sought accreditation from the American Psychological Association. An analysis of other disciplines will provide guidance to the field of gerontology as it contemplates accreditation.

### AGHE PROGRAM OF MERIT EVOLVES TO ACCREDITATION

M. Gugliucci[2], D.C. Burdick[1], *1. School of Social and Behavioral Sciences, The Richard Stockton College of NJ, Pomona, New Jersey, 2. University of New England, Biddeford, Maine*

The Association for Gerontology in Higher Education (AGHE) first developed standards and guidelines for gerontology instruction at associate, baccalaureate and graduate levels in 1989 after 5 years of careful deliberation by a distinguished national taskforce. The guidelines have been periodically updated to include recommendations for online instruction, doctoral programs and osteopathic medicine. A forthcoming update will address standards in health professions programs. AGHE's Program of Merit (POM) was established in 1998 to acknowledge best practice in gerontological instruction, and was a natural evolution of AGHE's foundational work in standards and guidelines. Recently the POM was expanded to include curriculum review in gerontology and geriatrics in health professions. Clearly, current trends in academia and demographics demonstrate that accrediting Gerontology programs is important for the discipline. AGHE seeks to continue its leadership through an expanded POM, Consultation Program and other services. An overview of process, progress, and plans will be presented.

## SESSION 2200 (SYMPOSIUM)

### DIRECT-CARE WORKER TRAINING SYSTEM DEVELOPMENT: CHALLENGES AND OPPORTUNITIES

Chair: *D. Tyler, Center for Gerontology, Brown University, Providence, Rhode Island*

Co-Chair: *J. Angelelli, PHI National, New York, New York*

Discussant: *C.E. Bishop, Brandeis University - Heller School, Waltham, Massachusetts*

Training for direct-care workers (DCW) is an increasingly significant issue as more elders and persons living with disabilities require care and support while the care needs become more complex and the settings where care and support are provided become more diverse. The Nursing Home Reform Act established federal training requirements for nursing assistants in nursing homes and many states have instituted their own additional standards. However, no similar federal regulations exist for the training of DCWs providing only activities of daily living assistance in home care agencies, adult day service centers, or assisted living residences. State regulations, where they exist, vary widely. This symposium will illustrate some of the challenges and opportunities related to DCW training system development by describing the breadth of state regulations for DCW training and the practical and policy implications surrounding the declining availability of nursing home based DCW training. State response to the training needs of DCWs will be illustrated through the example of programs in two states. The design and implementation of a model curriculum for DCWs in Pennsylvania will be described as will the Jobs to Careers program developed in North Carolina.

### PRACTICE AND POLICY IMPLICATIONS OF DECLINING NURSING HOME-BASED NURSE AIDE TRAINING

D. Tyler[1], H. Jung[1], Z. Feng[1], V. Mor[2], *1. Center for Gerontology, Brown University, Providence, Rhode Island, 2. Brown University, Providence, Rhode Island*

All nurse aides (NAs) must receive training and pass a certification exam before working in Medicare/Medicaid certified nursing homes (NHs). According to the 2004 National Nursing Assistant Survey, the majority of NAs (57%) received their pre-employment training in NHs. However, our research shows that prevalence of NH-based training and certification programs has been dropping, with 37.6% of NHs providing these programs in 1997 and only 22.8% providing them in 2008. The purpose of this study was to examine the characteristics of NHs that dropped or adopted these training programs during this period. We found that a high deficiency score was a strong contributor to NHs dropping these programs, as was being located in an urban area. Large NHs were more likely to adopt programs, whereas facilities with higher NA staffing were less likely to adopt them. There are a number of practice and policy implications related to these findings.

### THE ROLE OF THE COMMUNITY COLLEGE IN NURSING ASSISTANT TRAINING: CHALLENGES AND LEVERAGE POINTS

J.C. Morgan[1], S.L. Ocander[2], B. Farrar[3], *1. UNC Institute on Aging, Chapel Hill, North Carolina, 2. Metropolitan Community College, Omaha, Nebraska, 3. North Carolina State University, Department of Sociology, Raleigh, North Carolina*

Population aging is driving an increase in the demand for healthcare services, the bulk of which, particularly in long-term care (LTC), is delivered by low-wage workers in jobs with low educational requirements. Community colleges are playing an increasing role in providing nursing assistant training. Using case studies from the evaluation of the Jobs to Careers: Promoting Work-based Learning for Quality Care program and the National Fund for Workforce Solutions, this paper seeks to illustrate how partnerships between LTC employers and community colleges can leverage resources to increase the skills, create career opportunities and improve retention. Data come from partnership case studies (40 key informant interviews) and local evaluation data. Interviews were audio-taped, transcribed, and coded for themes. Findings indicate that successful educational programs layer basic skills, support services, coaching and engage employers. Implications and challenges related to career pathways, skill development, care provision and partnership system change will be discussed.

### EXPLORING INTERSTATE DIFFERENCES IN THE CERTIFICATION OF THE HOME CARE WORKFORCE

C.M. Kelly, J. Deichert, L. Holley, K. Kosloski, *Department of Gerontology and Center for Public Affairs Research, University of Nebraska, Omaha, Nebraska*

Our research defines two distinct types of workers that constitute the home care workforce in the United States. Home health aides, who are typically credentialed, work for certified home health or hospice agencies and help with personal care and perform clinical procedures. Personal home care aides, who are typically uncredentialed, work for various public and private agencies or are hired directly by the patient or the patient's family. The latter provide companionship and custodial care and help with chores such as housekeeping and meal preparation. Training requirements for both types of workers vary widely from state to state. For example, some states require aides to complete specific training courses before they are allowed to work in the homes of clients. This study explores differences in credentialing requirements for home care workers across the 50 states and their potential impact on patient outcomes.

### DESIGNING A TRAINING AND CREDENTIALING SYSTEM FOR ENTRY-LEVEL DIRECT CARE WORKERS: LESSONS FROM PENNSYLVANIA

J. Angelelli, *PHI National, New York, New York*

There exist no national standards for the training and credentialing of Personal and Home Care Aides who are employed in home care agencies, adult day service centers, assisted living residences and/or disability service agencies to provide hands on activities of daily living assistance to elders and persons living with physical disabilities. This paper presents a sampling of state approaches to training this workforce and describes the Commonwealth of Pennsylvania's experience designing and field-testing a 77 hour model curriculum for entry-level direct care workers. The model curriculum was designed based on adult learner-centered principles and a competency-based approach developed for the US Department of Labor. Lessons are shared from a multi-employer (n=40) learning collaborative in Southwestern Pennsylvania that leveraged resources from the PA Department of Aging and the PA Dept of Labor and Industry.

# SESSION 2205 (PAPER)

## HOUSING, NURSING HOMES, AND RESIDENTIAL CARE III

### FULL-TIME RVING AS AN ALTERNATIVE HOUSING OPTION FOR OLDER PEOPLE

E. Sikorska Simmons[1], A. Gens[2], *1. Sociology, University of Central Florida, Orlando, Florida, 2. University of Central Florida, Orlando, Florida*

Full-time RVing (i.e., living in a recreational vehicle) has been recognized as an important housing alternative for older people. With the growing older population and the retirement of baby-boomers, the appeal of full-time RVing is increasing. It is estimated that 750,000 seniors live in RVs for part or all of the year. Little, however, is known about the quality of their housing, why they choose it, and how they manage their health and service needs over time. This paper reviews what is currently known about full-time RVing as an alternative housing option for older people. The Lawton's ecological model of adaptation and aging provides a conceptual framework for this analysis. Factors that influence the decision to live in an RV are classified into three categories: 1) personal preference (e.g., needs for independence and privacy), 2) enablement (e.g., health status, income, and geographic location), and 3) required support (e.g., access to health services and public facilities). The quality of RV housing is examined according to two dimensions: 1) macroenvironment (e.g., community structure and neighborhood) and 2) microenvironment (e.g., physical aspects of housing, safety, and satisfaction). As the number of older people who choose full-time RVing as a housing option increases, more research will be needed to understand how they manage their health and service needs. Such research could benefit policy-makers, planners, and mobile home/RV retirement park developers who are interested in improving the quality services for their residents.

### CONSIDERING FUTURE RELOCATION TO A RETIREMENT VILLAGE: PREDICTORS FROM A COMMUNITY SAMPLE

D. Crisp, T. Windsor, K. Anstey, P. Butterworth, *Australian National University, Canberra, Australian Capital Territory, Australia*

The prospect of downsizing to a smaller home or relocating to an age-segregated community such as a retirement village is one many people consider as they move through post-retirement phases of life. However, despite declines in health and functioning which often accompany ageing, and the appropriateness of one's home environment, a significant majority of people hold a preference to age in place and do not consider retirement community living as an option for their future. While research has highlighted motives that may prompt the eventual move, little focus has been placed on factors predicting whether or not people would consider the prospect of retirement village living in the future. Using a random sample of 540 community residents, aged 55 to 94 years, from the Australian Capital Territory, the present study examines psychosocial, environmental and health characteristics predicting favourable consideration toward relocating to a retirement village; and investigates factors which encourage or discourage people from wanting to move into such a community. Present retirement status, self-rated health and a negative perception of one's current living environment were associated with consideration given to retirement village living. The nature of village facilities and the probability of reduced stress were identified as factors that may influence the decision to relocate. The findings are discussed in terms of implications for aged care providers.

### SOCIAL CARE FACTORS AFFECT HOSPITAL LENGTH OF STAY FOR AN URBAN HOMEBOUND POPULATION

D. Foer[3], K. Ornstein[1,2], T. Soriano[1], N. Kathuria[4], *1. visiting doctors program, mount sinai, New York, New York, 2. columbia university, new york, New York, 3. Yale University, New Haven, Connecticut, 4. Mount Sinai Hospital, new york, New York*

A major financial concern for medical institutions, prolonged hospital length of stay (LOS) is also a factor of clinical importance for older adults who are at greater risk for adverse outcomes. The goal of this project was to identify factors associated with high LOS in the growing homebound population who may have unique discharge needs because of their commitment to be cared for at home. The study included all 2007 discharges that occurred for patients in the Mount Sinai Visiting Doctors Program, a primary care program serving homebound adults. Using the University HealthSystems Consortium Database to adjust for a variety of institutional and patient clinical and demographic factors, expected LOS was calculated. A systematic chart review was used to determine when patients were medically ready to return home and outliers were characterized as social vs clinical stays. Average observed LOS for 479 discharges was 7.84 days. Seventeen discharges were determined to have LOS outliers, defined as two standard deviations above the mean. Eight of these cases were defined as social stays and accounted for a combined 136 days longer in the hospital (mean =17 days). The most common reason for social stay was nursing facility placement delays and lack of cooperation among family members around discharge. Our findings highlight the significant contribution of social care factors to prolonged LOS among the homebound. Educating hospitalists and administrators about the impact of social factors on LOS and increasing involvement of social workers in the outpatient setting may help to avoid costly and medically unnecessary LOS.

### THE EMERGENCE OF ELDER HOMELESSNESS AS A SOCIAL PROBLEM: POLICY TRENDS AND COMMUNITY RESPONSES

J.G. Gonyea, K. Mills-Dick, *Social Work, Boston University, Boston, Massachusetts*

Recent statistics offer troubling evidence of a growing number of older Americans who are either homeless or marginally housed. According to the U.S. Department of Housing and Urban Development (2009) statistics, over 250,000 homeless elders were sheltered in emergency or transitional housing programs in the U.S. during 2008. In 2005, the National Alliance to End Homelessness estimated that 744,313 people experienced homelessness in the U.S. Using the recent estimates of homeless elders as representing 10% to 15% of the total homeless population, this suggests that there are 74,431 to 111,646 homeless elders today. Further, it is predicted that the number of homeless elders will continue to rise as the baby boomer generation ages. Yet, despite their growing numbers, homeless older adults have largely been invisible within our communities and a forgotten group in the homeless service system. There is, however, evidence that elder homelessness is emerging as a social problem. This attention is fueled by changing perceptions of homelessness in general. Previously viewed primarily as an individual problem, homelessness is now seen as a social problem related to broad, underlying social and economic conditions. Our focus is on the examination of the impact of this redefinition, recent legislation and the role of national advocacy groups in fueling local communities' and states' actions in addressing elder homelessness. In particular, we explore the rise in supportive permanent housing for homeless or marginally housed seniors, including evidence of the effectiveness of this model. A central aim is to identify a research agenda to advance solutions to end elder homelessness.

### HEALTH PUBLIC SERVICES IN ALTERNATE HOUSING MODELS: ARE RESIDENTS AND FAMILIES SATISFIED WITH CARE?

N. Dubuc[1,2], M. Dubois[1,2], L. Demers[3], M.Y. Tousignant[1,2], A. Tourigny[4], J. Desrosiers[1,2], C. Corbin[1], *1. Research Center on Aging, Sherbrooke, Quebec, Canada, 2. Faculty of medicine and Health Sciences, Université de Sherbrooke, Sherbrooke, Quebec, Canada, 3. École d'administration publique (ENAP), Quebec, Quebec, Canada, 4. Faculté de médecine, Université Laval, Quebec, Quebec, Canada*

An evaluation project was carried out to know if new alternate housing models (AHMs) meet the needs of elders and their families in a comparable or superior way than in nursing homes (NHs). As a part of this larger study, this paper will compare satisfaction of residents and their families with care and services in AHMs as well as NHs. Using a cross sectional comparative design, 238 disabled elderly and their family caregivers (n=30) were met in 45 facilities (23 AHMs, 22NHs). Residents were chosen according to a 2-stage sampling and matched by gender, age and disability profiles. They were evaluated on demographic characteristics, functional disability, cognitive status, behavioral symptoms, social functioning, and satisfaction with care and services. From eight AHMs and their NH counterparts, semi-structured interviews were conducted with two family caregivers of residents selected in the comparative study. Findings revealed that in both settings residents are relatively satisfied (Health Care Satisfaction Questionnaire). However, residents from AHMs are significantly more satisfied than those in NHs (mean total score 10.29/16 [standard error of the mean (SEM) 0.25]) and 9.28/16 [SEM 0.33] (p= 0.0354)) respectively. Interviews showed also that caregivers from the AHMs reported more satisfaction than those in NHs with personalized care, time to obtain an answer to their requests, attention to the state of their relatives and the physical environment. In summary, this new approach is a good strategy to provide a range of housing types in communities that can satisfy the elderly with moderate to severe disabilities.

## SESSION 2210 (PAPER)

## LABOR FORCE PARTICIPATION AND RETIREMENT ISSUES

### MULTIPLE CAREGIVING RESPONSIBILITIES AND LABOR FORCE PARTICIPATION IN LATER LIFE

Y. Lee, F. Tang, *University of Pittsburgh, Pittsburgh, Pennsylvania*

In terms of allowing amounts of time and efforts, caregiving responsibilities sometimes might conflict with labor force participation. On the other hand, caregivers may be more likely to engage in working to search for the respite place from the caregiving roles or to secure earned income. This study explores the relationship between the multiple caregiving responsibilities, which include care to spouse/partner, parents, grandkids, friends, and relatives, by informal caregivers and labor force participation using role theory. This study used data from the Health and Retirement Study (HRS) and the sample was composed of the respondents aged 50 to 74 years old at the 2004 survey (N= 11,185). While female older adults with multiple caregiving responsibilities were less likely to participate in the labor force, caregiving responsibilities did not affect labor force participation for male respondents. In both female and male respondents, while those with higher levels of household income were more likely to participate in the labor force, those with higher levels of assets were less likely to participate in the labor force. In addition, married status was positively associated with the likelihood of labor force participation. Findings have implications for relieving caregiving burden and reconciling with work responsibility. Policies and programs are needed to make informal caregiving valuable by providing credits for the time care given, providing paid sick leave and subsidized daycare to help ease caregiving burden. Additionally, flexibility of work schedule will increase the ability to meet the conflicting demands of the caregiver roles.

### REDEFINING RETIREMENT: THE EXPERIENCES OF THOSE WORKING IN RETIREMENT AND THE IMPLICATIONS FOR EMPLOYERS

M. Brown[2,1], M. Pitt-Catsouphes[2,1], E. Galinsky[3], K. Aumann[3], J.T. Bond[3], *1. Social Work, Boston College, Chestnut Hill, Massachusetts, 2. Center on Aging and Work, Chestnut Hill, Massachusetts, 3. Families and Work Institute, New York, New York*

The aging of the workforce is more than a mere shift in demographics. It has been accompanied by the emergence of new attitudes and expectations about aging, in general, and about the relationships between aging and work, in particular. The increasing number of older workers who continue to work in retirement is reflective of these fundamental changes. However, little is known about those who continue to work in retirement and the factors associated with important outcomes for these older workers as well as their employers. Using data from a nationally representative study of the U.S. workforce, we explore what it means to be working in retirement and how employers might best meet the needs of older workers, to the advantage of workers and the employers themselves. We find that by most measures, those working in retirement are doing quite well. Overall, they are quite satisfied with their lives, their jobs, and their workplaces. We then explored if there were differences between those working in retirement and those not yet retired in the workplace characteristics associated with job satisfaction. While there was some overlap between the groups, we also found some notable differences in the factors associated with this important outcome. The findings of our study indicate that managers should not assume that older workers who have previously retired look at their work experiences and relationship to work in the same way as older workers who have never retired, even though they may be of similar ages.

### FACTORS AFFECTING DECISIONS TO WORK AFTER RETIREMENT: IS HEALTH MORE INFLUENTIAL THAN WEALTH?

E. Choi, *School of Social Work, University of Pittsburgh, Pittsburgh, Pennsylvania*

Purpose: Although financial factors are thought to be the most influential in older individuals' decisions to work beyond retirement, a health factor may be neglected. This study examined how individuals' decisions to work after retirement are shaped both by financial and health factors and compared the effects of the two factors. Methods: Using the 2006 dataset of the Health and Retirement Study (HRS), this study compared people 65+ (N=9,901) who are retired, and have part-time or full-time work. Health was measured by self-rated health and number of chronic diseases. The financial factor was captured as net worth at the time of the interview. The model was analyzed by Ordinal Probit and PRE (predicted probabilities) analysis. Results: Probit analysis finds that health is a significant factor after controlling for demographics; people working beyond retirement are more likely to rate their health "good" or "excellent" ($\beta$= .198, p=.000) and report fewer chronic diseases ($\beta$= -.080, p=.000). Further, when health is accounted for, the financial factor is not significant. The PRE analysis supports the Probit analysis findings; people 65+ with excellent health have a 27.3% likelihood of working, either part- or full-time, compared to those with very poor health who show 8.1%. Discussions: Health appears to be a crucial factor in determining the labor market activities of older adults. Policies assisting the low-income elderly should give a priority to those with the poorest health.

### ‘CAN I HELP YOU DEAR?’: AN OLDER FEMALE ACADEMIC RESPONDS TO THE SERVICE INDUSTRY AND WELL-MEANING STRANGERS

J. Birkbeck, W. Hulko, *Social Work, Thompson Rivers University, Kamloops, British Columbia, Canada*

Much attention has been paid to the plight of older women in terms of their susceptibility to poverty and ill health in later life as well as pressure to maintain standards of beauty and/or correct age-associated ‘deficiencies’. At the same time, personal accounts of aging are becoming more common and gerontology is embracing the humanities as a way to better understand the aging process and sensitize students to the lives of older adults. Little attention has been devoted to everyday interactions between older women and members of the service industry, however. The question ‘can I help you dear?’ directed to a woman over sixty is seldom answered with ‘yes, you can start by not calling me dear!’ Such a response might assist service workers to appreciate the effect of their words and the dismissiveness with which they approach older women. This paper presents an analysis of an older female academic’s experience with dismissive reactions from service personnel since she became visibly older. This auto-ethnography is a reflective look at the uncomfortable experience of aging into the margins while functioning as an academic, colleague, friend, mother, daughter, grandma, and person in the world. Through the use of journal entries and photographs, the authors weave a story of a woman becoming aware of her diminished status as she grows older; first enduring differential treatment, then developing strategies of resistance.

### WORK IN THE NETWORK: EMPLOYEES, STAFFING PRACTICES AND CHALLENGES IN AREA AGENCIES ON AGING

J. Straker, A. Lackmeyer, *Scripps Gerontology Center, Oxford, Ohio*

Area Agencies on Aging (AAAs) are at the heart of the Aging Services Network. And, like all other aging services providers, the future will bring an increased need for staff to meet the demands of a growing population of older adults. While a great deal of attention has been focused on health providers such as nurses and geriatricians, or direct care workers such as nurse aides, almost no information exists to describe the staff positions used in AAAs, the types of credentials held by AAA staff or the benefits and management practices AAAs employ to attract and retain their workers. Who works in AAAs? What are their jobs? What are the conditions of employment? An internet survey of 630 AAAs in January 2010 resulted in 363 responses (57.7%). Results suggest that AAAs hire workers with many different educational backgrounds and types of credentials. They have fairly stable workforces, with staff turnover ranking the lowest of any of their staffing challenges. Location and organization of the AAA office affects staffing issues, with metro/non-metro offices and offices with different organizational structures showing different staffing patterns. Implications of AAA workforce findings for meeting the needs of tomorrow’s older population and the changing Aging Services Network will be explored.

## SESSION 2215 (SYMPOSIUM)

### THE EMERGENCE OF INSTITUTIONAL ELDER CARE IN CHINA

Chair: *V. Mor, Community Health, Brown University, Providence, Rhode Island*

China’s population is aging rapidly, and pressures are building to grow institutional long-term care (LTC) as a policy. Not surprisingly, there has been a rapid growth of elder care institutions across major Chinese cities in recent years. Little is currently known, however, about the structure, ownership, financing, personnel and residents of these institutions. In an ongoing project funded by the NIH Fogarty International Center, a team of experienced long-term care (LTC) researchers from both the U.S. and China have developed a uniform institutional survey instrument, and using that instrument, recently collected systematic data from virtually all elder care homes in two major cities in China: Nanjing (N=140) and Tianjin (N=180). This symposium presents major findings from this survey, organized around four themes concerning current elder care institutions in each city: (1) their structure, ownership and financing; (2) personnel and staff; (3) resident demographics and conditions aggregated at the facility level; and (4) city district-level demographic and socioeconomic correlates of institutional elder care development. Combined, these data provide a comprehensive profile of existing elder care institutions in the two study cities. Information and insights gained from this study will help symposium participants understand the recent emergence, growth and character of institutional LTC services for the elderly in urban China as well as the socioeconomic, cultural and market forces driving their development. Study findings can also inform government agencies in China as well as other international organizations concerned with policy making, planning and regulations in this area.

### INSTITUTIONAL STRUCTURE, OWNERSHIP, AND FINANCING

V. Mor, H.J. Zhan, *Community Health, Brown University, Providence, Rhode Island*

This paper focuses on three aspects of recent developments in elder care institutions in urban China using data collected in Nanjing, China. The institutional structure of facilities is characterized by its recent establishment, diverse ownership and management, and ambiguous professionalization. Based on preliminary data analysis, we find institutional ownership elder care facilities consist of four models: government (40.7%), individual (43.6%), partnership/corporation ( 22%), and mixed (8 or 5.7%). The mixed model is usually a local government owned facility that is contracted out to an individual or a group of individuals to manage. In terms of financing, 40% of facilities reported completely relying on residents’ monthly payment as their revenue. Roughly 53% reported receiving partial or full government assistance as their annual revenue. Over 70% of facilities reported receiving some level of government subsidy monthly or annually from various levels of the government.

### DEMOGRAPHIC AND SOCIOECONOMIC CORRELATES OF INSTITUTIONAL ELDER CARE DEVELOPMENT

Z. Feng, *Center for Gerontology & Health Care Research, Brown University, Providence, Rhode Island*

In this paper, we investigate the demographic and socioeconomic characteristics of urban communities that correlate with both the supply and demand of institutional elder care services. Facility-level information is aggregated to the municipal district level and merged with most recent population and socioeconomic data at the district-level (11 and 15 districts in Nanjing and Tianjin, respectively). Preliminary analysis based on the Nanjing data suggests that the total numbers of both elder care home beds and residents are positively associated with the share of 65+ population, per capita income and total number of hospitals at the district-level. We will examine this correlation with additional district-level variables such as the percent of older people living alone, percent not married, average family size, population in poverty, and availability of various community-based residential care facilities. Implications of these findings are discussed in the context of shifting demographics and social change in urban China.

### PROFILE OF PERSONNEL AND STAFF

X. Guan, *Social Work & Social Policy, Nankai University, Tianjin, China*

This paper examines the profile of personnel and staff in 140 elder care homes in Nanjing, China. Based on data analysis, most facilities (67%) do not differentiate direct care staff from other care workers, Care workers are mainly recruited from migratory laborers (68%) from rural China; Roughly ¼ of facilities reported hiring laid-off workers; 15%

reported hiring retired worker. Regarding staff retention: 43% of facilities reported one or more care workers having left their post while 49% reported hiring new care workers in the same year. In terms of medical professionalization, majority of elder care homes (70%) have neither a trained nurse nor physician. Among all staff and administrative workers, only 26% are government employees. This figure shows that there is a heavy reliance on the elder care market; and the private market is predominant in the current elder care industry.

### PROFILE OF ELDER CARE HOME RESIDENTS

X. Feng, *Sociology, Nanjing University, Nanjing, China*

This paper provides a detailed description of current elder care home residents in the two study cities. Preliminary analysis based on the Nanjing data indicates that on average, there are 50 residents per facility, 55% are female, and 95% are 60 years old or older. In a typical home, more than 80% have medical insurance coverage, 63% are pensioners, and 40% pay out of pocket. Over 15% of residents are government welfare recipients, who are concentrated in a small number of homes. Regarding health conditions, on average 18% of residents need help with eating (fed by others), 40% need assistance with dressing, 41% need assistance with walking, 27% are bladder incontinent, 21% are bowel incontinent, and 23% have dementia. Relatively few residents have pressure ulcers, receive tube feeding or are physically restrained. Importantly, there is substantial variation across facilities in resident demographics and case mix.

# SESSION 2220 (PAPER)

## AGING FOR WOMEN: PRACTICAL AND MORAL ISSUES

### SHIFTING THE FOCUS: GENDER THEORIES IN RESEARCH SURRENDERING EMPLOYMENT-BASED HEALTH INSURANCE AS A PREDICTOR OF LABOR FORCE PARTICIPATION PATTERNS

A. Daub, *CWRU, Cleveland Heights, Ohio*

Prior research examining employment-based health insurance as a predictor of remaining at one work-place —or “job lock” literature— often examines the dichotomous outcome work versus retirement. Just recently, researchers started to include different labor force statuses such as disability and part-time labor. However, it is known that especially women become disabled and hold part-time positions. Furthermore, the life course of men can now be less described in terms of full-time work and retirement. Rather, “newer” forms of labor force patterns come into play which makes it more socially acceptable to hold part-time jobs also for men. These developments can be attributed to the de-institutionalization of the life course which is likely to be influenced by employment- based health insurance differently for men compared to women in the United States. These observations of existing literature on labor force participation patterns in the context of health insurance have not been addressed in regards to gender inequalities in time spent at work and stigmatized exit pathways taken, which is attributable to the dearth of gender theoretical guidance in this field. Here, it is suggested that gender theories could shed more light on gender inequalities in time spent in the labor force and in exit pathways taken which is likely to be influenced by employment-based health insurance not only for men.

### GENDER DIFFERENCE IN PARTICIPATED IN BASIC PENSION INSURANCE IN CHINA

H. Yang, *Women’s Studies Institute of China, All-China Women’s Federation, Beijing, China*

Objective: The study was designed to analyze the gender difference in ratio of Participated in Basic Pension Insurance in rural and urban area of China. Data: Data obtained from part of the sample survey on population in 2005, and there were 317385 older respondents (49.90% females). Method: Cross table analysis and chi-square partitioning procedure were computed for the individual columns of Participation. Results: (1) There was a statistical significant difference in Participated in Basic Pension Insurance between rural and urban area. Only about 3% rural older people and more than 62% urban older people Participated in Basic Pension Insurance ($p<0.001$); (2) Only 2.46% rural older women and 52.57% urban older women Participated in Basic Pension Insurance, which accounts 64% of rural old men and 73% of urban old men seperately($p<0.001$); (3) About half of urban older women and more than 97% rural older women had not participated in Basic Pension Insurance. Conclusion: Most of women Participated in informal employment before they were old, while there was a strong relationship between Basic Pension Insurance and formal employment in China, so most of women couldn’t Participated in Basic Pension Insurance, they had to depend on thire family, and there are high risks to be poor and reduce the quantity of living matter of those older women. Keywords: Basic Pension Insurance; Gender Difference; in China

### OLDER WOMEN’S MORAL REASONING: AN ANALYSIS BASED ON CAROL GILLIGAN’S THEORETICAL FRAMEWORK

E.K. Dakin, *School of Social Work, Colorado State University, Fort Collins, Colorado*

This study examined moral reasoning among older women, a group that has received little attention in moral development and reasoning research and theory, based on the female moral development model developed by psychologist Carol Gilligan. This model was developed as a result of the finding that females are deficient in comparison with males when tested within the framework of Lawrence Kohlberg’s moral development theory (Gilligan, 1982). Gilligan’s alternate theoretical understanding of female moral development was developed through research with subjects diverse in gender, ethnicity, age (6 through 60), and socioeconomic status. This research emphasizes real-life decision making, for instance reasoning around the decision of whether or not to have an abortion (Gilligan; Gilligan & Attanucci, 1988). One limitation of Gilligan’s model, however, has been the lack of research on older adult (i.e., over age 60) subjects. This study addressed this gap by assessing the utility of Gilligan’s model among 88 African American, Latina and Caucasian women age 60 and over from varying socioeconomic backgrounds who participated in eight focus groups that examined ethical dilemmas within adult protective services (APS) related to mandatory reporting, involuntary protective services, and criminalization of elder maltreatment (Dakin & Pearlmutter, 2009). The participants’ reasoning in responding to the dilemmas reflected underlying decision-making processes based in an ethic of care and responsibility and recognition of the limitations of autonomy. This type of reasoning is clearly consistent with Gilligan’s description of the care perspective, an orientation emphasized by females in responding to ethical dilemmas (Gilligan & Attanucci).

### OLDER WOMEN’S BODY IMAGE: A LIFE COURSE PERSPECTIVE

T. Liechty[1], C.M. Yarnal[2], *1. Kinesiology and Health Studies, University of Regina, Regina, Saskatchewan, Canada, 2. The Pennsylvania State University, State College, Pennsylvania*

Body image research has traditionally focused on younger women and girls, ignoring women in later life. Recent literature, however, has called for more research into the body image of older women, specifically from a life course perspective. The life course perspective can address the complexity of body image by identifying personal and/or environmental factors that shape body image and the trajectories of body image across the life course. The purpose of this study, therefore, was to explore older women’s body image using a life course perspective. We conducted individual interviews and follow up focus groups with 13 women aged 60 to 69. We analyzed transcripts using open and axial coding, to identify over-arching themes. Findings highlight the influence of interpersonal relationships (e.g., with husbands or mothers), key life events (e.g., pregnancy or education) and the larger society on participants' body image. In addition, the findings suggest that with age, women de-prioritize appearance in favor of health or internal characteristics. Finally, the findings clarify body image as a construct applied to aging women, which includes attitudes toward appearance, evaluation of health and physical ability, as well as assessment of appearance. This research demonstrates the value of studying participants within the context of their overall life stories by highlighting connections between past life experiences and current body image perspectives. Furthermore, findings of this study provide insight into the process by which aging women negotiate body image concerns. Such insights can be key to improving body image interventions for younger women and girls.

## SESSION 2225 (SYMPOSIUM)

### AGING IN US URBAN NEIGHBORHOODS: QUALITY OF LIFE AND QUALITY OF LIVING

Chair: *I. Yen, University of California, San Francisco, San Francisco, California*
Co-Chair: *Y. Michael, Drexel University, Philadelphia, Pennsylvania*
Discussant: *J. Kelley-Moore, Case Western Reserve, Cleveland, Ohio*

Neighborhood environment and health of older adults is gaining increasing attention in the public health and gerontology research literature. The majority of older adults live in urban areas in the US and industrialized nations around the world. How are neighborhoods contributing to quality of life of older adults and what is the quality of living for older adults in urban areas? This symposium session features qualitative and quantitative research from US urban areas with diverse racially/ethnically study populations, highlighting what aspects of neighborhoods contribute to quality of life for older adults. Qualitative research will be presented from Portland, Oregon. Survey results are from Chicago, Oakland, Chicago, and Miami. Key findings highlight: 1)importance of social relations for keeping active; 2) the role of built environment features such as front porches and community centers in maintaining a sense of community; 3) the role of visibility of the street in providing a sense of support contributing to less psychological distress; 4) how access to services contribute to quality of life; and 5) whether access to stores and services and physical disorder contribute to differences in Black-White differentials in perceived neighborhood quality. The symposium objectives are to emphasize mechanisms through which neighborhoods support quality of life among older adults in contrast to much of the research which has highlighted problems and stresses. Additionally this symposium showcases the role of both qualitative and quantitative research methods toward that end.

### THE RELATIONSHIP OF BUILT ENVIRONMENT ≤EYES ON THE STREET≤ FEATURES TO SOCIAL SUPPORT AND PSYCHOLOGICAL DISTRESS IN HISPANIC ELDERS IN MIAMI, FL

S.C. Brown[1], C.A. Mason[2], J.L. Lombard[3,1], F. Martinez[3,1], E. Plater-Zyberk[3,1], A.R. Spokane[4], H. Pantin[1], J. Szapocznik[1,3], *1. Dept. of Epidemiology & Public Health, University of Miami Miller School of Medicine, Miami, Florida, 2. University of Maine College of Education and Human Development/Center for Community Inclusion & Disability Studies, Orono, Maine, 3. University of Miami School of Architecture, Coral Gables, Florida, 4. Lehigh University College of Education, Bethlehem, Pennsylvania*

OBJECTIVE: To examine whether architectural features of the built (physical) environment theorized to promote observations and social interactions (e.g., porches; stoops) predict Hispanic elders' psychological distress. METHODS: Coding of built environment features of all 3,857 lots in East Little Havana, Florida, and enumeration of elders in 16,000 households was followed by assessments of perceived support and psychological distress in a population-based sample of 273 low-socioeconomic status Hispanic elders. Structural equation modeling was used to assess relationships between block-level built environment features, perceived social support, and psychological distress. RESULTS: Architectural features of the front entrance such as porches that promote visibility from a building's exterior were positively associated with perceived support. Perceived support in turn was associated with reduced psychological distress, controlling for demographics. Additionally, perceived social support mediated built environment's relationship to psychological distress. CONCLUSIONS: Architectural features that facilitate direct, in-person interactions may be beneficial for Hispanic elders' mental health.

### ACTIVE AGING: BUILT AND SOCIAL ENVIRONMENTAL INFLUENCES

Y.L. Michael, *Department of Epidemiology and Biostatistics, Drexel University School of Public Health, Philadelphia, Pennsylvania*

The goal of this mixed-methods study was to examine the role of neighborhood context in active aging. Nine focus groups were conducted in 2002 and 2003 with residents aged 55 and over (n=60). In addition, a random sample of street segments were audited using the Senior Walking Environmental Assessment Tool (SWEAT) and residents on audited streets were interviewed to assess psychological sense of community and walking behavior (n=128). Older adults discussed the role of formal and informal social connections in their neighborhoods in keeping them active. Further, these older adults identified aspects of the built environment, such as front porches and community centers that increased sense of community. Quantitative findings support a positive association between neighborliness and the cumulative presence of characteristics providing semi-private space for informal interaction, including front porches, continuous sidewalks, and freedom from high traffic streets, bars on windows and doors, and litter and graffiti.

### LOWER-BODY FUNCTION, NEIGHBORHOODS, AND QUALITY OF LIFE IN AN OLDER POPULATION

W. Satariano, M. Kealey, E. Kurtovich, S.L. Ivey*, University of California, Berkeley, Berkeley, California*

This is a report of whether neighborhood qualities moderate the association between poor lower-body function and disability and thus enhance quality of life. A sample of 884 people aged 65 years and older was identified through service organizations in four US counties. Interviews addressed neighborhood characteristics, lower-body function, and disability. The main outcome was disability (level of reported difficulty in walking 2+ city blocks). Functional capacity was based on measures of lower-body strength, balance, and walking speed. Estimates of main and interaction effects were derived from GEE regression models. Poor lower-body function was less likely to be associated with disability in neighborhoods with qualities, such as better access to services, greater traffic safety, and with residents who are more likely to assist others. These results suggest that particular neighborhood factors may enable older people, even those with reduced capacity, to experience a better quality of life.

### RACIAL DIFFERENCES IN NEIGHBORHOOD SATISFACTION: RESULTS FROM THE CHICAGO HEALTH AND AGING PROJECT

I. Yen[1], L.L. Barnes[2], C.F. Mendes de Leon[2], *1. University of California, San Francisco, San Francisco, California, 2. Rush University, Chicago, Illinois*

Which characteristics of neighborhood are associated with neighborhood satisfaction? Using data from the Chicago Health and Aging Project ( n=4727; 73% African American), we investigated whether access to services (e.g. pharmacy, park, bank, or beauty shop), physical disorder, social cohesion, and proportion of people over age 65 in the census block group were associated with neighborhood satisfaction.

Satisfaction was measured with the question: How would you rate this neighborhood to live in [fair/poor 16%]? African Americans reported fair/poor ratings much more than whites (21% vs 2% p<0.0001). Poor access to services was associated with fair/poor rating [OR=1.57; 95% CI: 1.26,196]. Physical disorder was strongly associated with fair/poor rating [OR=2.19; 95% CI 1.89,2.53]. Proportion of people over age 65 affected African Americans' rating but not whites (p<0.01). For African Americans, for every increase in percent of people over age 65 there was a 6% reduced odds of reporting fair/poor neighborhood.

# SESSION 2230 (PAPER)

## ATTITUDES TOWARD TECHNOLOGY

### OLDER ADULTS' USE AND ATTITUDES TOWARDS TECHNOLOY: TRANSFORMING COMMUNITIES, ENVIRONMENTS AND TECHNOLOGIES FOR AGEING-IN-PLACE

O. Brian, B. Knapp, A. O'Hanlon, R. Bond, L.E. Carragher, *Dundalk Institute of Technology, Dundalk, Ireland*

With unprecedented demographic changes comes an urgent challenge to support older people in their homes as they grow older. Technology offers much potential for addressing this challenge, yet little is known about adults' attitudes, preferences and use of different forms of technology, or the ethical boundaries around those attitudes and preferences. A series of studies are outlined to explain adults' attitudes and behaviour around technology through the use of the newly developed Extended Technology Acceptance Model. Study 1 is a large survey in the north-east of Ireland (n = 1000) which examines adults' attitudes and use of communication, information, entertainment and health technologies; it also examines the predictors of those attitudes and their consequences on health, quality of life and relationships. Study 2 is a physical home-environment in a lab setting where a home environment is simulated through CAVE technology. The Cave Automatic Virtual Environment (CAVE) is a fully immersive virtual reality environment offering a multi-person, room-sized, high-resolution 3D video and audio environment. As the user moves within the display boundaries, the correct perspective is displayed in real-time to achieve a fully immersive experience. Study 3 is a Lab-in-the-Home (Pop. 15-40) which provides a place-based evaluation framework from 16 living apartments within Dundalk, Co. Louth; it also provides state-of-the-art ambient assisted living (AAL) technologies to operate pilots for future developments and retrofits within the community. Results from these studies show the value of the Extended Technology Acceptance Model in explaining adults' attitudes and use of technology. Insights are also offered around ethical issues of confidentiality, responsibility, privacy and non-maleficence. The surveys also provide a diverse testbed of matched groups for follow up interviews, surveys, trials and simulations.

### RELATIONSHIP BETWEEN PERSONALITY TRAITS AND ATTITUDES TOWARDS NEW TECHNOLOGIES IN SPANISH ELDERLY

E. Urdaneta, A. Navarro, M. Gonzalez, A. Garcia, C. Buiza, C. Sobrino, M. Iturburu, J. Yanguas, *Fundacion Instituto Gerontologico Matia INGEMA, Donostia-San Sebastian, Spain*

INTRODUCTION Research on the elderly and the adoption of new technology suggests that personality traits could play a role on older people technology adaptation. The aim of this study is to examine whether personality traits are associated with beliefs and attitudes towards new technologies. METHODOLOGY The study included 62 elderly people ranging from 55 to 90 years old (M=69.67, SD=7.82). According to the aims of this work, NEO-FFI-Inventory (Costa and McCrae, 1992) was used. Also, a Likert type scale questionnaire was developed for this study composed by 19 items assessing beliefs about new Information and Communication technologies (ICT), personal resources to use and how to interact with them. RESULTS Pearson correlations show that trait Conscientiousness is significantly positively related to beliefs: "older people need to use ICT" (r=-0.59) and "older people have the resources to use ICT" (r=-0.44) and negatively with "only young people are able to use ICT" (r=-0.32) "it is very difficult for older people to use ICT" (r=-0.38), "it is very difficult for seniors to understand the management of ICT" (r=-0.34), "older people are reluctant to use ICT" (r=-0.57), "the elderly often forget the ICT skills" (r=-0.31) and "older people prefer to use something familiar but old and with less functionality than something new and with more guarantees of success" (r=-0.37). DISCUSSION Results point that being organized, careful, cautious, meticulous and having persistent goals is associated with better beliefs and more positive attitudes towards new technologies, which should be taken into account when developing new technological tools.

### WHAT DO OLDER ADULTS UNDERSTAND ABOUT THEIR PRIVACY RISKS WHILE ONLINE?

J. Camp, L. Lorenzen Huber, L. Borrero, *Indiana University, Bloomington, Indiana*

At what age group does general age-related cognitive decline intersect with susceptibility to phishing and computer fraud? To what kinds of attacks are adults most susceptible? And critically, armed with this understand how can we enable elders to protect themselves from fraud? In a two year study funded by NSF, we are answering these questions through an innovative integration of video, surveys, and scenarios in order to explore the anxiety-fraught domain of financial fraud. In an iterative series of focus groups used to inform the development of the multimedia approach, 20 older adults provided insight on older adults' understanding of two common threats: phishing and "pump and dump." The mechanics and avoidance of phishing were understood by 80% of participants. None of the participants were familiar with "pump and dump," in which scammers infiltrate online accounts, pump up the prices of penny stock, and then dump the holdings, thus emptying the account. The combination of the concentration of wealth among older American elders, the global unsecured network, availability of personally identifiable information used for authentication, and disproportionate lack of technical expertise among elders creates a problem of such a distinct scale that it is arguably of a new type altogether. The findings from this study provide a critical first step in the development of functional models to understand older adults' financial risks. Outcomes of the study include a methodology to communicate risk as well as an understanding of elders' susceptibility and suggested best practices avoid fraud.

### EXAMINING USE OF INTERACTION SUPPORT FOR EVERYDAY TECHNOLOGIES BY OLDER AND YOUNGER ADULTS

M.A. O'Brien, S. Reeves, *Psychology, UAHuntsville, Huntsville, Alabama*

Headlines from the 2010 Consumer Electronics Show revealed an increased interest among manufacturers in developing technologies that specifically appeal to the growing population of older adults. Research suggests that older adults are slower to adopt new technologies than younger adults, but older adults' adoption of new technologies may be enhanced through training (e.g., Rogers, Cabrera, Walker, Gilbert, & Fisk, 1996). A focus study exploring older adults' preferred method of training found that text (i.e., manuals) was participants' favored method to support use of new technologies, but several other methods such as one-on-one demonstrations were also frequently mentioned (Mitzner, et al. 2008). Beyond initial training, these methods may also be important to support intermittent use, technology maintenance, and discovery of other features that satisfy new goals. To cost-effectively develop support that helps all user groups, the actual usage and effectiveness of user-selected methods on technology success must be considered. The present study investigated actual use of support by older and younger adults in their everyday technology interactions. Over a ten day period, participants reported all encounters with everyday technologies in a journal. Then, they returned to the university for a structured interview that elicited strategies for success and problem-resolution in these encounters. Both age groups reported accessing support for problem-resolution more than for successes, with older adults more likely than younger adults to use this support to resolve problems. Differences in support use will be discussed in terms of general preferences and other factors influencing use in specific situations.

## SESSION 2235 (PAPER)

## MEDIA DISSEMINATION ABOUT AGING

### DEPICTION OF OLDER ADULTS IN ANIMATED MOTION PICTURES IN THE U.S.: 2000-2009

K. Dooley, J. Terhune, *Psychology, Murray State University, Murray, Kentucky*

As both art form and entertainment, motion pictures simultaneously reflect and influence the values of a . For example, one may examine themes and images portrayed in movies in order to discover dominant beliefs and attitudes toward older adults and the aging process more generally. Furthermore, social learning theory and cultivation theory suggest that individual attitudes and behavior are influenced by the stereotypes depicted in all media. This influence is especially powerful in shaping the beliefs of children. This study examines how a sample of the most popular animated motion pictures released since 2000 represent aging and older adults. Principal selection criterion was U.S. box office sales in the year released. We reviewed 32 films using a standardized questionnaire then conducted a content analysis of the following: demographic and biopsychosocial characteristics of older characters, aging-related themes, common aging stereotypes, and interpersonal relationships between older and younger characters. Many of the movies contained older adult characters and portrayed them as healthy, competent, and positive in other ways. This was somewhat surprising given general under-representation and negative aging stereotypes often depicted in other animated media. We discuss the potential effects of animated films on children's beliefs, attitudes, and behavior toward older adults.

### COGNITIVE HEALTH: MOVING BEYOND ALZHEIMER'S DISEASE

A.E. Vandenberg, *Graduate Institute of the Liberal Arts, Emory University, Atlanta, Georgia*

Alzheimer's Disease has emerged as a cultural boogie man for the baby boom generation, and representations of it drive fear, health vigilance, and symptom seeking. Has publicity been helpful in promoting awareness of brain health and healthy lifestyle behaviors within public health, or has it been a counterproductive distraction? Although prevalence rates seem low compared with other major age-related diseases, the social costs of Alzheimer's are enormous, and powerful aging institutions have aligned themselves behind an agenda of finding a cure. In evaluating the value of an Alzheimer's focused research agenda within a larger gerontological context, this presentation will examine public opinion poll data, official and unofficial histories of Alzheimer's research, public funding of cognitive initiatives, and data on health strategies enlisted by the "worried well." The synthesis of this systematic review suggests that attitudes and policy towards Alzheimer's are indicative of Americans' anxieties about aging in general. It also suggests that focusing on the overwhelmingly negative Alzheimer's scenario may fuel anti-aging attitudes and denial of cognitive aging rather than promote acceptance, creative adaptation, and healthful cognitive engagement throughout the life course.

### WHAT MAKES NURSING HOMES NEWSWORTHY? CONTRASTING CONTENT ANALYSIS OF NEWSPAPER STORIES WITH JOURNALISTS' REPORTED INTERESTS

J. Rozanova, T. Wetle, W. Rakowski, R.R. Shield, *Center for Gerontology and Health Care Research, Brown University, Providence, Rhode Island*

Media influence public deliberation by bringing important issues into the news spotlight. Nursing homes and their residents have often been a focus of media attention. However, the socio-cultural conventions, political agendas, and economic interests that determine which stories about nursing homes are published and become influential have not been studied. This paper addresses this knowledge gap by comparing the perspectives of 20 journalists who wrote about nursing homes in national and state American newspapers from 1999-2008 with key themes about nursing homes and their residents in the articles. Thematic analyses of 150 articles retrieved from the LexisNexis database identified the polarized discourse of (un-)healthy aging in nursing homes in a broader framework of individual responsibility and personal control. Portrayals of the frailest nursing home residents reveal residents' relative "success" or "failure" measured by continued participation in the market economy. Interviews with journalists focused on the factors that influence how stories are written and changed by editors, and which stories are published. This paper examines the potential for disconnect between the journalists' personal interest in the increasing needs and daunting experiences of individual nursing home residents, and the broader economic/political environment of the media that focuses on reducing public spending on longterm care and on stories with "shock value" to attract readership . The paper also discusses stories about nursing homes the journalists might not have been able to write due to the difficulty of getting the ideas past editors or unavailability of investigative time and resources to conduct research.

### SEEKING 'FORBIDDEN KNOWLEDGE' : BARRIERS TO GENETIC RESEARCH ON HUMAN AGING

M. Lambrix, E. Juengst, *Case Western Reserve University, Cleveland, Ohio*

Kempner and colleagues have written about the concept of 'forbidden knowledge' as a key obstacle to increased public and political support for scientific research. The authors argue that the idea that there are "things we should not know" animate both formal and informal social constraints on the direction and pace of science, with "a palpable effect on what science studies, how studies are performed, how data are interpreted and how results are disseminated." Genetic biomedical research has been progressing rapidly since the completion of the Human Genome Project. However, genetic research on human aging has not been on pace with the successes of specific disease based genetic research. We hypothesize that this could be due to the union of two contested areas of 'forbidden knowledge' – the quest to slow aging and genetic manipulation/enhancement. Given this contentious combination it's no surprise the field of genetic aging research faces numerous challenges in gaining and sustaining public and political support. Using data from 18 in-depth interviews with field experts, this paper seeks to better understand the unique challenges these researchers' face, particularly in terms of how this quest of 'forbidden knowledge' is influenced by the formal and informal constraints as outlined by Kempner et al. This analysis will document how scientists perceive these barriers and how they think it impacts their work and the field on a broader level. Exploring these perceptions may potentially lead to a renewed debate among both expert and lay people surrounding the quest to genetically manipulate human aging.

## SESSION 2240 (PAPER)

## PRODUCTIVE USE OF TIME

### ON/IN OUR OWN TERMS: ELDERS' MEANINGS OF COMMUNITY INVOLVEMENT AND HEALTHY AGING

M. Martinson, *1. Health Education, San Francisco State University, San Francisco, California, 2. University of California, Berkeley, Berkeley, California*

Research, policy and practice have recently focused on older adult civic engagement as a component of healthy aging. The empirical research has operationalized civic engagement primarily as formal service volunteerism. Furthermore, research has focused on individual health and wellbeing outcomes of volunteering as assessed through quantitative methods, while few studies take a critical standpoint or explore meanings elders themselves have about community involvement, healthy aging, and the broader contexts of involvement and health. This qualitative study takes a constructivist, modified grounded theory approach to explore the lived experiences of community involvement among a diverse sample of 22 elders, ages 60-93 years old, who are engaged in a range of community activities often missed by traditional definitions of volunteerism, e.g. spiritual leadership, community activism, cultural preservation, and community organizing. In-depth interviews are analyzed to explore subjective meanings of community work, the relation of those meanings to experiences of aging, and the elders' definitions of "healthy aging." Themes of community involvement include: doing what I can; being in and building community; finding personal enjoyment; slowing down or stepping back with age. Meanings of healthy aging include: care of the body; a positive approach; a supportive and respectful environment; feeling free; and how I'm trying to live. Key findings reveal that community involvement and healthy aging reflect reciprocal interactions between individual, interpersonal and broader social, political and economic contexts. Community involvement, aging and health are processes elders negotiate, employing varying degrees of agency to create a sense of "aging on my own terms."

### CONTRIBUTING TO OTHERS, CONTRIBUTING TO ONESELF: GREATER PERCEIVED CONTRIBUTION TO OTHERS PREDICTS BETTER FUNCTIONING AND HEALTH IN LATER LIFE

T. Gruenewald, *University of California, Los Angeles, Los Angeles, California*

Growing evidence suggests that the ability to provide support to and play useful roles in the lives of others may have health-promoting influences in older adulthood. The current analysis examines the association between perceptions of contributions to others and disability and mortality in later life. Method: Data comes from participants aged 55 and over (n = 713) in The Study of Midlife in the U.S. (MIDUS), a longitudinal study of healthy aging (baseline and 9-year follow-up). Perception of contributions to others was assessed with a single rating (0 - worst to 10 - best possible). ADL disability was assessed with a count of 9 basic ADLs (e.g., bathing, bending, lifting) that participants indicated "a lot" of impairment in performing. Mortality status was obtained via the National Death Index. Covariates included age, gender, number of health conditions, educational attainment, and baseline ADL impairment. Multinomial logistic regression analyses were used to examine the odds of increased disability or death over the follow-up as a function of baseline level of perceived contributions to others. Results: Compared to those who showed no change/slight improvement in disability level over the follow-up, the odds of a large increase in ADL impairment (3+ domains) or death was lower in those with higher perceptions of contributions to others at baseline (adjusted ORs = .88 (95% CI = .79, .97) and .87 (95% CI = .80, .95), respectively). Conclusions: Results suggest that perceptions of making valuable contributions to others are associated with more positive health trajectories in later life.

### A COMPARISON OF OLDER AND MIDDLE-AGED VOLUNTEERS AT THE 2010 WINTER OLYMPICS: HEALTH AND BURNOUT

A.V. Wister, *Gerontology, Simon Fraser University, Vancouver, British Columbia, Canada*

There has been a growing interest in the effects of volunteerism among older adults. One body of research has examined volunteerism from the point of view of its short- and long-term social and health consequences for those who help others. Yet, there may be adverse consequences for those who volunteer, especially if the volunteer activity is intense, such as at major sporting events. This paper examines whether and to what extent older volunteers experience similar or different outcomes associated with their volunteer experience. Data were collected before and after the volunteer experience from 251 persons aged 45 and over who participated as volunteers at the 2010 Winter Olympics in Vancouver Canada. Change in measures of perceived health; psychological well-being; stress and Maslach's Burnout Inventory were examined, as well as open ended responses to questions pertaining to their volunteer experience. Results indicate that there were few differences in the health outcomes and experience of older and middle-aged volunteers. These findings are explained in terms of selection factors and strong altruistic tendencies of volunteers of all ages. Participants to this session will obtain an understanding of the similarities and differences in the health outcomes and volunteer experience among older and middle-aged adults at a major sporting event.

### ENGAGEMENT IN PRODUCTIVE ACTIVITIES AND SOCIAL WELL-BEING IN LATE ADULTHOOD

Y. Jung[1], T. Gruenewald[2], *1. Social Welfare, UCLA, Los Angelels, California, 2. UCLA, Los Angeles, California*

This paper aims to examine whether engagement in productive activities (i.e., paid work, volunteering, and informal helping) is associated with the change in older adults' social well-being defined as the perceived quality of social functioning and relationship with other people, neighborhood, and communities. Analyses are based on the participants aged 55 or older (n=491) from the first (1995/1996) and the second (2004/2005) waves of the National Survey of Midlife Development of the United States (MIDUS), a nationally representative sample of adults aged 25-74. Separate ordinary least squared regressions on five domains of social well-being - meaningfulness of society, social integration, social contribution, acceptance of others, and social actualization - indicated that engagement in volunteering (none vs. some) at baseline was associated with increased levels of social integration (b=0.95, p=0.01) and social contribution (b=0.95, p=0.00) at Wave 2 after controlling for the Wave 1 values. When the number of activities at baseline was examined, those participants who engaged in all three activities reported higher levels of social integration (b=1.70, p=0.02) compared to those who engaged in no activity. Those who performed two activities and who engaged in all three activities showed increased levels of social contribution (b=1.35, p=0.03 and b=1.40, p=0,05, respectively) compared to those with no activity. Findings suggest that engagement in multiple productive activities and volunteering, in particular, may promote older adults' perceived levels belongingness to their communities and society as well as their own evaluation of their values and contribution to society.

### WHERE DOES THE TIME GO? GENDER, RACIAL, AND EDUCATIONAL DIFFERENCES IN TIME USE AMONG OLDER ADULTS

S.A. Robert, J. Mullahy, *University of Wisconsin-Madison, Madison, Wisconsin*

Background: There is growing interest in older adults' contributions to society—particularly through volunteer and care work—and understanding racial/ethnic differences in these contributions. We examine gender, racial/ethnic, and educational differences in time use among older adults across the following seven competing time use categories: leisure, caring for someone in the household, caring for someone outside the household, volunteering, work, sleep, and household tasks/personal care. Specifically, we examine whether there are racial/ethnic differences in time spent providing care work versus engaging in volunteer activities. Methods: We use time use daily diary data from the combined 2003-2008 American Time Use Surveys for adults 65 and older (n=11,966). Novel econometric share equation techniques allow us to compare predictors of time use across seven competing time use categories. Results: There are no racial/ethnic differences in the amount of time spent on volunteering or care work, even among women. Women spend more time than men in volunteer activities, and less time in leisure activities, though men spend more time in paid work. Across gender and racial groups, greater education is associated with more time volunteering and less time in leisure activity among older adults. Discussion: Contrary to some prior work, there are no racial/ethnic differences in time spent on either informal care work or volunteering among older adults. Education level is the most consistent predictor of volunteer activities among older adults. With an increasingly highly educated older adult population, non-paid activities considered productive are likely to increase among all gender and racial/ethnic groups.

## SESSION 2245 (PAPER)

## QUALITY NURSING HOME CARE: VIEWS OF RESIDENTS AND STAFF

### AN EXPLORATION INTO THE MEANINGS OF CARE: A VIEW FROM THE INSIDE

R.A. Siders, *Sociology, Case Western Reserve University, Cleveland, Ohio*

Throughout the care literature, care appears as a standard set of service delivery practices that are defined and unilaterally imposed by professional and clinical experts. Yet, the matter of what care is and what it means in specific contexts has not been critically considered. For example, the "quality of care" in LTC settings is judged and evaluated in terms of performance of physical tasks or medical treatment, which are recorded in the patient's charts. However, what is neglected in the language of medicine and its institutions is the care work that involves social relations, comprised of intricate and uncharted mental and emotional work, special knowledge and skills involved in tending to the other's needs (Diamond, 1986). Since care is defined primarily by those who provide it, there has been virtually no investigation of definitions and meanings of care from the perspective of care recipients. It is necessary to give systematic scholarly consideration to the meaning of care by focusing on those who are cared-for; therefore, this project enlists the voices of elder care recipients living in LTC in developing a systematic and theoretically grounded approach to the concept of care. It is an approach that holds the promise not only of advancing institutional practices of care and its effects at the level of personal experience. Qualitative results of care definitions, meanings and experiences articulated by elder care recipients and frontline staff will be presented.

### NURSING HOME RESIDENTS' PREFERENCES, VALUES, AND SATISFACTION WITH COMPONENTS OF PERSON-CENTERED CARE

C. Berdes[1,2], M. Anichini[2], J. Grad[2], L. Anichini[2], *1. Buehler Center on Aging, Health & Society, Northwestern University, Chicago, Illinois, 2. Presbyterian Homes, Evanston, Illinois*

While much attention has been given to specifying the artifacts of culture change toward person-centered care, not much work to date has reflected the understanding that person-centered care is by definition individualized, and thus that its components are differently valued by different residents, and cumulatively, therefore, these values may indicate different components for different facilities. Our research developed and pilot-tested a measure of residents' preferences, values, and satisfaction with the person-centered care they receive. Our aim was to tap residents' opinions on the components of person-centered care, the value they place on each component they name, and their satisfaction with how each component they value is respected by the staff who care for them. The measure was piloted in face-to-face contacts with 27 nursing home residents. Findings: We found disparities between which components residents valued, and which they were most satisfied with. In particular, we found that residents attributed high value to but low satisfaction with caring attitudes of nurses aides and nurses, choice of activities, and participating in decisions about health care and care plans. Because such data may be useful to facilities as a direction-finder in or measure of their progress in the process of culture change toward person-centered care, we are now seeking additional ways to systematize and automate the collection of such data.

### "IT'S A DIGNITY THING": NURSING HOME CARE WORKERS' USE OF EMOTIONS

J. Rodriquez, *Institute for Health, Health Care Quality, And Aging Research, Rutgers University, New Brunswick, New Jersey*

This article examines how nursing home care workers use emotions to construct dignity at work. Previous scholarship has shown how the financial and organizational characteristics of nursing homes shape and constrain emotion work among staff. Using evidence gathered during eighteen months of participant observation in two nursing homes and 65 interviews with staff, this article analyzes how, despite obstacles, nursing home care workers generated authentic emotional attachments to residents. In particular, staff enjoyed caring for and about residents whom were difficult to control. Such attachments to "feisty" residents generated dignity among the staff, who felt accomplished when such residents successfully transitioned from life at home to life in institutional care. Emotions created dignity for staff and induced compliance among residents. Emotions are not only generated by organizations and imposed on workers. Staff themselves produce emotions – sometimes in ways consistent with organizational demands, and sometimes not – but they consistently found in their emotions a resource to manage the strains of their work lives.

## SESSION 2250 (PAPER)

## RESEARCH ETHICS: CONSENT AND BUY-IN

### LOCAL TELEVISION BRIDGES GERONTOLOGY, THE NORM OF BENEFICENCE, AND THE GSA ETHICS CODE

J. White, *1. Whitedeer Gerontology Consulting, LLC, Huntsville, Alabama, 2. Capella University, Minneapolis, Minnesota*

As the only gerontologist in North Alabama, she has presented over 300 aging topics via live television every Wednesday morning for over seven years to a rural viewing audience. Working without compensation, the premise for acting in this capacity as aging educator is ethical code #6 of the Gerontological Society of America Ethics Statement: "To society as a whole we owe the benefit of our knowledge and understanding of Biological, Cultural, Social, and Psychological Aspects of Aging. We should communicate our understanding of human aging to the society at large" (GSA, 2002). Known as the Norm of Beneficence, the values of altruism, charity, and giving something for nothing challenges gerontologists to disseminate accurate aging information to those who otherwise would have no access to it. The nontraditional sentiments of loyalty, gratitude, and faithfulness (Hiller & Barrow, 2007), are clearly indicated in our Ethics Statement and challenge gerontologists to share academic findings without material reward. This unique method of disseminating aging research via television transmission has recently expanded to a global audience via live streaming on the world wide web. After attending this activity, participants will be able to use live local television for dissemination of aging research and application of the GSA Ethical code.

### OLDER ADULTS IN RESEARCH: ON ALL SIDES OF THE CONSENT TABLE

D.D. Beaty, *1. graduate college of social work, university of houston, Houston, Texas, 2. West Texas A&M, Canyon, Texas*

This presentation will report on the findings of a research study examining the communication of researchers and ethics review boards regarding research with adults who may have cognitive impairment. Older adults are often excluded from research due to complications of co morbidities. Assessment of cognition in older adults to insure true informed consent is time consuming and there are unclear guidelines in the research regulations. Older adults in the research community have often positioned themselves with experience and education to lead or review experimental projects. This session examines the roles of older adults as investigators, ethics reviewers and participants in the research community.

### ETHICAL ISSUES IN END-OF-LIFE RESEARCH: CONCERNS AND MANAGEMENT STRATEGIES

S. Hickman[1,2], J. Cartwright[2], C.A. Nelson[2], K. Knafl[3], S. Bankowski[2], *1. Indiana University, Indianapolis, Indiana, 2. Oregon Health & Science University, Portland, Oregon, 3. University of North Carolina at Chapel Hill, Chapel Hill, North Carolina*

Background: Ethical issues were identified as a key barrier to the advancement of end-of-life (EOL) research in the 2004 NIH State of the Science Consensus Conference. However, data are lacking regarding perceptions of ethical issues in EOL research, approaches used to manage ethical concerns, and the impact on the conduct of EOL research. Methods: This NIH-funded study used a qualitative, exploratory case study design to follow the development of EOL research from proposal development through study execution. Cases were identified through publically available resources (e.g., NIH CRISP database). Data were collected from a purposive sample of 21 EOL investigators who were interviewed by telephone. Results: Investigators reported numerous ethical concerns that were self-identified or raised during reviews including: the evaluation of decisional capacity to participate in research; avoiding inadvertent disclosure of diagnosis or prognosis; sensitivity to issues of burden and vulnerability; and ensuring access to the benefits of research. Investigators reported several strategies to manage ethical concerns including: modifying consent procedures; careful attention to language in the recruitment; consent and data collection materials; the creation of back-up protocols; and partnering with the IRB prior to submission to proactively address concerns. Some strategies to mitigate concerns impacted recruitment and study timelines. Overall, investigators were confident in their ability to identify and manage research risks for this population. Conclusion: Investigators identified numerous ethical concerns that arise in EOL research that may impact research. They reported a variety of strategies to manage actual and perceived ethical issues in the conduct of EOL research.

## SESSION 2255 (SYMPOSIUM)

### SOCIAL INTERACTIONS OVER THE COURSE OF DEMENTIA

Chair: *P. Saunders, Georgetown University School of Medicine, Washington, District of Columbia*
Co-Chair: *K. de Medeiros, Georgetown University School of Medicine, Washington, District of Columbia*
Discussant: *S.R. Sabat, Georgetown University School of Medicine, Washington, District of Columbia*

Friendships have been linked to a psychological and emotional well-being and better physical functioning for older adults. Conversely, there are negative consequences (e.g., depression) associated with losing friendships and having ones' social networks decrease. The potential consequences of declining social engagement make friendship formation and social interactions critical topics to study and understand. While a decline of cognitive ability is a potential limiting factor for the person with dementia to establish friendships, research on how friendships are navigated throughout the course of dementia is lacking. Understanding how people with dementia can maintain social functioning is invaluable information because of the potential to preserve high quality of life throughout the experience of this disorder. The papers in this symposium will discuss the social worlds of people with dementia in different contexts. The objective of this symposium is to present information concerning how socialization changes or maintains over the course of dementia. Saunders et. al. examines ethnographic data of social relationships among persons with dementia in long-term care. This paper analyzes language used to create and maintain social relationships. Harris examines semi-structured interview data conducted with persons with mild to moderate dementia to show factors that underlie the maintenance of friendships. Hamilton presents data on the language of descriptions, evaluations, and personal experience narratives produced by individuals with AD viewing art exhibitions. Sabat as the discussant will reveal themes across these papers in the area of person centered care and social relationships. Practice implications will be discussed.

### LINGUISTIC MARKERS OF FRIENDSHIP AMONG PERSONS WITH DEMENTIA IN LONG TERM CARE

P. Saunders[1], K. de Medeiros[2], P.J. Doyle[2], A. Mosby[2], *1. Georgetown School of Medicine, Washington, District of Columbia, 2. Copper Ridge Research Institute, Sykesville, Maryland*

The value of social relationships throughout the life course, no matter a person's abilities or limitations, is an important area of study. Friendships have been linked to psychological and emotional wellbeing and better physical functioning for older adults. Conversely, there are negative consequences (e.g., depression) associated with losing friendships and having ones' social networks decrease. Given that language and functional abilities decline as dementia progresses, it is challenging to identify markers of friendship. The Friendship Project is an ethnographic study of social interaction among persons with dementia living in a long-term care setting. The data are from transcripts and field-notes of social interactions among residents with a range of cognitive impairments over a six-month time period. Results reveal that persons with dementia employ specific linguistic features such as narrative, evaluation, evidentials, and pronominal reference to make meaning and create relationships over time. Practical implications will be discussed.

### MAINTAINING FRIENDSHIPS ALONG THE DEMENTIA JOURNEY: FACTORS TO CONSIDER

P. Harris, *Sociology, John Carroll University, Cleveland, Ohio*

Friendships and the importance of social connectiveness play a critical role in aging successfully, regardless of gender, race, social class, or impairment. However, as research has demonstrated, it is not necessarily the quantity of the relationships, but the quality of the relationships, having that confidant, that can make a meaningful difference in one's quality of life. This qualitative study examines in-depth eight case studies of people in the early and middle stages of dementia who have been able to maintain a strong friendship despite the diagnosis. So much of the literature focuses on the friends that withdraw, but what can be learned about the friendships that remain? Factors that seem to play important roles are: retention of similar values, ability to look beyond the disease, flexibility, recognition of personal strengths, a sense of humor, and a trusting relationship. Practice implications will be discussed.

### TALK SPARKED BY ART: MUSEUM INTERACTIONS FOR PEOPLE WITH ALZHEIMER'S DISEASE

H.E. Hamilton, *Georgetown University, Washington, District of Columbia*

Proponents of innovative programming at the intersection of Alzheimer's disease and the arts claim that these multi-sensory experiences that focus on personhood are especially good at promoting the social and creative wellbeing of individuals with this disease. Because language is an observable representation of mental activity, rigorous linguistic analyses would arguably provide powerful evidence of the cognitive and social effects of such programs on participants. To my knowledge, however, no linguist has yet studied the discourse produced within such artistic endeavors. In this study, I examine the language of descriptions, evaluations, and personal experience narratives produced by individuals with Alzheimer's disease as they view museum paintings as part of three weekly hour-long video-recorded small group tours at the National Gallery of Australia. The findings of this study may illuminate contextual features of the complex relationship between language and Alzheimer's disease while simultaneously providing an important step toward improving the everyday lives of people living with this disease.

## SESSION 2260 (PAPER)

## SPOUSAL LOSS, DEPRESSION, AND MORTALITY

### CONFIRMING THE DISTINCTIVENESS OF GRIEF FROM DEPRESSION AND ANXIETY AMONG BEREAVED CAREGIVERS

I. Nam, *School of Social Work, Univeristy of Pittsburgh, Pittsburgh, Pennsylvania*

Studies have shown that symptoms of grief constitute a dimension distinct from symptoms of depression and anxiety. This study was designed to replicate these findings in the samples of bereaved dementia caregivers by examining the distinctiveness of grief from other psychological symptoms and the distinctiveness was invariant across races. Data were from the Resources of Enhanced Alzheimer's Caregiver Health project. Bereaved dementia caregivers (N = 200) were provided ratings on measures of grief (the Texas Revised Inventory of Grief), depression (the Center for Epidemiologic Studies Depression), and anxiety (Anxiety Inventory Questionnaire). Confirmatory factor analyses were performed. Results indicated that the 3-factor model of grief, depression, and anxiety fits the data reasonably well (CFI = .963, RMSEA = .065, SRMR = .005). The chi-square difference test resulted in 2(3, N = 200) = 133.101, p < .000 between the 1-factor and the 3-factor model which indicated that the 3-factor model fit statistically better than the unidimensional model combining grief, depression, and anxiety. Factor loadings of each factor were all significant. Correlation of grief with depression and anxiety were r = 4.00 and r = 2.21, respectively, and depression were highly correlated with anxiety (r = 7.04). When examining multiple-group confirmatory factor analyses and chi-square difference test were conducted to examine the invariance of factor model across racial groups. Results were indicative of invariance of the factor structure across races. Confirmatory factor analyses confirm the distinctiveness of grief from depression and anxiety in bereaved dementia caregiver population and the distinctiveness is invariant across races.

### THE ASSOCIATION OF FINDING MEANING IN SPOUSAL LOSS AND DEPRESSIVE SYMPTOMS

W.D. Brynildsen, S.L. Foy, *Sociology, Duke University, Durham, North Carolina*

Stress process researchers note that people are not simply the passive recipients of psychologically distressing experiences; through a variety of coping mechanisms, they actively seek to alter the impact of stressful life events. Empirical evidence suggests that one such mechanism often employed to alleviate bereavement is meaning-making, a process by which the bereaved may both make sense of and identify positive aspects of loss. However, the impact of meaning-making on mental health, when employed as a coping mechanism for dealing with spousal loss, is unclear. In the present study, we examine how attempts to construct meaning and the successful finding of meaning regarding spousal loss affect depressive symptoms. We use the first wave of the American Changing Lives Survey (1986) to examine the impact of searching for and finding meaning after spousal loss among a sample of widows and widowers. We find that while there is a direct effect of searching for meaning on depression symptoms, there is no direct effect of finding meaning. However, we find that finding meaning is an important moderator in the relationship between searching for meaning and depression. A significant interaction exists between searching for and finding meaning, whereby individuals who search for meaning and do not find it have higher levels of depression than either individuals who search for and find meaning or who do not search for meaning. This paper serves to further elaborate the role of meaning-making in the stress process and explain individual variation in the consequence of bereavement on depression.

### AGE-DEPENDENT EFFECT OF SPOUSAL LOSS ON MORTALITY AMONG OLDER MEN IN SOUTH KOREA: A KANGWHA COHORT STUDY

J. Kang[1], M. Lee[2], *1. Yonsei University, Seoul, Republic of Korea, 2. ChungAng University, Seoul, Republic of Korea*

Objectives: We estimate the effect of spousal loss on mortality for Korean older adults and examine if the effect is differential by gender and timing of spousal loss. Data and Methods: The baseline survey of Kangwha Cohort Study was collected for 6,291 residents in Kangwha County, aged 55 and older in 1985. The study not only performed a second-wave survey in 1994 but also followed the cohort for their cause-specific death up to the end of 2005. We conducted Cox proportional hazard model for mortality. Results: Being bereaved at the time of survey, either 1985 or1994, increases the hazard ratio of death for male respondents by 16%. We,however, found no effect of spousal loss for female respondents. This male-only effect decreases with age at the time of survey: Being bereaved at relatively younger ages is more harmful to men in South Korea. Discussions: The findings suggest that old men are more vulnerable to spousal loss as a stressful life event than old women in South Korea. We also suspect that those stressful events will be acuter when facing old men earlier in their life time.

### MORTALITY DIFFERENCES IN WIDOWHOOD

A.R. Sullivan, *Population Studies Center, Unversity of Pennsylvania, Philadelphia, Pennsylvania*

Being widowed elevates mortality risk, relative to married men or women of the same age. I investigate how risk varies by sub-population of widows and widowers. Specifically, using data from the Health and Retirement Study, I test for differences in widowhood mortality by education, by number of children, and by how sudden or expected the death of the pre-decedent spouse was. Consistent with other studies, I find an increased hazard of mortality upon widowhood. In contrast with other studies but consistent with the larger literature on socioeconomic status and mortality, education is protective in widowhood. Number of children has a u-shaped association with mortality in widowhood, with those having 3-4 children having the lowest levels of mortality after death of a spouse. Lingering deaths (deaths after a chronic condition) of the predecedent spouse are much for the surviving spouse than sudden deaths or other types of death. Important gender differences occur with each of these effects. These findings illuminate mechanisms through which mortality is affected by widowhood, and provide evidence on the power of SES and social support in vulnerable populations.

## SESSION 2265 (PAPER)

### SUBSTANCE ABUSE AND ANXIETY

### DIFFERENTIAL EFFECTS OF ACUTE STRESS AND SOCIAL ANXIETY ON SELF-CONTROL IN YOUNGER AND OLDER PEOPLE

S. Forstmeier, M.E. Mortby, *Dept. of Psychology, University of Zurich, Zurich, Switzerland*

The delay discounting paradigma has been shown useful to measure self-control vs. impulsivity on a behavioural level. It has been found that in general older people have lower discounting rates that younger ones, i.e., they are more self-controlled. Aim of the present study is to investigate whether older vs. younger people differ in the degree to which self-control is influenced by acute stress and social anxiety. The sample consists of 72 cognitively healthy, community dwelling participants between 18 and 40 years (mean 23) and 64 between 60 and 80 years (mean 70). The Montreal Imaging Stress Task (MIST) was used to induce acute stress. The MIST is a computerized control and stress task combining challenging arithmetic problems with social-evaluative threat and has previously been found to increase cortisol level, heart rate, and alpha-amylase levels, and to reduce respiratory sinus arrhythmia. The Kirby Delay Discounting Questionnaire was used to measure self-control on a behavioural level; participants were offered choices between monetary rewards available immediately and larger rewards available after delays ranging from 1 week to 6 months. A significant stress x anxiety interaction was found in the young sample, but not in the old sample. Younger people with low social anxiety were more self-controlled than people with high social anxiety when not stressed and decreased in their self-control under acute stress. This effect is reversed in the older sample, although not significantly. These results suggest that the effects of stress and social anxiety on self-control might change with age.

### ALCOHOL USE IN MIDDLE ADULTHOOD: FUNCTIONS AND RATIONALE

M.A. Montpetit[1], C. Bergeman[2], *1. Psychology, Illinois Wesleyan University, Bloomington, Illinois, 2. University of Notre Dame, Notre Dame, Indiana*

The present study investigates the roles that alcohol plays in coping with the stressors accompanying midlife (functions), as well as how drinking motives (rationale) affect the relationship between drinking behavior and emotion. In particular, data from N=311 middle aged adults (Mage=51.7 years; SDage=6.3 years) were used to investigate hypotheses concerning the relationships between stress, drinking behavior (both frequency of alcohol use, and the number of drinks typically consumed), and affect (both negative and positive), which speak to the function of alcohol use. A second set of hypotheses explore the rationale for drinking; it was believed that a coping motive of drinking would mediate the relationship between alcohol use and negative affect, while social- or enhancement-motives would likely explain relationships between alcohol use and positive affect. Results suggest that the amount of alcohol consumed moderates the stress -> NA relationship (but that the frequency of drinking behavior does not); conversely, the frequency of alcohol use moderates the stress -> PA relationship (but, that the amount of alcohol consumed does not). Furthermore, the relationship between the amount of alcohol consumed and negative affect is mediated by both coping and enhancement motives. Because there was no direct effect relationship between the frequency of alcohol use and positive affect, no further analyses were conducted. Overall, evidence suggests that, for those choosing to drink, alcohol use plays an important role in the stress-and-coping process. Interestingly, the relationship between the typical amount of alcohol one consumes while drinking and negative emotion is almost entirely explained by an individual's rationale for drinking. In particular, evidence suggests that a desire to decrease negative affect (i.e., a coping motive) and a desire to increase positive affect (i.e., an enhancement motive) play particularly important roles in explaining the relationship between alcohol use and negative affect.

### PREVALENCE AND CHARACTERISTICS OF MENTAL HEALTH SERVICES USE IN OLDER AMERICANS WITH AND WITHOUT MOOD AND ANXIETY DISORDERS

A.L. Byers[1,2], P.A. Arean[1], K. Yaffe[1,2,3], *1. Department of Psychiatry, University of California, San Francisco, San Francisco, California, 2. San Francisco VA Medical Center, San Francisco, California, 3. Departments of Neurology, Epidemiology and Biostatistics, University of California, San Francisco, San Francisco, California*

**Introduction:** Population-based studies of mental health services use in elderly Americans to date are limited. Therefore, we determined updated, nationally representative estimates. We used the Andersen behavioral model of health services use, which posits 3 major predictors of use—predisposing (e.g., age, gender), enabling (e.g., income, health insurance), and need (e.g., psychiatric, medical). **Methods:** The data are from a population-based probability sample, the National Comorbidity Survey Replication (NCS-R), a study of 9,282 participants 18 years and older. For this analysis, we examined 1,372 participants aged 55 and older [sample: 48% 55-64; 52% 65+]. Twelve-month mental health service use was assessed by self-report, classified into specialty mental health, general medical, and non-health care services. Twelve-month mood and anxiety disorders were assessed by the WHO's World Mental Health Survey Initiation version of the Composite International Diagnostic Interview, using DSM-IV criteria. Analyses included frequency measures and logistic regression using weights and complex design-corrected statistical tests. **Results:** In multivariable logistic regression models, we found in those 55-64 years old diagnoses of mood and anxiety disorders, younger age, never married, being divorced\separated\widowed, and having a prior stroke and functional impairment were associated with greater use of specialty mental health. While in those 65 and older, only need factors explained greater use of specialty mental health services (i.e., DSM-IV disorders, heart disease, chronic pain, not having cancer, and varying domains of functional impairment). **Conclusions:** Mental health service use was highly influenced by need, especially in adults 65 and older who have high rates of medical comorbidities.

### SCREENING AND BRIEF INTERVENTION FOR ALCOHOL AND OTHER SUBSTANCE: THE FLORIDA BRITE PROJECT

L. Schonfeld[1], D. Hedgecock[1], R. Hazlett[2], V. Burns[2], D. Duchene[2], J. Balser[2], *1. Aging and Mental Health Disparities, University of South Florida, Tampa, Florida, 2. Florida Dept of Children & Families, Tallahassee, Florida*

The Florida BRITE Project (BRief Intervention and Treatement for Elders) is funded by a five year SAMHSA/Center for Substance Abuse Treatment to screen adults 55 and older for risky and nondependent use of alcohol and other substances. Now in its fourth year, BRITE has screened approximately 40,000 unduplicated cases across 28 sites in 18 counties in Florida and is targeting a total of 66,000 cases by the end of the grant. About 11% of cases screened positive for substances, primarily medication misuse and/or alcohol and required brief intervention in most cases. Follow-ups on a 10% sample conducted at six months indicate decreased alcohol consumption and decreased drug use. Site comparisons where screenings were conducted show that aging services have a higher proportion of positive screens compared to medical settings. Implications for sustainability following the end of federal funding include Medicare, Medicaid, and Insurance billing codes, as well as strategies for aging resource centers.

# SESSION 2270 (PAPER)

## ADAPTATION AND MAINTAINING INDEPENDENCE

### SIGN CHI DO AND ADAPTATION TO AGING IN OLDER ADULTS

C.E. Rogers, *College of Nursing and Health Innovation, Arizona State University, Phoenix, Arizona*

Sedentary older adults are at risk of decreased physical function and maladaptation to aging that may lead to loss of independence. SCD is a mind-body approach that has multiple health benefits including improving strength and balance. The Roy Adaptation Model guided the design of a 12 week intervention that tested the effects of SCD exercise compared to a sedentary wait-list control group on physiologic and self-concept adaptation among sedentary community dwelling adults over 55. 67 older adults (mean age = 74.46, SD =8.15) were recruited and randomized to SCD or control group. Measurement of physiologic adaptation (Timed Up & Go [TUG], 6-minute walk [6-MW], weekly physical activity [PA], pedometer steps, systolic and diastolic blood pressure) and self-concept adaptation (Functional Assessment of Chronic Disease Spiritual-wellbeing [FACIT-SP] and Exercise Self-efficacy [ESE] ) were completed at baseline (T1), 6 and 12 weeks (T2 and T3). Physiologic adaptation improved over time for three measures while self-concept adaptation did not. The TUG and PA scores improved significantly from T1 to T3 for the intervention group (actual change -2.53, p = .000 and 1512.71, p = .001 respectively). There was a significant between group difference of 271.36 feet walked for the 6-MW at T3, p = 0.02. The self-concept measures were high at baseline and higher baseline FACIT-SP scores were associated with faster 6-MW, more PA, and higher ESE. These results indicate that the theory based SCD intervention improved measures of balance and physical function among sedentary older adults.

### SILVER: SUPPORT FOR INDEPENDENT LIVING AND A VITAL, ENERGETIC RETIREMENT

V.F. Rempusheski[1], M. Kennedy[1], B. Laster[2], *1. School of Nursing, University of Delaware, Newark, Delaware, 2. Jewish Family Services of Delaware, Wilmington, Delaware*

Mobility options, safety, available housing and recreation, services and support within Naturally Occurring Retirement Communities often determine the ability of older adults (OA) to age-in-place successfully. This study used a community-based participatory research approach and a structure-process-outcome framework. We measured four outcomes (awareness, access, support, understanding OA needs) of comprehensive age-in-place services (i.e., care management, social work, health care, education, volunteer opportunities) for OA in three zip codes in New Castle County, DE, from the perspective of OA, age 65+ and community stakeholders (CS), age 18+. Outcomes were measured by two valid and reliable scales: Social Provisions Scale (SPS, Russell & Cutrona, 1984) ($\alpha = 0.945$) and Perceptions of Community (POC, Chellappoo, 2008) ($\alpha = 0.895$). Printed scales were administered in various service/community settings pre and post outreach and yielded a convenient stratified sample of 593 subjects: 318 OA (M age 75.8, SD 6.8; 83% retired; 54% married, 29% widowed) and 275 CS (M age 47.3, SD 14.3, 57% married, 29% single). Subject characteristics approximated the zip code population characteristics: 68% female; 74% white. There were no statistically significant differences between T1 and T2 outcomes. There were significant differences between OS and CS in perceptions of safe access, promote independence and recreation POC subscales; attachment support was excluded from the OA regression model and reliable alliance support was excluded from the CS model. These findings raise further questions about CS awareness of OA needs, priorities of each and complexity of aging-in-place decisions. Supported by an Administration on Aging grant.

### ROLE OF TECHNOLOGY IN THERAPEUTIC ENVIRONMENTS FOR SENIORS WITH MENTAL HEALTH AND OTHER COMPLEX NEEDS

L. Liu[1], C. Schalm[2], B. Wilkey[2], S. Maisey[2], E. Stroulia[1], S. King[1], L.N. Seale[1], C. Laing[2], *1. Occupational Therapy, University of Alberta, Edmonton, Alberta, Canada, 2. Shepherd's Care Foundation, Edmonton, Alberta, Canada*

Simple technological supports could be used to address issues such as sundowning, wandering, monitor activity engagement, help ensure safety and provide therapeutic interventions. Technologies could: (1) minimize visible barriers while still ensuring an appropriate level of safety, (2) augment normal non-technological care, service and supports available through staff and the physical and social environments, and (3) expand ways that staff (and family members) could appropriately and respectfully monitor the movements of the individual for the purpose of providing help at the right moment (e.g., automatic lighting for night time activities, to minimize fall risk and notify staff who can check to offer care and support) or by providing automatic reminders for routine or “event triggered” activities (e.g., electronic notification of individual medication needs and documentation). The overall objective of this project is to perform a comprehensive environmental scan of research studies, public- and private-sector initiatives, demonstration projects, best practices and protocols around the application of technologies in supportive housing and assisted living environments for older adults with complex physical and mental problems. We will present (1) a critique of relevant publications on this topic in appropriate databases and repositories; (2) key projects in this area of local, provincial, national and international scope, and data from interviews with project leaders; and (3) results of a one-day Think Tank where key representatives of research, health care and industry communities discuss, present and respond to the key findings of this project.

### FACTORS INFLUENCING VARIABILITY IN ASSESSMENT PROCEDURES FOR MEDICALLY AT-RISK DRIVERS

B. Vrkljan[1], A. Myers[2], S. Marshall[3], R.A. Blanchard[2], *1. McMaster University, Hamilton, Ontario, Canada, 2. University of Waterloo, Waterloo, Ontario, Canada, 3. Ottawa Hospital Research Institute, Ottawa, Ontario, Canada*

Prior surveys (e.g. Korner-Bitensky et al., 2006) have shown tremendous variability in both off- and on-road procedures for assessing medically at-risk drivers. As part of a larger project examining linkages with ministry policies for medical review, 91 centres that conduct assessments of drivers for medical purposes were identified throughout Canada. Each centre was sent two electronic surveys: one for managers and the other for frontline personnel. Managers were asked about operation, staffing, clientele, assessment and reporting procedures. Assessors were asked about their backgrounds, caseload and client profiles, as well as general assessment tools and procedures. To examine consistency of practices, they were then asked to consider four specific vignettes with different presenting problems (paraplegia, stroke, probable dementia and schizophrenia). Surveys were completed by 44 centres (48% response) and by 46 assessors. About half the centres operated in hospitals and for-profit settings. Caseloads varied considerably (1 to 50/month), as did client costs, wait times and procedures. For instance, only 62% used a standardized scoring system for road tests. The wide variability in assessment tools and procedures supported the findings of prior surveys. Analysis of the vignettes and confidence ratings provided greater insight into the clinical decision-making process. Assessor training (predominately occupational therapists), program differences (e.g., DriveABLE™) and provincial criteria explain some of the differences found. Surprisingly, however, not all managers or assessors were aware of these criteria. Findings have implications with regard to standardizing protocols and informing policy concerning equitable and fair assessment of medically at-risk drivers.

## SESSION 2275 (SYMPOSIUM)

### EMERGING ISSUES IN AGING IN ASIA

Chair: *A. Chan, Sociology, National University of Singapore, Singapore, Singapore, Duke-NUS, Singapore, Singapore*

As Asia's populations age and research and data availability on aging expands, several themes are emerging as important yet understudied. As individuals live longer they face increasingly complex health care issues. Moreover, existing research often focuses on the older individual and does not model the effects of older adult health on family members and the larger society, e.g., the labor market. This symposium presents papers that examine such emerging issues in Japan, Korea and Singapore. The presentations are aimed at stimulating discussion and enriching the high quality work that is already being done. One of the serious concerns of population aging is how to provide care for older individuals with cognitive impairment in a way that is effective, humane and sustainable. A systems dynamics approach, based on empirical findings from Singapore, will be used to discuss this dynamic and complex issue. Another paper from Singapore will present a multidimensional understanding of the health of older adults spanning fifteen different health dimensions. We explore the relationship between self-rated health and these other health outcomes focusing specifically on gender differences. A paper from Japan will provide insights into the epidemiology of body pain, a condition so common among older adults that it is most often considered to be a part of normal aging. Finally, the paper from Korea addresses an understudied issue in Asian countries that is the provision of family care for older adults and the impact of informal caregiving on the labor market.

### THE EFFECT OF INFORMAL CAREGIVING ON LABOR MARKET OUTCOMES IN SOUTH KOREA

Y. Do[1], E. Norton[2], S.C. Stearns[3], *1. Duke-NUS Graduate Medical School Singapore, Singapore, Singapore, 2. University of Michigan, Ann Arbor, Michigan, 3. University of North Carolina, Chapel Hill, North Carolina*

This study investigates the effect of informal caregiving on labor market outcomes in South Korea, an Asian society with traditional norms, a highly gendered division of labor at home, and gender differences in labor market outcomes. Using data from the 2006 Korean Longitudinal Study of Aging, the current study examines multiple labor market outcomes by gender and age group, and accounts for the endogeneity of informal caregiving using the instrumental variable method. Our overall results suggest that informal caregiving has substantial labor market opportunity costs. Compared with otherwise similar non-caregivers, female intensive caregivers, who provide at least 10 hours of care per week, are at an increased risk of being out of the labor force by 15.2 percentage points and of being out of the employment sector by 8.2 percentage points, and receive lower hourly wages. Informal care is an important economic issue in South Korea.

### FIFTEEN DIMENSIONS OF HEALTH AMONG ELDERLY SINGAPOREANS

C. Malhotra[1], A. Chan[2,1], R. Malhotra[1], T. Østbye[3], *1. Duke-NUS Medical school, Singapore, Singapore, 2. National University of Singapore, Singapore, Singapore, 3. Duke University, Durham, North Carolina*

The objective of the study was to present a broader perspective of the health of older Singaporeans spanning 15 dimensions of health. Self-rated Health (SRH) and 14 other health dimensions were assessed using data from 5000 older Singaporeans (60+) . Generalized logit model was used to assess the relative contribution of these 14 dimensions with positive (very healthy, healthier than average) and negative (somewhat unhealthy, very unhealthy) SRH, compared to average SRH. About 86% of older Singaporeans reported themselves to be healthy (average and positive SRH). Independence in mobility, no difficulty in hearing and vision, absence of major physical ailments, freedom from pain, strong personal mastery and perceived financial adequacy were associated with significantly increased odds for positive SRH and decreased odds for negative SRH, relative to average SRH. The study supports a multidimensional understanding of health of the elderly.

### PREVALENCE, LOCATION, AND EFFECT ON DAILY LIFE OF PAIN AMONG OLDER JAPANESE PEOPLE: A POPULATION-BASED STUDY

V. Yong, Y. Saito, *Nihon University, Tokyo, 0, Japan*

Pain is commonly experienced by older adults, particularly among those with health conditions or diseases. It is also often a precursor to functional limitations and difficulties with activities of daily living. To date, few studies have used population-based data to examine pain among older Japanese people. In this paper, we use a nationally-representative sample of 4,493 Japanese aged 65+ to establish the prevalence and location of pain as well as the extent to which the pain hinders daily life, including sleep. We present results for the overall population and by pertinent sociodemographic characteristics. This study has important implications for pain management and intervention measures in Japan where almost one in four (23%) persons is aged 65+ and which has the world's longest life expectancy.

### A SYSTEMS MODEL FOR ADDRESSING COGNITIVE IMPAIRMENT AND DEMENTIA IN SINGAPORE

D. Matchar, *Duke-NUs, Singapore, Singapore*

Developing a case for one clinical or public policy strategy or another is exceedingly challenging because of the complexity of the health system, breadth of health care needs, and variety of health care providers. To address this challenge and to have an impact on the health and well being of the population, it is increasingly apparent that health services research must: (1) take a systems perspective; (2) engage all stakeholders in the first instance to promote insight to and ownership of solutions; and (3) establish a scholarly foundation for research. A preliminary model that addresses the issues involved with the development and management of cognitive impairment and dementia in Singapore will be presented. The methods and procedures underlying the development of this model will be discussed; the strategy for engaging stakeholders will be outlined; and approaches to identify and apply relevant data as inputs to the model will be explained.

## SESSION 2280 (SYMPOSIUM)

### EXPLORING THE TRANSITIONS OF LONG-TERM CARE RECIPIENTS: UNPACKING HOSPITALIZATIONS

Chair: *K. Abbott, University of Pennsylvania - School of Nursing, Philadelphia, Pennsylvania, NewCourtland Center for Transitions and Health, Philadelphia, Pennsylvania*
Discussant: *C. Murtaugh, Center for Home Care Policy and Research:Visiting Nurse Service of New York, New York, New York*

Hospitalizations among long-term care (LTC) recipients have consistently been associated with poor health outcomes, including increased rates of adverse clinical events; accelerated cognitive, physical, and functional decline; high rehospitalization rates and increased mortality. In addition to the tremendous human burden, these hospitalizations also have contributed to rapidly escalating health care costs. Improving health care quality and reducing costs is a substantial challenge. This is especially true for frail elderly LTC recipients who suffer from multiple chronic illnesses and serious disabilities superimposed on the aging process. The need to understand the experiences of elders and, providers as well as predictors of hospitalizations are crucial to developing preventative interventions. In this symposium we will explore this transition through a variety of lenses. First longitudinal data from 208 older adults new to LTC (nursing homes, assisted living facilities or home and community-based services (H&CBS)) were used to predict hospitalizations. Predictors included being in a nursing home and lower self-rated health. Second, a sub-sample of data collected on 31 elders in H&CBS will examine the hours of nursing care delivered and the unique contributions nurses provide in transitional care. Finally, common facilitators and barriers to quality of care in the hospitalization experience from both elder and provider perspectives are discussed. Common themes are presented using data from qualitative interviews with 46 hospitalized elders and 12 provider focus groups. This symposium highlights the multiple perspectives needed to explore transitions among LTC recipients from a person, provider, and system level understanding of transitions.

### PREDICTORS OF HOSPITALIZATIONS IN OLDER ADULTS NEW TO LONG-TERM CARE

C. Zubritsky[1], K. Abbott[2,3], A. Hanlon[2], C. Murtaugh[4], M.D. Naylor[2,3], *1. University of Pennsylvania - School of Medicine, Philadelphia, Pennsylvania, 2. University of Pennsylvania - School of Nursing, Philadelphia, Pennsylvania, 3. NewCourtland Center for Transitions and Health, Philadelphia, Pennsylvania, 4. Center for Home Care Policy and Research-Visiting Nurse Service of New York, New York, New York*

The primary aim of this study is to examine predictors of hospitalizations for elders in LTC. Attention to the identified predictors of hospitalization that are potentially preventable could reduce the risk and cost of these hospitalizations and increase the quality of life of individuals in LTC. Self-report and medical chart abstraction data from 208 older adults new to the LTC system interviewed quarterly through 12 months were collected. Generalized Estimated Equations were used to model repeated measures of hospitalizations as a function of quality of life, self-rated health, age, functional limitations, cognitive impairment, gender, depression, and facility type. Independent predictors of increased hospitalizations included being in a nursing home (p=.024) and lower self-rated health (p=.005). Findings suggest that self-rated health can be used as an additional prognostic indicator of a patient's risk for hospitalization and further research is needed in the development of interventions.

### HOURS OF NURSING CARE IN TRANSITIONAL CARE OF ELDERS ENROLLED IN HOME AND COMMUNITY BASED SERVICES

J.H. Van Cleave[1], J. Prvu Bettger[1], J. Foust[2], C. Tocchi[3], S. Chopra[4], M.D. Naylor[1], *1. School of Nursing, University of Pennsylvania, Philadelphia, Pennsylvania, 2. University of Massachusetts Boston, Boston, Massachusetts, 3. Yale School of Nursing, New Haven, Connecticut, 4. Visiting Nurse Service of New York, New York, New York*

The primary aim of this study was to examine hours of nursing care delivered to 31 patients newly enrolled in H&CBS. Seven consecutive days of data were collected at 1, 3, and 6 months from date of admission from computerized agency records. Data collected included total time of care coordination and direct care provided by Registered Nurses, Licensed Professional Nurses, and Home Health Aides. Results indicated the complex care needs of hospitalized elders transitioning across health settings. Emblematic is Mrs. X, an 81 year old who desired to return home after hospitalization. H&CBS nurses spent 6 hours, placed 18 telephone calls across three health care systems, and visited Mrs. X for 90 minutes over a one week period to coordinate goals of care and discharge planning. This study represents one of the first attempts to illustrate the unique contributions nurses provide in transitional care.

### TRANSITIONS OF ELDERLY LONG-TERM CARE RECIPIENTS TO AND FROM HOSPITALS: THE ELDERS' PERSPECTIVES

K. Abbott[1,2], L. DiGiovanni[1], L. Lechtenberg[1], J. Synder[1], M.D. Naylor[1,2], *1. University of Pennsylvania - School of Nursing, Philadelphia, Pennsylvania, 2. NewCourtland Center for Transitions and Health, Philadelphia, Pennsylvania*

The primary aim of this study was to understand the experience of elders in LTC hospitalized for an acute episode of illness. Semi-structured open-ended qualitative interviews were conducted to elicit the experience of the elder and the impact of these transitions. Forty-six elders age 65 or older from NHs and ALFs who had a recent hospitalization (past 30-60 days) were interviewed. Qualitative analysis was conducted to identify common themes. Residents believed that hospital staff were understanding of their needs and that they received the care they needed. Barriers that emerged included: a lack of communication and information exchange between the LTC provider, hospital, and resident; confusion regarding medical condition; significant wait time in the emergency department; and a lack of knowledge regarding questions to ask health care providers. Findings revealed several areas for increased transfer of information and improved transitions across settings.

### TRANSITIONS OF FRAIL ELDERS TO AND FROM HOSPITALS: THE HEALTH CARE PROVIDERS' PERSPECTIVES

K.B. Hirschman[1,2,3], K.H. Bowles[1,2,3], M. Bixby[1], S. Panzer[1], M.D. Naylor[1,2,3], *1. Institute on Aging, University of Pennsylvania, Philadelphia, Pennsylvania, 2. NewCourtland Center for Transitions and Health, Philadelphia, Pennsylvania, 3. Institute on Aging, Philadelphia, Pennsylvania*

The primary aim of this study was to understand the experience of frail LTC recipients admitted to the hospital for an acute episode of illness by eliciting the perspectives of health care professionals involved in their care. Qualitative analysis of eleven focus groups of providers from multiple settings (e.g., hospital, NH, ALF, H&CBS) revealed common facilitators and barriers. Both LTC and hospital providers identified communication and information transfer back and forth about the resident as a barrier to providing optimal care and a smooth transition (i.e., lack of information sent, poor quality of information, patients managed too aggressively at end of life). LTC providers noted that the stability of their staff (e.g., length of employment), ability to function as a team as major facilitators in promoting good transitions for their service recipients. Findings revealed multiple opportunities to improve communication between sites and among providers.

## SESSION 2285 (PAPER)

## FRAILTY AND FUNCTION IN OLDER LIFE

### FRAILTY IN KOREA

G.S. Hong[1], J. Song[2], M. Park[3], I. Shin[4], *1. Hanyang University, Seoul, Republic of Korea, 2. Korea University, Seoul, Republic of Korea, 3. Keimyung University, Daegu, Republic of Korea, 4. Catholic Univ.of Daegu, Daegu, Republic of Korea*

No consensus on the definition of frailty exists. The aims of the study were 1) to develop the Korean Frailty Index and investigate the prevalence of frailty in Korea, and 2) to examine differences in demographics (gender, age, educational level), number of chronic illnesses, nutritional status, physical function, cognitive function, number of falls, and depression among non-frail, pre-frail, and frail elderly. As a part of the 2008 national study of Korean elderly, this study was conducted using a sample of 15,146 respondents who were over 60 years old and living in communities. The Korean Frailty Index was based on Fried et al's (2001) index, composed of five main markers (weight loss, exhaustion, physical activity, walking speed, and grip strength). Frail and pre-frail groups were categorized by whether they were in the lower 25 percentile on 3 or on 2-3 out of five indexes, respectively. Oneway ANOVAs and Chi-square tests were used for data analyses. The percentages of frail, pre-frail, and non-frail elderly were 6.9%, 46.3%, and 46.8%, respectively. Frail elderly were more likely to be female, older, and of lower education level as compared to the other groups. Mean numbers of chronic illnesses (F=436.01, p <.001), nutritional status ($\chi$2 = 1472.20, p<.001), physical activity (F=1745.50, p<.001), cognitive function ($\chi$2 = 295.98, p<.001), number of falls (F=32.32, p<.001), and depression (F=1611.59, p<.001) were significantly different among 3 groups. Interventions should be developed to improve all types of functions, which must postpone frail process.

### A 6-MONTH STUDY OF MK-0773 (A SELECTIVE ANDROGEN RECEPTOR MODULATOR) IN WOMEN WITH SARCOPENIA

S. Ather[1], H. Zhu[3], J. Chandler[2], J. Lutkiewicz[1], D. Papanicolaou[1], *1. Merck, Rahway, New Jersey, 2. Merck, Upper Gwynedd, Pennsylvania, 3. Forest Research Institute, Jersey City, New Jersey*

BACKGROUND: Sarcopenia refers to the loss of muscle mass, strength and function, and is a major contributing factor to frailty in the elderly. MK-0773 is a selective androgen receptor modulator designed to improve muscle function while minimizing effects on the skin and uterus. STUDY DESIGN: A 6-month study was conducted in women aged 65 and older with sarcopenia and moderate physical dysfunction to examine the effects of MK-0773 on muscle strength (BLP), LBM (by DEXA), physical performance (SPPB, SCP, gait-speed), and drug safety and tolerability. Patients were randomized in a 1:1 ratio to receive either MK-0773 50 mg b.i.d. or placebo; all patients received Vitamin D and protein supplemenation. RESULTS: MK-0773 showed a statistically significant increase in LBM from baseline at Month 6 vs. placebo (p<0.001). Both MK-0773 and placebo showed a statistically significant increase in BLP from baseline to Month 6, but the mean difference between the two groups was not significant (p=0.269). Both groups showed significant improvement from baseline at Month 6 in physical performance measures, but there were no statistically significant differences between MK-0773 and placebo. There were no differences in the proportion of patients with hirsutism, acne or androgenic alopecia between MK-0773 and placebo groups. A significantly greater number of patients experienced elevated transaminases in the MK-0773 group vs. the placebo group. In all cases the elevations resolved after discontinuation of study therapy. MK-0773 was generally well-tolerated. CONCLUSION: The increase in LBM did not translate to improvement in strength or function vs. placebo.

### SLEEP PARAMETERS AND INCIDENT FRAILTY STATUS IN OLDER MEN

K. Ensrud[1], T. Blackwell[2], S. Ancoli-Israel[3], S. Redline[4], P. Cawthon[2], M.L. Paudel[5], T.L. Dam[6], K.L. Stone[2], *1. VA Medical Center / University of Minnesota, Minneapolis, Minnesota, 2. California Pacific Medical Center, San Francisco, California, 3. University of California - San Diego, San Diego, California, 4. Case Western Reserve University, Cleveland, Ohio, 5. University of Minnesota, Minneapolis, Minnesota, 6. Columbia University, New York, New York*

Sleep problems and frailty are increasingly common with aging, but the association between these conditions is uncertain. To determine whether non-frail older men with poorer sleep at baseline are at increased risk of greater frailty status at follow-up, we measured subjective (Pittsburgh Sleep Quality Index (PSQI) and Epworth Sleepiness Scale (ESS)) and objective (actigraphy and polysomnography) sleep parameters in 2503 non-frail men ≥67 years at baseline and re-examined frailty status (robust, intermediate stage, frail, dead) 3.4 years later. After adjusting for multiple confounders (age, race, site, health status, education, social support, alcohol intake, smoking, medication use, medical conditions, cognition, and body mass index), poorer sleep quality (proportional odds ratio (POR) 1.11, 95% CI 1.03-1.21 per 1 SD increase in PSQI) and greater daytime sleepiness (POR 1.13, 95% CI 1.05-1.23 per 1 SD increase in ESS) at baseline were each associated with a higher odds of greater frailty status at follow-up. Associations for objective measures of lower sleep efficiency (POR 1.08, 95% CI 0.99-1.17 per 1 SD decrease), greater nighttime wakefulness (POR 1.06, 95% CI 1.00-1.12 per 30 min increase) and nocturnal hypoxemia (POR 1.08, 95% CI 1.00-1.18 per 1 SD increase in % sleep time with SAO2 <90%) nearly reached the level of significance. Objective measures of total sleep time, sleep latency, and respiratory disturbance index at baseline were not associated with frailty status at follow-up. Among older non-frail men at baseline, poorer sleep quality and greater daytime sleepiness independently predicted an increased risk of greater frailty status at follow-up.

### INSULIN-LIKE GROWTH FACTORS AND PHYSICAL PERFORMANCE IN OLD AGE: THE BOYD ORR AND CAERPHILLY STUDIES

K. Birnie[1], Y. Ben-Shlomo[1], S. Ebrahim[2], J. Gallacher[3], A. Bayer[3], D. Gunnell[1], J.M. Holly[4], R.M. Martin[1], *1. Department of Social Medicine, University of Bristol, Bristol, United Kingdom, 2. London School of Hygiene and Tropical Medicine, London, United Kingdom, 3. Cardiff University, Cardiff, United Kingdom, 4. Department of Clinical Sciences at North Bristol, University of Bristol, Bristol, United Kingdom*

Aims: The insulin-like growth factor (IGF) system regulates growth and IGF-I increases muscle mass, strength and body composition. Height and leg-length are markers for circulating IGF-I in pre-pubertal children; trunk length may be a marker for factors influencing pubertal growth. We assessed associations of the IGF system and height with physical performance in old age. Methods: Physical performance was measured with the get-up and go timed walk and flamingo balance test at 63-86 years. We examined cross-sectional associations in the UK Boyd Orr cohort (n=405) and prospective associations in the Caerphilly prospective study (CaPS) (n=730) from stored samples (average 17 years earlier). Results: In CaPs, a standard deviation (SD) increase in IGF-I was associated with a 2% faster walking time (95% confidence interval -4% to -1%; P=0.009) and 11% lower odds of poor balance (odds ratio 0.89; 0.78 to 1.02; P=0.10). There were no associations with IGF-II or IGFBP-3. Cross-sectional effects of IGF-I on walking time were weaker in Boyd Orr (1% faster; -4% to 1%; P=0.39). Cross-sectional trunk-length was a better predictor of walking time than leg length (Boyd Orr 5% faster per SD increase; -8% to -2%: CaPS 2% faster per SD increase; -3% to 0%), but this was not seen for childhood trunk length or in the prospective CaPS data. Conclusion: These results are consistent with IGF-I in young to middle adulthood being more important in establishing peak physical performance, and reductions in trunk length due to "shrinkage" being a predictor of later life function.

## SESSION 2290 (PAPER)

### FUNCTIONAL HEALTH: PREDICTORS AND INTERVENTIONS

### MIDLIFE GRIP STRENGTH, LIVING HABITS AND PARENTAL LONGEVITY AS PREDICTORS OF FULLY DEFINED LENGTH OF LIFE IN A MALE COHORT BORN 100 YEARS AGO

T. Rantanen[1], K. Masaki[2], Q. He[2], R.D. Abbott[2], L. White[2], *1. Gerontology Research Center, University of Jyvaskyla, University of Jyvaskyla, Finland, 2. Pacific Health Research Institute, Honolulu, Hawaii*

Information on long-term predictors of longevity, especially of becoming a centenarian is missing from prospective studies. Only few datasets exist, which provide an opportunity to examine measures of midlife physiological function and lifestyle in a large panel of subjects followed until death. We studied hand grip strength and living habits assessed at the age of 62 and parental age as predictors of longevity up to becoming a centenarian. The design is a prospective cohort study within the Honolulu Heart Program/Honolulu Asia Aging Study of 2239 men born before the end of June 1909 who took part in hand grip strength tests and other assessments at baseline in 1965-68 when they were on average 62 years old (range 56-68) and whose death dates were followed up for 44 years until end of June 2009 with complete coverage. Survival time after baseline was expressed in years. Longevity was categorized as centenarian (≥100 years, n=47), nonagenarian (90-99 years, n=545), octogenarian (80-89 years, n=847) and ≤79 years (n=801, reference). The average survival time after baseline was 20.8 years (SD 9.62). Longer survival time adjusted for baseline age and other confounders was observed among those with higher grip strength, maternal longevity and physical activity and among never-smokers, while prevalent diabetes or high blood pressure correlated with shorter survival time. Those in the highest third of grip strength distribution had 2.5 times (Odds Ratio, OR, 2.52, 95% Confidence Interval, CI, 1.23-5.10) and those in the middle third double (OR 2.02, 95% CI 0.84-4.87) the odds of becoming centenarian rather than dying at the age of ≤79 years as compared to those in the lowest third of grip strength. Never vs. ever smoking (OR 5.75 95% CI 3.06-10.80), participating in intensive or moderate physical activity outside work (OR 1.13 per daily hour, 95% CI 1.02-1.25) and mothers longevity ≥80 years vs. ≤60 years (OR 2.3, 95% CI 1.06-5.01) predicted becoming a centenarian. The models for nonagenarians and octogenarians vs. reference (≤79 years) showed parallel results. Adjusting for chronic conditions or excluding people with known chronic conditions at baseline did not materially change the models. Good grip strength and having a long-lived mother may indicate constitutional physiological and genetic resilience to aging and processes which may be enhanced with physical activity and diminished with smoking.

### GERIATRIC CONDITIONS AND CHRONIC DISEASES AND THEIR DISABILITY AND MORTALITY OUTCOMES: A NEW APPROACH

C. Cigolle[1,2,3], C. Blaum[2,3], W. Ye[4], Y. Lee[2], J. Liang[4], *1. University of Michigan Department of Family Medicine, Ann Arbor, Michigan, 2. University of Michigan Department of Internal Medicine, Ann Arbor, Michigan, 3. VA Ann Arbor Healthcare System Geriatrics Education, Clinical and Research Center (GRECC), Ann Arbor, Michigan, 4. University of Michigan School of Public Health, Ann Arbor, Michigan*

Geriatric conditions, in addition to diseases, define the health status of older adults. Previous research used latent class analysis to examine the structure of underlying patterns of conditions and diseases to produce profiles of older adult comorbidity. We hypothesized that these profiles were associated with distinct disability and mortality outcomes. We analyzed the 2004-2008 waves of the Health and Retirement Study, a nationally-representative longitudinal health interview survey. Our study sample included adults >=65 years old (n=11,113, representing 37.1 million). Independent variables included 5 geriatric conditions (dementia, falls, incontinence, poor vision, poor hearing) and 7 chronic diseases (diabetes, hypertension, heart, stroke, lung, psychiatric, musculoskeletal). Outcome variables included new dependency in activities of daily living (ADL) and instrumental activities of daily living (IADL) and mortality. We used latent class analysis to investigate profiles/clusters of older adult health status and their two- and four-year outcomes. Six profiles/classes were identified: (1) Healthy, 47% of older adults nationally; (2) Intermediate (diabetes/hypertension), 19%; (3) Intermediate (diabetes/hypertension/heart), 9%; (4) Intermediate (without diabetes), 15%; (5) Dementia with geriatric conditions, 6%; and (6) Multimorbid without dementia, 4%. New ADL/IADL dependency at 2 years was 33.4%/18.8% for Class 3 and 25.7%/35.5% for Class 6, versus 4.5%/7.3% for Class 1. Two- and four-year mortality were 39.8%/64.1% for Class 3 and 25.2%/43.6% for Class 6, versus 6.0%/15.4% for Class 1. Latent classes or profiles of geriatric conditions and diseases predict disability and mortality outcomes. This approach may offer new insight into older adult comorbidity, how it accumulates over time, and its outcomes.

### THE RESPONSIVENESS OF THE ACTIVITIES-SPECIFIC BALANCE CONFIDENCE SCALE AND TINETTI'S PEFORMANCE ORIENTED MOBILITY ASSESSMENT IN OLDER ADULTS WITH IMPAIRED BALANCE

E. Hood[1], K.K. Chui[2], M. Lusardi[2], *1. Warren Hospital Balance Center, Phillipsburg, New Jersey, 2. Physical Therapy and Human Movement Science, Sacred Heart University, Fairfield, Connecticut*

Introduction: Impairments of balance are frequent and problematic for many older adults. Physical therapists often administer a battery of self-reported and performance-based outcome measures to measure the effectiveness of their intervention. There is, however, little evidence to assist practitioners with the interpretation of change scores from these outcome measures. This study evaluated the responsiveness of two outcome measures frequently used in rehabilitation: the (self-reported) Activities-specific Balance Confidence Scale (ABC) and the (performance-based) Tinetti's Performance Oriented Mobility Assessment (POMA). Methods: Sixty-one consecutive community dwelling older adults (mean age = 77.3±7.0 years) referred to physical therapy (PT) participated in this study. All participants had diagnoses that impaired their balance (mean duration 12.5±14.0 months). PT interventions included balance exercises, gait training, and strength training among others (mean number of visits = 10.3±4.3). Distribution-based indexes of responsiveness were calculated and include standard error of the measurement (SEM), minimal detectible change (MDC), effect size (ES), and standardized response mean (SRM). Results: Indexes of responsiveness were calculated for the ABC (SEM = 5.8, MDD = 16.0, ES = 0.64, SRM = 0.87), POMA-balance subscale (SEM = 0.74, MDD = 2.0, ES = 0.97, SRM = 1.4), POMA-gait subscale (SEM = 0.74, MDD = 2.0, ES = 0.56, SRM = 0.69), and POMA-total score (SEM = 1.26, MDD = 3.45, ES = 0.88, SRM = 1.3). Conclusion: The indexes of responsiveness reported can assist practitioners with the interpretation of changes scores from two outcome measures frequently used for patients with impaired balance, the ABC and POMA.

### THE EFFECT OF AGING ON THE FUNCTION OF THE FEMALE HAND

C. Irwin, M. Sesto, *Trace Center, University of Wisconsin-Madison, Madison, Wisconsin*

Introduction: Hand function is critical for activities of daily living and independence. The aging process has been shown to adversely affect strength, the ability to produce force quickly and muscle synergy. Both strength and rapid force production (in the lower extremity) have been strongly correlated with function but only strength has been studied in the hands. A new and validated instrument, the Multi-Axis Profile (MAP) dynamometer, was used to simultaneously evaluate three grip-related variables; strength, rate of force production and force orientation. Methods: A total of 20 healthy, community dwelling, right handed adult females participated (n=10 older participants; avg. age=74 (SD=7.7) years and n=10 younger participants; avg. age=24.5 (SD=3.7) years). Participants were instructed to build up force as quickly as possible during a maximum voluntary grip activity. Participants also completed the 9-hole peg test to evaluate manual dexterity and the Short Form-36 to assess self-reported global function. Results: Older females averaged 69% the grip strength ($p<0.05$), 62% the force production rate ($p<0.05$) and oriented their forces up to 56 degrees more proximally ($p<0.05$) than younger females. Strength, force production rate and force orientation were significantly correlated with the SF-36 (0.40 to 0.62) and manual dexterity (0.47 to 0.67). Conclusion: Changes in grip strength, force production rate and force orientation were observed in healthy older females and were correlated with self-reported function and manual dexterity. Collectively these results may indicate a muscle force imbalance affecting hand function.

# SESSION 2295 (PAPER)

## RECOMMENDATIONS AND RESOURCES IN MUSCULOSKELETAL HEALTH

### PREDICTORS OF OLDER ADULTS' USE OF RECOMMENDED ARTHRITIS PAIN TREATMENT

D.D. McDonald, *School of Nursing, University of Connecticut, Storrs, Connecticut*

Non-steroidal anti-inflammatory drugs (NSAIDs) are not recommended for treatment of osteoarthritis pain in older adults due to the potential for adverse events. Exercise and acetaminophen remain the first line treatments for osteoarthritis pain. The purpose of this descriptive secondary analysis was to identify factors predictive of older adults' use of exercise and/or acetaminophen, and avoidance of NSAIDs. Data was analyzed from 455 adults age 60 and older with moderate or greater osteoarthritis pain intensity who responded to the Brief Pain Inventory between 2006 and 2007. A total of 212 (46.6%) reported using exercise and/or acetaminophen and did not report using NSAIDs. The following predictors were entered into a logistic regression to predict use of the exercise and/or acetaminophen and nonuse of NSAIDs: age, gender, Hispanic/nonHispanic ethnicity, White/nonWhite race, less than high school/high school or greater education, arthritis treatment by a practitioner, pain treatment by a practitioner, pain intensity, functional interference from the pain, and percent of pain relief from current treatments. Older adults reporting arthritis treatment by a practitioner were 2.19 (CI 1.07 – 4.51) more likely to use recommended arthritis pain treatment, $p < .03$. Only 3% to 4% of the variance for use of recommended pain management treatment was explained by the predictors. All of the older adults reported moderate or greater pain intensity, but less than half reported current use of the first line recommended pain treatment. Results underscore the importance of guidance by practitioners who are knowledgeable about safe osteoarthritis pain management for older adults.

### EDUCATION, COGNITION, AND FUNCTIONAL RECOVERY FROM A HIP FRACTURE

N. Chiles, A.L. Gruber-Baldini, D. Orwig, J. Magaziner, *University of Maryland Baltimore, Baltimore, Maryland*

Cognitive ability impacts recovery from hip fracture. Education is positively correlated with cognition; however the details of the relationship between years of education, cognition, and hip fracture recovery remain unclear. This study hypothesizes that higher education would be an independent predictor of better cognition and improved functional recovery post-hip fracture. Data was from 163 patients with a hip fracture from an ongoing study (Baltimore Hip Studies, BHS-7, 75 male and 79 female), recruited from 8 Baltimore-area hospitals. Baseline Modified Mini-Mental State (3MS) scores were used to determine cognitive impairment. Functional Recovery was measured by lower extremity physical activities of daily living (LPADLs) at 2 months post-fracture. At baseline, 75.5% were not cognitively impaired (3MS>=78), while 12.9% were moderately impaired (3MS 66-77) and 11.7% were severely cognitively impaired (3MS<66). Compared to non-cognitively impaired, severely cognitively impaired patients were older (Mean=85.8+/-SD=10.1 vs. M=81.0+/-7.8), less educated (M=11.3+/-2.9 vs. M=13.5+/-3.3), and more disabled (LPADL M=11.4+/-1.4 vs. M=7.0+/-3.1) (all p<.05). Linear regression examined the impact of education on 3MS and 2-month LPADL, adjusting for age, sex, history of dementia, and in-hospital delirium, as well as pre-fracture LPADL for the 2-month LPADL regression. Years of education were positively associated with 3MS scores (b(SE)=1.0(0.3), p<.01, Model R-squared=0.33), as well as 2-month post-fracture functional outcomes (b(SE)=-0.2(0.1),p<.05, Model R-squared=.35). Our findings indicate that education is associated with cognitive functioning and recovery in physical functioning following a hip fracture.

### THE USE OF "DICHOS" TO COMMUNICATE RESOURCES FOR PHYSICAL ACTIVITY IN OLDER LATINAS

A. Perez, J. Fleury, C. Keller, N. Shearer, M. Belyea, *College of Nursing and Health Innovation, Arizona State University, Phoenix, Arizona*

Introduction: Studies have shown that older adults achieve better health outcomes when health communication is linguistically and culturally appropriate. The purpose of this paper is to describe a theory-driven approach to developing a culturally relevant intervention grounded in formative research and partnerships with community members to promote physical activity (PA) among older Latinas. Methods: A series of community-based focus groups provided a systematic description of cultural meaning, social and contextual strengths, and resources related to PA. Insights gained from thematic analysis were integrated throughout intervention and materials development. Promotoras used "dichos" to open up sessions and include in reminder postcards and calendars as a way or reinforcing PA goals for self and family. Results: Family, friends and group setting were identified as important in promoting PA, Intervención de Motivación Para Actividad Fisica was open to family members, comadres, vecinas, and new walking support system of 6 to 10 women at sites closest to their neighborhood. Strategies focused on family interaction and activities included: joining children/grandchildren for activity at the park, home, and using short walks to talk to their comadre, vecina, or hermana. Women acknowledged age as a factor in remembering to do things, including PA, and recommended writing things down, using calendars for the refrigerator door, and using "dichos" as a culturally relevant way to communicate health as a priority on a regular basis. Discussion: Results may help guide clinicians in developing feasible and culturally appropriate communication strategies that promote regular PA in older Latinas.

# SESSION 2300 (SYMPOSIUM)

### ASSESSING READINESS FOR MOBILITY MANAGEMENT: FINDINGS FROM THE LIFE SPACE & MOBILITY STUDY

Chair: *M. Berg-Weger, School of Social Work, Saint Louis University, St. Louis, Missouri*
Discussant: *T.M. Meuser, University of Missouri-St. Louis, St. Louis, Missouri*

Mobility is a key factor in maintaining autonomy and quality of life in advancing age. Little is known about older adults' perceived meanings and emotions regarding changing life space and mobility. Life space–person's physical space–encompasses values, attitudes and needs. Researchers can help professionals identify and understand spaces in which older adults live, the impact of perception on mobility and strategies for responding to mobility changes and develop tools that practitioners need for effective mobility assessments and interventions. This symposium explores transitions across the aging and mobility continuum with attention to meanings and emotions associated with individuals' definitions of life space and relationships to anticipated mobility changes. Utilizing data from the Life Space and Mobility Study, three papers explore the multi-phased development of a person-centered measure focused on personal meanings and emotional aspects of anticipated life space mobility changes. The papers emphasize contributions of qualitative and quantitative approaches for successful mobility-related intervention. "Investigating Subjective Responses to Mobility Changes in Older Adults" presents data from three focus groups in which participants discussed perceptions of current and future mobility. "Development of the Mobility Preparedness Inventory" presents debuts the Person-Centered Mobility

Inventory. “Reflections on Mobility: The Elder Perspective” analyzes the participants’ written reflections on their life space and mobility changes.

### INVESTIGATING SUBJECTIVE RESPONSES TO MOBILITY CHANGES IN OLDER ADULTS

A. Harmon, M. King, *University of Missouri-St. Louis, St. Louis, Missouri*

The attitudes, meanings and emotions associated with personal life space and mobility status were explored in three focus groups. Thirty adults (57 – 92 years, mean age 74) participated in one of three focus groups defined as Low Disability/Broad Life Space, High Disability/Broad Life Space, and Mixed Disability Level/Constricted Life Space based on self-reported scores on the Life Space Questionnaire (LSQ) and SF-12v2 Physical Composite Score (PCS). Recordings of each meeting were transcribed and a grounded, consensus conference approach was used to identify four major themes across all three groups: Definition of Mobility and Mobility Related Change, Mobility Loss in Aging, Managing Loss and Change, and Self-Perception and Mobility. Common themes and key between-group differences will be discussed in the context of mobility-related intervention by social service professionals.

### DEVELOPMENT OF THE MOBILITY PREPAREDNESS INVENTORY

T.M. Meuser[1], J. Chibnall[2], *1. University of Missouri-St. Louis, St. Louis, Missouri, 2. Saint Louis University, St. Louis, Missouri*

This presentation will detail the development and initial validation of a new inventory for mobility counseling and management interventions, the Person-Centered Mobility Preparedness Inventory (PCMPI). A set of 87 test items were administered, along with other established measures (e.g., mood, self-rated disability, personality), to a volunteer sample of 300 community-dwelling adults (mean age 72, 77% female, 75% Caucasian, 80% current drivers). Factor analysis with rotation yielded a 24-item scale with sound reliability and validity characteristics. Unlike tools which emphasize transportation options, the PCMPI was designed to focus on a critical precursor to active mobility planning, namely awareness of real or potential change and the felt motivation (readiness) to address it. Various suggestions for implementation will be presented.

### REFLECTIONS ON MOBILITY: THE SENIOR PERSPECTIVE

M. Berg-Weger[1], J. Stowe[2], *1. School of Social Work, Saint Louis University, St. Louis, Missouri, 2. University of Missouri-Columbia, Columbia, Missouri*

The development of effective clinical tools and interventions for older adult mobility can be enhanced by incorporating the experiences of individuals. This paper will present a qualitative analysis of written comments provided by older adults participating in the Life Space and Mobility Study. An analysis of the comments highlight five general themes: 1) lack of awareness regarding a need to plan for mobility changes; 2) belief that mobility changes will be devastating; 3) belief that aging and mobility can be adequately addressed through positive thinking, exercise, a healthy diet and/or prayer; 4) concern about the lack of viable mobility resources, alternatives and supports for older adults; and 5) concern that mobility changes had not yet been personally considered. A small segment of the respondents indicated they had planned for impending or existing mobility changes. Implications for research and practice will be discussed.

## SESSION 2305 (PAPER)

## DIVERSITY IN AGING II

### EFFECTS OF PERCEIVED CAREGIVING BURDEN ON ECONOMIC WELLBEING AMONG EMPLOYED AFRICAN AMERICAN WOMEN

J. Kim[1], S. Kang[2], L.A. Chadiha[1], *1. University of Michigan-Ann Arbor, Ann Arbor, Michigan, 2. University Texas at Alington, Alington, Texas*

The effects of perceived caregiving burden on economic well-being of employed caregivers providing eldercare have not been widely examined. The purpose of this study is to examine this problem among female African American employed caregivers. Using cross-sectional data from Black Rural & Urban Caregiver Mental Health & Functioning Study, this study pays particular attention to employed African American women (n=235, average age 46) providing eldercare for a dependent adult aged 65 and older. Structural equation modeling (SEM) is used to investigate how perceived caregiving burden influences women’s economic well-being through their work performance. Results show that economic status is not directly but indirectly associated with employed African American women’s perceived caregiving burden. Specifically, caregivers’ work performance mediates between perceived caregiving burden and women’s economic status. The fit indices provide strong support for the hypothesized model: NNFI= .93, CFI= .95, GFI= .99, RMSEA= .05 and $\chi 2$ (df=14) = 23.19 (p=.06). Perceived caregiving burden tends to decrease African American women’s work performance (beta=-0.23, p<.001), resulting in decreased income status (beta=-2.53, p=.012). Policy makers, employers, and service providers can use this study’s findings to better understand how perceived caregiving burden among employed caregivers is associated with their work performance and economic well-being. In particular, findings point to the need for programs and services that reduce undesirable effects of perceived caregiving burden on work performance and minimize decreases in economic well-being among employed African American women.

### HEALTH STATUS BY NATIVITY AND LENGTH OF STAY IN THE U.S. AMONG OLDER INDIVIDUALS: TESTING DIFFERENT PERSPECTIVES

S. Choi, *Department of Social Work, State University of New York, Binghamton, Binghamton, New York*

This study compares health status of older adults by nativity (U.S.-born vs. foreign-born) and length of stay in the U.S. using four different health care measures. A “healthy immigrant effect” has been empirically supported among young immigrants. However, studies are inconclusive regarding late-life immigrants. Using three waves of data from the Second Longitudinal Study of Aging (1994-2000) and the linked mortality file, this study compared 1) chronic health conditions (yes/no for 10 conditions; the number of conditions (0-10)); 2-3) longitudinal trajectories of the number of functional impairments in ADL and IADL (0-13) and self-rated health; and 4) mortality through 2002 between three groups (age 70+) - 1) late-life immigrants with less than 15 years of residence in the U.S. ( n=133); 2) older foreign-born individuals with 15+ years in the U.S. (n=672); and 3) the U.S.-born (n=8,642). Logistic and Poisson regression, Hierarchical Generalized Linear Modeling, and survival analysis (Kaplan-Myer and Cox proportional hazard models) were used. First, after controlling for demographic variables, late-life immigrants were less likely to suffer from osteoporosis and cancer and demonstrated lower numbers of chronic conditions compared to their U.S.-born counterparts. Second, the U.S.-born and longer-term immigrants reported better self-rated health over time, as well as lower numbers of functional impairments compared to late-life immigrants. Finally, late-life immigrants were associated with longer survival time and lower hazards of mortality over time. In conclusion, a healthy immigrant effect was only partially supported among older adults depending on the health status measure selected.

### HEALTH DECLINES AND WEALTH TRAJECTORIES: A LONGITUDINAL ANALYSIS AND EXPLORATION BY RACE

L.A. Sullivan, T. Meschede, *Heller School for Social Policy and Management, Brandeis University, Waltham, Massachusetts*

This study investigates the impact of negative health events on life cycle savings and wealth building and assesses differential effects by race. The analysis reveals the ways in which health declines can influence long-term savings trajectories as households approach and enter into retirement. Using over twenty years (1984-2007) of longitudinal data from the Panel Study of Income Dynamics (PSID), a sample of self-assessed healthy working age (25-55) and employed adults was selected and followed across 8 waves to better understand long-term wealth building trends across the life course. By selecting initially healthy, working households, our identification strategy helps to address endogeneity concerns and presents a new approach to the study of health and wealth as households age. Throughout each year of the study, households with heads who have poor health have significantly lower mean wealth ($p<.0001$) than households with heads in better health. By 2007, study sample households with healthy heads had on average \$133,040 in greater net financial assets (wealth not including home equity) compared to the wealth of households in poor health: \$326,254 versus \$193,215 ($p<.0001$). Analysis by race reveals that health status is significantly related to wealth for whites, but not for African-Americans. Unhealthy white households hold 50 percent fewer financial assets, than their healthy peers in 2007 (mean=\$235,156, $p=0.001$); however, health is not a significant factor in determining the wealth of African-Americans, who hold very few assets (mean = \$72,693, $p=0.50$). Pooled time-series analyses further test the long-term impact of health on wealth.

## SESSION 2310 (PAPER)

## END OF LIFE AND PALLIATIVE CARE II

### CARE COORDINATION AND TRAJECTORY OF ILLNESS FOR END-OF-LIFE MEDICARE BENEFICIARIES

I. Chan, S. Shen, L. Alecxih, *The Lewin Group, Falls Church, Virginia*

Similar to the general population, among decedents, a small proportion of high spenders constitutes a large proportion of spending. While studies show that most people want to die at home and minimize care transitions at end-of-life, this high-spending subgroup of decedents has trajectories of multiple settings changes and illness deterioration. Longitudinal analysis was performed on 1,195 decedents for three years from the Medicare Current Beneficiary Survey. Analysis on the top 10% of spenders found that top decile spending decedents spent five times what others spent in the last year of life (LYOL) because their service mix is significantly different. High-spending decedents spent seven times as much on hospitalization and six times as much on post-acute services compared to lower-spending decedents, but had shorter hospice stays. About 73 percent of high-spending decedents had three or more inpatient admissions in the years leading up to LYOL. Among the lower-spending group, 21 percent had three or more inpatient admissions. Health trajectories compound the difficulty of death for high-spending decedents. The high-spending decedents have a drastic development of new chronic conditions and ADLs—half of higher-spending decedents reported a new chronic condition in LYOL. Our closer look shows considerable variation in spending within the decedent population, and the variation appears to be associated with health and utilization trajectories. The question now is how to execute decedent care to meet their needs in symptom management and quality of care. The analysis suggests that end-of-life care coordination requires flexibility for trajectories of escalating conditions.

### A STATEWIDE STATUS REPORT ON HOSPITAL-BASED PALLIATIVE CARE PROGRAMS

A.P. Glass, M. Burgess, *University of Georgia Institute of Gerontology, Athens, Georgia*

A decade ago, the palliative care (PC) movement was in its infancy. There is increasing evidence that PC has much to offer to improve end-of-life care, especially for frail older patients, but how is it progressing? In order to determine the current status of hospital-based PC programs in one southern state, a survey of 128 hospitals on Georgia's Medicare.gov listing was conducted. Of these, 24 (19%) reported having a PC program: 15 large (300+ beds), seven mid-sized (50-300 beds), and two small hospitals (<50 beds), comprising 50%, 10%, and 7% by respective hospital category. Only one program was in a for-profit hospital. This total was less than the number reporting PC in an earlier state-by-state report card (Morrison, Dietrich, & Meier, 2008), which identified 33 PC programs among 103 hospitals, and these percentages are below their national averages. A comparison with a current provider listing (getpalliativecare.org) shows 19 hospitals are included on both lists, 11 hospitals on the website directory reported no PC in the current survey, and five hospitals not on that list now report offering PC. Additionally, PC program representatives in the current study were asked to complete a survey to assess their accordance with recently established national consensus guidelines (Weisman & Meier, 2008). Most PC programs do not yet have a board-certified PC physician, and in-patient units are rare. Overall, results show that the spread of PC has been slow in this state and there is a need for increasing awareness and education about PC.

### IS NURSING HOME PROFIT STATUS ASSOCIATED WITH INNOVATIONS IN ADVANCE DIRECTIVES?

J.A. Davis, *Management and Marketing, The University of Alabama, Tuscaloosa, Alabama*

End-of-life (EoL) care continues to undergo ongoing evolution as service providers and other groups seek improved instruments for individuals to convey their last wishes. Three such instruments that have increased in prominence are Five Wishes, Physician Order for Life-Sustaining Treatment (POLST), and Last Acts. Each of these programs offer a unique advantage over many of the traditional advance directives, thus each may represent an innovation in way EoL wishes are communicated. However, the presence or use of these innovations varies by numerous organizational characteristics. One important organizational characteristic that has been shown to impact innovation is the ownership status of the nursing home. There is a rich body of research suggesting that for profit (FP) nursing homes behave quite differently than not-for-profit (NFP) nursing homes and this difference manifests on numerous levels. The purpose of this project is to explore the relationship of profit status to innovative instruments used to communicate EoL wishes. Data for this project comes from the 2004 National Nursing Home Survey (NNHS). After removing observations with missing data, the final unweighted sample consisted of 929 nursing homes. The results of the Poisson regression revealed that FP/Freestanding nursing homes, nursing homes with medical directors who had EoL training, those that offered in-house hospice care, those with certain characteristics associated with culture change, and those with more registered nurses per patient day were more likely to offer EoL innovations. Thus, nursing home ownership is associated with EoL innovations. However, the utilization of these innovations remains woefully low.

## SESSION 2315 (PAPER)

## HEALTH INTERVENTIONS ACROSS DIVERSE SETTINGS

### PRACTICE MAKES PERFECT?: FACILITY VOLUME EFFECT ON TIME TO DISCHARGE AMONG HIP FRACTURE PATIENTS

P.L. Gozalo[1], N. Leland[1], J.M. Teno[1], J. Bynum[2], T. Wetle[1], V. Mor[1], *1. Community Health, Brown University, Providence, Rhode Island, 2. Dartmouth University, Lebanon, New Hampshire*

Objective: While volume of admissions leads to improved outcomes in acute care hospitals, the volume effect is unknown for skilled nursing homes (SNF). We compared Medicare Beneficiaries' outcomes when admitted to NH with higher vs. lower volume of rehabilitation. Population Studied: Medicare Beneficiaries 75 and older who experienced initial surgery for hip fracture between 1999 and 2006, discharged to nursing home (NH) for rehabilitation. Subjects were excluded if they enrolled in manage care, hospice, or resided in NH at the time of the hip fracture. Methods: A multivariate model that accounted for censoring due to death or discharge to an inpatient rehabilitation facility tested the association of SNF hip fracture admission volume with the time to NH discharge after adjusting for age, gender, race, year, and hospital LOS. Results: During the 8 years, 50% of NH were low volume (1-15 admissions), 25% medium volume (16-43 admissions), and 25% were high volume (44-918). The median days in the NH before discharge to the community were 36, but it varied by hip fracture volume: 52 (low) 49 (medium) and 33 (high). Relative to SNF patients in a low volume facility, those in a medium volume SNF had a 12% higher probability of being discharged within a year (HR 1.12, 95%CI 1.09-1.15), while those in a high volume SNF had a 64% higher probability of being discharged within a year (HR 1.64, 95%CI 1.60-1.67). Conclusions: The volume of hip fracture admissions to a NH is associated with an early transition to home.

### IMPLEMENTATION OF A HEART FAILURE MANAGEMENT PROGRAM IN SKILLED NURSING FACILITIES TO IMPROVE TRANSITIONS IN CARE

M.A. Dolansky[1], J. Hitch[1], I. Pina[1], R.S. Boxer[2,1], *1. Nursing, Case Western Reserve University, Cleveland, Ohio, 2. University Hospitals of Cleveland, Cleveland, Ohio*

Approximately 30% of heart failure (HF) patients are discharged to skilled nursing facilities (SNF) following hospitalization as a transition from hospital to home. The purpose of the study is to evaluate the implementation of an interdisciplinary HF management protocol in two inner city free standing SNFs. The HF protocol consists of nursing HF management standing orders (identification of HF signs and symptoms, risk assessment, documentation of left ventricular function, guideline medication management, and weight monitoring) and organizational tools to implement and sustain the protocols (HF patient log and tracking binder, assignment of HF champions, weekly HF rounds, and audits). Implementation success was monitored weekly for 4 months and monthly for 5 months. During the weekly audits, cycles of coached improvement were implemented. After the first 4 months, the weekly audits indicated that the protocols were adhered to 77.5%. Nursing orders that were not adhered to were filling out additional forms (47%) and interdisciplinary rounds (19%). During the next 5 months, monthly audits indicated that protocol adherence dropped to 60%. Difference between the sites were significant as site 1 had a 47% adherence and site 2 had a 80% adherence. Four key elements emerged as necessary for success; interdisciplinary champions, coached implementation, multiple cycles of change, and supportive leadership. Barriers consisted of high staff turnover and hierarchal SNF culture. Instituting a program of staff education, HF management protocols, and self-sustaining management tools may greatly enhance the care of patients with HF and decrease the risk rehospitalization.

### THE TECHNOLOGY AND AGING PROJECT (TAP): OUTCOMES FROM A RANDOMIZED FIELD TRIAL

A.T. Woodward[1], P.P. Freddolino[1], C. Blaschke-Thompson[1], D.J. Wishart[2], M. Fox[2], L. Bakk[1], R. Kobayashi[1], *1. School of Social Work, Michigan State University, East Lansing, Michigan, 2. Otsego County Commission on Aging, Gaylord, Michigan*

There is increasing evidence that use of information and communication technologies (ICTs) can improve the physical and mental health of older adults by enhancing social support and psychosocial well-being. Although rates of ICT use among older adults are increasing, they are still below other age groups in the US. The absence of good training opportunities is one reason for this difference. The Technology and Aging Project attempts to address this barrier by evaluating a training program in ICT use provided to adults aged 60 and older in a rural county in Northern Michigan. The study randomly assigned 45 participants to an experimental group that participated in a six-month training program and 38 to a control group. Data were collected at baseline, 3 months, 6 months, and a 9-month follow-up. Data includes measures of loneliness, depression, quality of life, social networks, perceived social support, computer self-efficacy and the use of various ICTs. Analysis was conducted using mixed regression models. Compared to the control group, the experimental group reported a greater overall increase in computer self-efficacy, the number of ICTs used, and the proportion of their network they communicated with by email, instant messaging, and Skype. The experimental group also reported a greater increase in the number of people in their social network and in the social support they received from their network, particularly from friends. These results support previous research suggesting that older adults can and are willing to learn how to use ICTs in the appropriate setting.

### INFLUENZA VACCINATION AND ABSENTEEISM AMONG NURSING HOME STAFF

M.K. Lin, B.Y. Lee, *Health Policy & Management, University of Pittsburgh, Pittsburgh, Pennsylvania*

Researchers at the Pennsylvania Department of Health and University of Pittsburgh developed a survey to be administered at the end of the 2008-2009 influenza season. This survey was sent to 56 facilities participating in a program to receive free influenza vaccination doses supplied by a vaccine manufacturer. Among the key measures of effectiveness, comparative influenza vaccination rates and employee absenteeism rates were collected. Researchers asked the survey respondent to describe their facility's vaccination policies, and their perceptions regarding barriers and facilitators to influenza vaccination among employees. Results: Among the facilities that participated in the free vaccination program, approximately half (49%) reported that vaccination rates among employees increased, and only a few (5%) reported that vaccination rates decreased from 2007-2008 to 2008-2009. No facilities reported that absenteeism increased, and 33% reported that it decreased. Only 16% of facilities require that their staff provide documentation of vaccination, and only 27% of the facilities participating in the vaccination program reported having a formal policy for visitors. Conclusions: Offering free influenza vaccinations to nursing facilities is an effective way to increase the receipt of influenza vaccination among nursing home staff. However, simply offering free vaccinations may not be sufficient to protect regular employees and residents from contracting influenza due to issues regarding actual receipt of a vaccination, the effectiveness of a particular vaccination, and the presence of visitors and agency staff. Participants reported that policymakers should prioritize educational awareness programs over alternative options, such as offering free vaccinations or creating regulatory requirements.

### NIGHTIME URINATION, AGEING AND SLEEP DISTURBANCE: STRATEGIES AND ADJUSTMENTS

S. Venn, S. Arber, *Department of Sociology, University of Surrey, Guildford, United Kingdom*

Objectives Going to the toilet frequently in the night is a commonly reported cause of sleep disturbance among older people, which impacts on quality of sleep and daytime functioning. Yet older people often do not seek help for nighttime urination as it is regarded as part of the normal ageing process by both the medical community and older people themselves. This paper will examine older people's strategies for coping with nighttime urination. Methods Data is presented from 76 community dwelling men and women aged 65-95 with poor sleep in SE England. Respondents completed detailed sleep and activity diaries over a 24 hour period for 14 days, along with rating sleep quality. In-depth interviews were also undertaken (n=61). Results Respondents reported varying frequencies of going to the toilet, ranging from once a night to three or four times a night. Results indicate that those respondents who were aware of possible causes of urination, such as consuming drinks prior to bedtime, often failed to make adjustments to those behaviours. Adjustments that were made included avoiding any fluid intake for several hours before bedtime. Conclusion Respondents expected an increase in nighttime urination as part of the 'normal' ageing process yet often adopted strategies that may actually increase sleep disturbance. Targeted advice on coping with nighttime urination may contribute to older people either seeking professional help, or undertaking more appropriate strategies. Research supported by the New Dynamics of Ageing initiative, a multidisciplinary research programme supported by AHRC, BBSRC, EPSRC, ESRC, MRC (RES-339-25-0009).

## SESSION 2320 (PAPER)

## HOUSING, NURSING HOMES, AND RESIDENTIAL CARE IV

### WHOSE CHOICE IS IT ANYWAY? INDEPENDENT LIVING AND AGEING IN PLACE IN QUESTION

S. Hillcoat-Nalletamby, J. Croxall, *School of Human and Health Sciences, Centre for Innovative Ageing, Swansea University, Swansea, Wales, United Kingdom*

UK policy makers increasingly emphasize the importance of facilitating ageing in place and independent living for older people to ensure their wellbeing. This policy drive partly stems from research showing that their preferred option is to live at home for as long as possible rather than move to a residential or institutional setting. It therefore becomes increasingly difficult to question the premise that the home environment is best suited to meeting later life needs. This poster offers a critical perspective to this policy drive, with a view to understanding what "independence" itself may mean to older people, and the risks that promoting ageing in place may represent for certain social groups. Qualitative findings from a Welsh study on older people's care needs gathered from three different settings, extra-care facilities (N=59 participants), residential homes (N=66 participants) and the community (N=59 participants) are presented. We have examined how older people aged 60 or more and receiving some form of care in each setting, perceive their sense of independence, and what their motives have been for their choice of residential setting. Results suggest that motives are multiple, that risks of social isolation, as well as enhanced feelings of social inclusion can occur in both residential and community settings and that independence takes on a myriad of meanings. We interpret findings in relation to theories of structured dependency and humanist, post-modern perspectives which argue for the diversity of meanings and experiences in later life.

### THE IMPACT OF SMALL-SCALE LIVING IN THE NETHERLANDS AND BELGIUM: TRIANGULATION OF DATA ANALYSIS

A. De Rooij[1], K. Luijkx[2], A. Declercq[3], J. Schols[4], *1. Tilburg University / Tranzo / De Wever, Tilburg, Europe, Netherlands, 2. Tilburg University / Tranzo, Tilburg, Europe, Netherlands, 3. Catholic University Leuven / Lucas, Leuven, Europe, Belgium, 4. Maastricht University / CAPHRI, Maastricht, Europe, Netherlands*

Introduction The considerable increase of the number of people suffering from dementia implies an increasing demand for residential care. At the same time, transformations to more homelike environments are taking place. The rapid expansion of small-scale living facilities is not accompanied by sufficient scientific evidence about the effect of these facilities. This study addresses the following question: What is the impact of small-scale living arrangements on quality of life of residents with dementia in Belgium and the Netherlands, compared to similar residents in regular nursing home wards. Methods and materials With a time interval of 1 year data were gathered from 67 residents of small-scale living facilities and 61 residents of regular nursing home wards about quality of life, Activities of Daily Living, neuropsychiatric and depressive symptoms, use of psychotropic medication and social engagement. To reach triangulation of data analysis, the data were analyzed using a Qualitative Comparative Analysis (QCA; crisp set analysis) and using regression analysis, to explore what configuration of characteristics leads to maximum quality of life. Results The paper will show that qualitative and quantitative analyses of the same data provide congruent results. It reveals under what circumstances demented residents reach maximum quality of life scores, and differences between the Netherlands and Belgium. Conclusion After attending this session participants will have insight into the outcome differences between small-scale living facilities and regular residential care on older people with dementia. Furthermore, participants will get methodological information on the complementarities of QCA and regression analysis.

### DO THEY MEAN WHAT WE MEAN? DIFFERING INTERPRETATIONS OF TERMS IN NURSING HOME RESEARCH AND POLICY

D. Tyler[1], R.R. Shield[1], M. Rosenthal[2], S. Miller[1], T. Wetle[3], M. Clark[1], *1. Center for Gerontology, Brown University, Providence, Rhode Island, 2. Rutgers University, New Brunswick, New Jersey, 3. Brown University - Public Health Program, Providence, Rhode Island*

Purpose: Cognitive-based testing of surveys has not been standard practice in nursing home (NH) research. Many terms used in the literature do not have standard definitions and may be understood or interpreted differently by researchers, research subjects, and policymakers. The purpose of this study was to use cognitive-based testing to determine how Directors of Nursing (DON) and NH Administrators (NHA) understand and interpret terms and concepts commonly used in NH research and policy. Methods: Using existing survey questions with established validity and reliability and input from experts, we developed questionnaires to be administered to DONs and NHAs. Cognitive-based interviews using focused probing methods were conducted with 50 participants. Detailed notes were taken during all interviews and two researchers independently coded these notes for key themes and important points of divergence in the interpretation and/or understanding of terms and concepts. Results: Many terms and concepts routinely used by NH researchers and policymakers, such as "direct-care workers" and "resident-centered care", are not uniformly interpreted by those managing NHs. At times, two different professionals working in the same NH had different understanding of key terms and concepts. For example, respondents' definitions of "direct-care workers" ranged from nursing assistants to broader categories of clinical and other staff members. Implications: Our results may help explain discrepant findings across NH studies. They also clarify the necessity of cognitive testing for survey development and have important implications for policy decisions.

For example, reimbursement pass-throughs intended to increase direct-care staffing could be affected by differing understanding of this term by policymakers and NH managers.

### THE VIEW FROM HERE: A COMPARISON OF FRONTLINE WORKER AND MANAGER PERCEPTIONS OF NURSING HOME SAFETY CULTURE

J. Meagher[1], B. Kitch[2], *1. Brandeis University, Waltham, Massachusetts, 2. Harvard Medical School, Boston, Massachusetts*

Nursing home quality and safety has been a cause for concern for over three decades. It is estimated that medication errors occur in nearly one in five medication doses in nursing homes. A recent trend in quality and safety improvement is to learn from high-reliability organizations (HROs), or those with complex processes and high risk for failure but very low error rates. A common feature of HROs is a culture that prioritizes and supports proactive safety. Nursing home researchers and administrators have begun to examine the extent to which long term care facilities support safety and identify weaknesses in their cultures in order to improve quality of care. Because the majority of nursing home resident care is delivered by an entry level workforce, the buy-in of these workers to a culture of safety is critical. Using exploratory survey data collected from eight nursing homes in Massachusetts, this analysis examines the extent to which the frontline workforce, comprised of Certified Nursing Assistants (CNAs), perceives a culture of safety in their organizations. This study also compares CNA and manager opinions about safety culture in order to understand how perceptions of culture differ across organizational hierarchy. Results show that responses from the two groups differed significantly on nearly half of all survey items. CNAs had a consistently more negative perception of safety culture compared to management, particularly regarding communication and feedback. These findings suggest potential challenges lay ahead for developing a culture that supports proactive resident safety.

## SESSION 2325 (SYMPOSIUM)

### INCREASING CAPACITY FOR CAREGIVING THROUGH PARTNERSHIPS

Chair: *D.J. Sheets, School of Nursing, University of Victoria, Victoria, British Columbia, Canada*
Co-Chair: *M. Marcus, Harry and Jeanette Weinberg Foundation, Inc., Owings Mills, Maryland*
Discussant: *G. Alkema, The SCAN Foundation, Long Beach, California*

An $8 million, 3 year initiative funded by the Harry and Jeanette Weinberg Foundation was launched in September 2009 to support development of community partnerships and innovative approaches to support family and informal caregivers. This was one of the first initiatives in the nation to focus on family caregivers rather than the care recipient. This symposium highlights the implementation and evaluation of three of the programs developing innovative community partnerships. The Transitions in Caring collaborative links caregiver support programs in four rural counties of Western New Hampshire and is building community capacity to support caregivers of older adults through a person-centered, caregiver focused model. The Asian Pacific Islander Dementia Care Network (APIDCN) in Los Angeles is establishing a service network with carefully selected partners which is designed to provide culturally appropriate and comprehensive access to services. A third presentation focuses on the Caregiver Ombudsman Outreach Program (The Co-Op), a collaboration of eight community-based agencies and a School of Social Work. The Co-Op is training a cadre of indigenous case managers in underserved neighborhoods of Northern Manhattan to identify caregivers of older adults and link them to available resources and information, thus supporting the independence of older adults in the community. Evaluation includes assessing the impact of a wiki tool being used to create a database and website of caregiver health and psychosocial resources in the area. All presenters will describe implementation successes and challenges, using examples from the first year of program evaluation.

### THE CAREGIVER OMBUDSMAN OUTREACH PROGRAM (THE CO-OP): AN INNOVATIVE APPROACH TO SUPPORTING CAREGIVERS AND THEIR FAMILIES

C.R. Gelman[1,2], T.A. Sokoloff[2], E. Alvarado[2], C. Greer[3], *1. Hunter College School of Social Work, New York, New York, 2. Isabella Geriatric Center, New York, New York, 3. New York University, New York, New York*

The Caregiver Ombudsman Outreach Program (The Co-Op) is a collaboration of eight community-based agencies and a School of Social Work to train a cadre of indigenous case managers in underserved neighborhoods of Northern Manhattan to identify caregivers of older adults and link them to available resources and information, thus supporting the independence of older adults in the community. The expectation is that this training of community members will build community capacity, reduce caregiver burden, promote strategic use of existing programs, and identify gaps in services. A wiki format will be used to create a database and website of caregiver health and psychosocial resources in the area. The evaluation of the impact of the Co-Op through focus groups eliciting the experience of caregivers served and of the ombudspeople providing the service are described. Other evaluation methods to assess the outcomes of the program on caregiver well-being are also discussed.

### COMMUNITY PARTNERSHIPS TO SUPPORT CAREGIVERS IN RURAL NEW HAMPSHIRE

S. Fox, *Institute on Disability, University of New Hampshire, Concord, New Hampshire*

The Transitions in Caring initiative links caregiver support programs in four rural counties of Western New Hampshire and features intensive caregiver training and respite care for the caregiver and care-recipient. This collaborative is building community capacity to support caregivers of older adults through a person-centered, caregiver focused model. Community Asset Mapping is being conducted to identify and build on existing volunteer networks, including faith based communities. A unique aspects of this initiative is the mentoring partnership between 2 more experienced counties who are sharing their service delivery expertise with two adjoining counties to develop the capacity to support family and informal caregivers living in rural areas. This paper discusses implementation and evaluation of this model for addressing the needs of rural caregivers.

### ASIAN PACIFIC ISLANDER DEMENTIA CARE NETWORK (APIDCN): SERVICES FOR CAREGIVERS (ALZHEIMER'S ASSOCIATION)

K.G. Kietzman, *1. Partners in Care Foundation, San Fernando, California, 2. Health and Aging Policy Fellow, Washington, District of Columbia*

The Asian Pacific Islander Dementia Care Network (APIDCN) in Los Angeles seeks to improve knowledge and increase access to culturally sensitive support services that reflect the values and traditions of Asian populations. Asian elders are less likely to receive a timely diagnosis of Alzheimer's Disease resulting in limited access to early intervention. Additionally, family caregivers of Alzheimer's patients are reluctant to seek assistance from non-family members, due, in part, to perceived shame in relation to the disease. To address the multitude of needs experienced by families, a service network was developed with partners including the Alzheimer's Association, Little Tokyo Service Center, Chinatown Service Center, Asian Pacific Health Care Venture, Los Angeles Caregiver Resource Center, and Bet Tzedek (legal aid). This paper describes the development of the APIDCN, with specific attention given to the challenges of program evaluation of the diverse and often non-English speaking caregivers enrolled in network services.

## SESSION 2330 (SYMPOSIUM)

### NEW RESEARCH ON RESIDENT CHARACTERISTICS, PROGRAM OUTCOMES, AND POLICIES IN LOW-COST HOUSING

Chair: *P. Carder, Institute on Aging, Portland State University, Portland, Oregon*
Co-Chair: *C. Levine, U.S. Department of Housing and Urban Development, Washington, District of Columbia*
Discussant: *J. Pynoos, University of Southern California, Los Angeles, California*

This symposium presents new research on the need for and outcomes of programs designed to support individuals, especially those with low incomes, as they age in the places where they live. Housing settings that offer low-cost options are explored: multi-family subsidized housing, NORCs, and manufactured home parks. The papers reflect recent research on resident characteristics and service programs. The Golant et al paper offers a theory-driven conceptual framework by which to organize and assess current knowledge regarding the quality of the assistance and services found in "affordable clustered housing-care." Vladeck el al present the development and analysis of a structured instrument to identify health risk factors and interventions for NORC residents. Cotrell describes findings from a needs assessment of 130 residents of a publicly-subsidized high rise building. Stone et al present findings from an evaluation of a pilot program to support families who are care partners for older adults in subsidized housing. Tremoulet presents a policy analysis of the effects of mobile home park closures on older persons. The common theme across these papers is how both needs and program outcomes vary by the racial and ethnic profiles of resident populations and the outcomes that result from the relationship between the health and service characteristics of resident populations and the availability of services. Such research is critical to states, local jurisdictions and housing and service providers as they respond to the aging of the current population and to the projected shortage of affordable housing in the future.

### AGING IN PLACE IN MANUFACTURED HOME PARKS: REWARDS AND RISKS

A. Tremoulet, *Institute on Aging-IOA, Portland State University, Portland, Oregon*

Manufactured home parks are one of the least-studied settings where older adults of modest means age in place. This Oregon-based case study profiles the rewards and risks associated with aging in place in this setting. Data from the 2005 Oregon Population Survey are used to profile the characteristics of park residents in the state. Findings from six focus groups conducted with park residents statewide provides insights about why older residents choose this setting and hope to live the rest of their lives there. But when parks close, residents lose more than just a place to live. The risk of this residential stetting is analyzed by examining the impacts of the closure of a 270-unit park on its older residents. Participants will leave this session with a greater understanding of both the benefits and the drawbacks of this housing form as a setting for aging in place.

### ASSESSING THE QUALITY OF HEALTH AND SUPPORTIVE SERVICES IN AFFORDABLE CLUSTERED HOUSING-CARE ARRANGEMENTS: JUSTIFYING FUNDING FROM THE PUBLIC AND NONPROFIT SECTORS

S. Golant[1], P. Parsons[2], P. Boling[2], *1. Geography, University of Florida, Gainesville, Florida, 2. Virginia Commonwealth University, Richmond, Virginia*

Purposively planned or adapted affordable community-based housing arrangements now accommodate low and modest income older persons who have functional limitations and chronic health illnesses. Referred to as "affordable clustered housing-care," these housing arrangements introduce various physical infrastructure and dwelling design changes, and make available supportive and health-related services that enable their vulnerable older occupants to live independently and manage their health problems. Many of these housing arrangements are federally subsidized, rent assisted, multiunit apartment projects with low-income older occupants who have aged in place. Drawing on the work of Donabedian, this paper constructs a theory-driven conceptual framework by which to organize and assess our current knowledge regarding the quality of the assistance and services found in these housing-care settings. Such evaluations are essential to justify organizational and funding support from the public and nonprofit sectors and to encourage the participation of housing and service providers.

### REDUCING HEALTH RISKS OF OLDER ADULTS LIVING IN LOW AND MODERATE INCOME HOUSING DEVELOPMENTS: IMPLEMENTATION OF THE HEALTH INDICATORS IN NORC PROGRAMS INITIATIVE

F. Vladeck[1], M. Oberlink[2], *1. United Hospital Fund, New York, New York, 2. Visiting Nurse Service of New York, New York, New York*

This paper describes Health Indicators in Naturally Occurring Retirement Community (NORC) Programs, a web-based, community-sensitive, data collection tool used by the NORC programs of New York City Department for the Aging to identify several key risks to healthy aging (access to care, use of prevention and health promotion services, and management of chronic conditions and falls risks) among more than 5,000 older adults living in public and private low and moderate income NORCs. Findings include striking geographic differences in health status and risks and identified health disparities along racial and ethnic lines. Armed with the results of a 75-item questionnaire that takes 15 minutes to administer and is based largely on the BRFSS and AdvantAge survey instruments, NORC programs are now able to target diabetes, heart disease, and falls risk sub-populations with comprehensive risk-reduction interventions to improve the health status of older adults in their communities.

### USING STRUCTURED ASSESSMENT TO PLAN SERVICES FOR ETHNICALLY DIVERSE RESIDENTS OF A SUBSIDIZED APARTMENT BUILDING

V. Cotrell, P. Carder, *Institute on Aging, Portland State University, Portland, Oregon*

This paper describes a structured resident needs assessment that was developed and used to assess the health-related status of 130 older residents of a subsidized high-rise apartment building. The goal was to identify appropriate supportive services to meet the needs of individuals who wanted to age in place. Findings indicate that the residents are diverse, with 5 language groups identified (English, Mandarin Chinese, Cantonese Chinese, Russian and Farsi). A sizable number of individuals were found to either exhibit functional losses that required assistance or were struggling to maintain independence. A significant difference in health status and behavior was found between the ethnic groups. The findings are being used to guide the property owner's decisions about service provision. Such an assessment is useful in identifying the complex causes of functional loss before those losses lead to excess dependency, resulting in the need for increased health service use or institutional care.

### FAMILY CAREGIVER SUPPORT IN AFFORDABLE SENIOR HOUSING

R. Stone[1], A. Sanders[1], R. Meador[2], V. Parker[3], *1. AAHSA, Washington, District of Columbia, 2. Cornell University, Ithaca, New York, 3. Boston University, Boston, Massachusetts*

This presentation will profile the development and pilot of a training program for family caregivers of older adults residing in affordable, independent senior housing communities. The program's goal is to help strengthen the knowledge, skills and capacity of residents' family caregivers and to build partnerships between the family members and the property, thereby enhancing their collective capacity to support the residents' ability to remain safely in their apartment. Data gathered through a resident self-assessment survey, focus groups with family caregivers and residents, and interviews with property staff to understand the nature and degree of family care giving occurring in affordable senior housing properties and to inform the content of the program curriculum will be presented. Results of the program pilot in three affordable housing will also be shared.

# SESSION 2335 (PAPER)

## RESEARCH METHODOLOGY

### SELF-MANAGEMENT IN CHRONIC ILLNESS: A REVIEW ON THE PERSPECTIVE OF ELDERLY LIVING ALONE

J. Haslbeck[1], R. McCorkle[3], D. Schaeffer[2], A. Büscher[2], *1. Careum Patientenbildung, Careum Foundation, Zurich, Switzerland, 2. Bielefeld University, Bielefeld, Germany, 3. Yale University School of Nursing, New Haven, Connecticut*

BACKGROUND: Elderly living alone with chronic conditions are considered vulnerable as they have few resources and/or social support for chronic illness management. So far, they have received limited attention in the debate on self-management support in chronic illness. AIMS: The purpose of this on-going study is to fill this gap by providing insight into needs and abilities of elderly living alone with chronic conditions. METHODS: Evidence on the perspective of elderly living alone with chronic conditions has been systematically examined in an integrative review. 173 articles relevant on the topic were identified and using inclusion criteria, so far, 27 studies were retained into the review. FINDINGS: A growing number of studies address the views of those living alone and how they manage chronic illness. Yet, the evidence is spreading across journals and databases, is poorly indexed and terms are inconsistently used. The group of elderly living alone is heterogeneous and complex, varying in terms of age, gender, socio economic status, diseases, living location, or ethnicity. Studies show various efforts of active engagement used by elderly living alone, symbolizing a struggle to remain independent. DISCUSSION: Living alone in later life with chronic illness is increasingly recognized as relevant. Elderly living alone appear to be often frail and homebound, but they have an active role in chronic illness self-management. Because of the heterogeneity and complexity of this group, there is a need to increase awareness, risk assessment and responsiveness amongst health professionals.

### COMMUNITY OF RESIDENCE HELPS EXPLAIN VARIATIONS IN BLOOD PRESSURE AND BODY MASS INDEX IN MEXICO

F. Wheaton, E. Crimmins, *University of Southern California, Los Angeles, California*

Mexico is characterized by substantial regional and local inequalities in level of development. Differences in infrastructure and affluence between communities are hypothesized to contribute to later life health disparities net of individual characteristics. We use data from the 2002 Mexican Family Life Survey (MxFLS). The analytic sample includes 4,606 respondents aged 50 years or older distributed across 154 communities. We estimated OLS regression models with and without community fixed effects to determine if accounting for community of residence explained additional variation in systolic and diastolic blood pressure and body mass index, above and beyond individual-level variables, such as age, sex, and socioeconomic status (SES). Results showed that the addition of community fixed effects substantially increased the proportion of variance explained in the outcome as measured by the R2 statistic. The individual-level model including only age, sex, years of education, and presence of an indoor toilet (a proxy measure of SES) explained only 1% of the variation in systolic blood pressure and 4.9% of the variation in diastolic blood pressure, compared with 9.7% and 13% of variation explained by the model that additionally controlled for community. Similarly, the explained variance increased from 10% to 18.3% in the BMI regression model. Controlling for differences in community of residence also accounted for some of the association between SES and health. These results suggest that community-level factors are significantly associated with health in later life in Mexico. Further work is needed to identify which features are most consequential to health at older ages.

### AN EXAMINATION OF THE MEASUREMENT ADEQUACY OF THE CES-D SCALE AMONG AFRICAN AMERICAN WOMEN FAMILY CAREGIVERS

P.A. Rozario[1], N. Menon[2], *1. School of Social Work, Adelphi University, Garden City, New York, 2. Fordham University, New York, New York*

Background and Purpose: Researchers studying caregiver distress have typically focused on depressive symptoms and have extensively used the Center for Epidemiologic Studies Depression Scale (CES-D) to assess depressive symptoms. While the CES-D has high internal consistency, many researchers have questioned its adequacy for use among different racial/ethnic groups because of its factor invariance. Method: We used data from a cross-sectional study of 521 urban and rural African-American women family caregivers in a mid-Western state. We conducted item-by-item description and item-total correlations of a modified 18-item CES-D Scale. Following Perreira et al. (2005), we performed nested confirmatory factor analyses (CFA) using the maximum likelihood method (MLE), to examine the dimensionality of the CES-D by testing four different measurement models. Given that the CES-D items were ordinal in nature, we re-estimated the four CFA models using weighted least squares (WLS) estimation. Results: While we found support of the statistical superiority of the four-factor CFA model over the other models, the results also indicate poor fit indices with MLE estimation. Using WLS estimation, we found that the four-factor CFA model is a better fit than the single-factor and one three-factor (Positive Affect) CFA model. At the same time, we also find that the three-factor (Somatization) model is statistically equivalent to the four-factor model. Conclusions and Implications: Our study findings point towards the limitations of considering depression as a one-dimensional construct, especially among African-American female caregivers. Our analysis using the WLS suggests two equivalent measurement models of depression. We conclude with implications for future investigations of depression using CES-D with diverse populations.

### CREATING A QUALITY OF LIFE ASSESSMENT MEASURE FOR RESIDENTS IN LONG TERM CARE

M. Iris[1], N.A. DeBacker[2,1], R.C. Benner[1], *1. Leonard Schanfield Research Institute, CJE SeniorLife, Chicago, Illinois, 2. Feinberg School of Medicine Northwestern University, Chicago, Illinois*

One goal of long term care (LTC) is to maintain and enhance quality of life (QoL) for residents. However, because QoL is a complex concept, assessment can be difficult, especially in the presence of dementia. A full understanding of QoL requires empirical investigation of individual and collective views of various “stakeholders.” This project conceptualized QoL for LTC residents, created a visual map of the domain, and identified key indicators used to develop an assessment instrument. The project was conducted at a 240 bed, not-for-profit, religiously affiliated long term care facility. Fourteen stakeholder groups were convened, with residents, front-line staff, administrative staff, and family members, to brain-storm indicators of resident QoL. A final list contained 88 unique indicators. Next, a card sorting task was conducted to identify the component structures of the overall domain, along with a rating task that established the relative importance of indicators vis-à-vis one another. Using Concept Systems software, we generated a graphic, quantitative synthesis of participants' conceptualization of the field, expressed entirely in the language of participants, and showing key indicators and their relationships. Methodology includes principal components analysis, multidimensional scaling, and cluster analysis. Concept maps display relationships among components as well as the importance of each concept and its feasibility of measurement, using 3-dimensional representations. Results were used to develop a questionnaire to assess resident QoL in LTC, and to enhance staff training and education about QoL and its meaning to different constituents.

## SESSION 2340 (SYMPOSIUM)

### HELP SEEKING FOR DEMENTIA BY SOUTH ASIAN CANADIANS

Chair: *L. McCleary, Nursing, Brock University, St. Catharines, Ontario, Canada*

This study explored experiences of South Asian Canadians, Canada's largest visible minority group, prior to dementia diagnosis. Six persons with dementia and nine of their family carers described their early perceptions of dementia related changes; actions taken, including help seeking and diagnosis; and affective responses. Early signs were attributed to aging or personality. Even after prescription of cognitive enhancers, several family carers continued to believe that the dementia symptoms were "normal". Affective response may be related to carer attributions. Before seeking medical attention, family carers modified physical or social environments because of symptoms. Recognition of a health problem was influenced by safety, emergence of new symptoms following trauma, and treatment for other health problems. For some, family living outside the home or outside Canada were instrumental in recognizing a problem and convincing participants to seek medical attention. Help seeking was delayed up to two years, even with significant dementia symptoms.

### PRACTICE AND POLICY IMPLICATIONS OF THE CANADIAN CROSS-CULTURAL PATHWAYS TO A DIAGNOSIS OF DEMENTIA PROGRAM: FEDERAL AND PROVINCIAL PERSPECTIVES

N. Drummond[1], C. Cohen[2], S.D. Koehn[3], L.J. Garcia[4], J. Silvius[5], V. Emerson[6], W. Dalziel[7], L. McCleary[8], *1. Family Medicine, University of Calgary, Calgary, Alberta, Canada, 2. Sunnybrook Health Sciences Centre, Toronto, Ontario, Canada, 3. Providence Health, Vancouver, British Columbia, Canada, 4. University of Ottawa, Ottawa, Ontario, Canada, 5. Alberta Health Services, Calgary, Alberta, Canada, 6. Acuity Research, Ottawa, Ontario, Canada, 7. Ottawa Hospital-Civic Campus, Ottawa, Ontario, Canada, 8. Brock University, St Catharine's, Ontario, Canada*

Four independent but conceptually and methodologically linked projects investigated early problem identification and help-seeking by people with dementia and family caregivers in four Canadian cultural, ethnic or linguistic groups (Anglo-Canadian, French Canadian, South Asian Canadian and Chinese Canadian) in four major urban centres (Calgary, Ottawa, Toronto and Vancouver, respectively). This paper will analyse and interpret the data from those studies in the context of the local health and social systems applying in each centre, with a specific focus on the systemic similarities and differences between them, and the implications of those factors for both health policy and clinical practice. In addition, the paper will address the implications of the findings for federal policy development relating to ethnicity and care for seniors. Finally, the paper will place particular emphasis on the role of the not-for-profit, non-governmental and voluntary sectors in responding to early care needs of ethnic minority people with dementia.

### IS FRENCH THE ISSUE?: THE PATHWAY TO DIAGNOSIS OF FRENCH-SPEAKING CANADIAN INDIVIDUALS LIVING WITH EARLY DEMENTIA IN A MINORITY SITUATION

L.J. Garcia[1,3], V. Emerson[2,1], H. Léopoldoff[1,3], W. Dalziel[4,1], N. Drummond[5], S.D. Koehn[6], L. McCleary[7], *1. University of Ottawa, Ottawa, Ontario, Canada, 2. Acuity Research Group Inc, Ottawa, Ontario, Canada, 3. Elisabeth Bruyère Research Institute, Ottawa, Ontario, Canada, 4. Ottawa Hospital, Ottawa, Ontario, Canada, 5. University of Calgary, Calgary, Alberta, Canada, 6. Centre for Healthy Aging at Providence, Vancouver, British Columbia, Canada, 7. Brock University, St Catharines, Ontario, Canada*

In Ontario, health services must be made available in French to French-speaking citizens. To explore the experience of individuals with dementia (care recipients) and caregivers during the peri-diagnostic period, fourteen participants (7 care recipients and their caregivers) who spoke French as their primary language were recruited for this study. Completed interviews were transcribed verbatim and analyzed using open, axial and selective coding. Differences existed between care recipients' and caregivers' perceptions of the indicators leading to help-seeking. Caregivers identified more changes in the patient, and these were more indicative of pathology than those identified by the care recipients. Pathways took anywhere from 4 months to 6 years and were complicated by physical ailments. Family physicians were the gateway to care for all our participants. Results will be discussed in relation to the influence of language and culture and to the need for earlier symptom identification.

### PERCEPTIONS AND EXPERIENCES OF ANGLO-CANADIANS REGARDING THE PRE-DIAGNOSIS PERIOD OF ALZHEIMER'S DISEASE AND RELATED DEMENTIAS

K. Leung[1], J. Finlay[1], J. Silvius[2], S.D. Koehn[3], L. McCleary[4], C. Cohen[5], L.J. Garcia[6], N. Drummond[1], *1. University of Calgary, Calgary, Alberta, Canada, 2. Alberta Health Services, Calgary, Alberta, Canada, 3. Centre for Healthy Aging at Providence, Vancouver, British Columbia, Canada, 4. Brock University, St. Catharines, Ontario, Canada, 5. University of Toronto, Toronto, Ontario, Canada, 6. University of Ottawa, Ottawa, Ontario, Canada*

Six Anglo-Canadians with early-stage dementia (4 men, 2 women) and seven family caregivers (2 men, 5 women) were recruited from the Alzheimer's Society of Calgary to participate in semi-structured interviews exploring their experiences of problem identification and help-seeking. Individuals with dementia in our sample were the first to notice their memory difficulties, but initial symptoms were often perceived as ambiguous and interpreted within the context of their experiences. Early memory loss was typically attributed to inattention, distraction, and comorbid health problems. A diagnosis of dementia was not made until more serious cognitive deficits emerged including difficulties in decision making and driving. In addition, the role of caregivers evolved with time; caregivers initially served as a source of encouragement and support, but they eventually became actively involved over concerns about the diagnosis and its management. These findings may elucidate some of the barriers to an earlier diagnosis.

### A NON-ESSENTIALIZING VIEW OF CHINESE-CANADIAN PATHWAYS TO A DIAGNOSIS OF DEMENTIA IN METRO VANCOUVER

S.D. Koehn[1,2], M. Spence[1], J. Kozak[1,2], L.J. Garcia[4], K. Leung[3], L. McCleary[6], C. Cohen[7,5], N. Drummond[3], *1. Centre for Healthy Aging, Providence Health Care, Vancouver, British Columbia, Canada, 2. University of British Columbia, Vancouver, British Columbia, Canada, 3. University of Calgary, Calgary, Alberta, Canada, 4. University of Ottawa, Ottawa, Ontario, Canada, 5. University of Toronto, Toronto, Ontario, Canada, 6. Brock University, St. Catharine's, Ontario, Canada, 7. Sunnybrook Health Centre, Toronto, Ontario, Canada*

This retrospective study used qualitative semi-structured interviews to explore the pre-diagnosis experiences of ten community dwelling persons of Chinese descent aged 60+ recently diagnosed with an Alzheimer's-type dementia and their family caregivers living in Vancouver. Using an analytic inductive method, we found that more than half of the dyads reported that a diagnosis was either denied or not explained by a family doctor, yet some of these physicians simultaneously prescribed dementia drugs such as donepezil. Often they described the presenting symptoms to family caregivers as "normal aging." These ascriptions were challenged by the caregivers' own knowledge of dementia. "Cultural" explanations of help-seeking behaviour may fail to consider the multiple and mutually constitutive influences on the caregiver's decision to secure a diagnosis. Consideration of social determinants is essential to inform health service decision-makers aiming to optimize the timing of diagnosis to ensure quality of care.

## SESSION 2345 (SYMPOSIUM)

### APPROACH AND AVOIDANCE TENDENCIES AND NEGATIVE SOCIAL EXCHANGES IN MIDLIFE: A LONGITUDINAL ANALYSIS

Chair: *T. Windsor, The Australian National University, Canberra, Australian Capital Territory, Australia*

Negative social relationships characterized by tensions, arguments and criticism are recognized as having strong implications for health and well-being over the lifespan. This study investigated longitudinal changes in negative social exchanges with family members and friends in a large sample of 2529 midlife adults (ages 40 to 44 at baseline) assessed on three occasions over an 8 year interval. Associations of socio-demographic characteristics, physical health, and approach-avoidance aspects of personality with negative exchanges were examined. Results of adjusted latent growth models indicated that reported negative exchanges with both family and friends remained relatively stable over time. Women reported lower levels of negative exchange with friends, but higher levels of negative exchange with family relative to men. Sensitivity toward aspects of both approach and avoidance behavior were associated with higher initial levels of negative social exchanges. Results are discussed in the context of developmental influences with specific relevance to midlife.

### SOCIAL ROLES AND MIDLIFE PERSONALITY DEVELOPMENT: TAKING THE PATH LESS TRAVELED

N. Newton[1], A. Stewart[2], *1. University of Michigan, Ann Arbor, Michigan, 2. University of Michigan, Ann Arbor, Michigan*

Research suggests a strong link between personality development and social roles, particularly for women (Roberts, 1997; Vandewater & Stewart, 1998; Wood & Roberts, 2005). Societal gender norms are also influential: the social roles or life paths women undertake can be considered normative or non-normative. The current study examines the relationship between social role, personality, and well-being in late midlife for three groups of women who have pursued non-normative life paths: long-term divorced women; those without children; and those who entered male-dominated occupations. Two longitudinal samples of women currently in their early 60s were combined and analyzed using Significance Analysis of Microarrays (SAM) software to create permutation tests on personality data. Results indicated that not only does each non-normative life path relate to a different personality profile, but there are shared norm-challenging and norm-fitting attributes across the three groups. Non-normative life paths also differentially affected well-being.

### GLOBAL FORGIVENESS IN LATE ADULTHOOD

C. Torges[1], B. Ingersoll-Dayton[2], N. Krause[2], *1. North Dakota State University, Fargo, North Dakota, 2. University of Michigan, Ann Arbor, Michigan*

Overwhelming evidence suggests that experiencing forgiveness across various domains contributes to aging well. Enright's pioneering work suggests that a worldview of forgiveness –or experiencing forgiveness across multiple domains simultaneously – is especially powerful in promoting mental health and well-being. Considering the importance of religion in late adulthood, we have added to Enright's conceptualization of forgiveness by including feeling forgiven by God to create the construct, global forgiveness. Using a national probability study of older adults (49% African American), we explore the predictors and outcomes of global forgiveness using Structural Equation Modeling. We have found initial evidence that feeling connected to God promotes global forgiveness, and in turn, global forgiveness is associated with elevated life satisfaction and lower levels of depressive symptoms.

### SPOUSAL SUPPORT AND ENGAGEMENT: A DYADIC ANALYSIS OF WELL-BEING IN THE HEALTH AND RETIREMENT STUDY

L. Ryan, J. Smith, *Institute for Social Research, University of Michigan, Ann Arbor, Michigan*

Social engagement and spousal support are important sources of subjective well-being (SWB) but often are not studied directly. Using recent statistical advances, the present study directly evaluates individuals' and spouses' reports of positive and negative support, relationship closeness, and social engagement with four indices of SWB (Positive Affect, Negative Affect, Life Satisfaction, Loneliness) in a large sample of married, older adults from the 2008 wave of Health and Retirement Study (N=1544 couples). Actor-Partner Interdependence models (Kenny et al.,2006) using SAS PROC MIXED indicated that significant variance in each SWB component was due to interindividual and intercouple differences. Significant effects of individual and spouse support, relationship closeness, and social engagement are identified, over and above demographic, health, and personality. Age and gender interactions and the differential pattern of effects for each component of SWB are discussed. Results demonstrate the importance of considering the greater social context when examining well-being in adulthood.

## SESSION 2350 (PAPER)

### CARDIOVASCULAR DISEASE AND HYPERTENSION

### CAREGIVING TRAJECTORY: A LONGITUDINAL EXPLORATION OF THE WORK OF CARING FOR SPOUSES IN HEART FAILURE

L.A. Kitko, J.E. Hupcey, *School of Nursing, The Pennsylvania State University, University Park, Pennsylvania*

Introduction: The number of patients with heart failure is at epidemic proportions. Heart failure significantly changes and impacts life for the patient and family. Heart failure requires complex home medical management, typically done by a spouse. While providing this important care, spouses face significant threats to their own health. Yet, little is known about the actual "work" of caregiving over time in the context of the unpredictable trajectory of heart failure. Purpose: The purpose of this study was to define the types of work manifested in long-term spousal caregiving across the trajectory of heart failure. This was a qualitative secondary analysis of a larger longitudinal study of the palliative care needs of older patients with heart failure and their spouses. The in-depth serial interview data of 20 spousal caregivers of patients over age 62, collected monthly over 12-14 months, were analyzed utilizing the tenets of grounded theory methodology. Results: The work of spousal caregiving impacted all aspects of the lives of spouses and patients. This "work" was constant across the trajectory of heart failure. The core variable was committed obligation, which encompassed the competing demands of life. Work was expressed as living with the illness, care provision, vigilance, preserving normalcy, navigating complex systems, managing the household, and maintaining self. Conclusions: The work of caregiving was evident in times of heart failure exacerbation and in times of stability. Thus, caregivers should be assessed for unmet needs and may benefit from specific models of supportive care throughout the trajectory of heart failure.

### PILOTING A RANDOMIZED CONTROLLED TRIAL FOR IMPROVING BLOOD PRESSURE IN LOW INCOME, HYPERTENSIVE, SPANISH-SPEAKING, LATINO OLDER ADULTS: DESIGN, METHODOLOGY, AND SAMPLE BASELINE CHARACTERISTICS

S. Fernandez, F. De la Calle, M.E. Barrios, G. Ogedegbe, *Medicine, New York University School of Medicine, New York, New York*

Introduction: Efficacious behavioral interventions for controlling blood pressure (BP) are underutilized with hypertensive Latino older adults, a group with low BP control rates and a higher risk of related morbidity and mortality. Methods: Spanish-speaking Latino older adults with hypertension were recruited from three Senior Centers in the New York Metropolitan area. Participants were randomly assigned to Intervention Condition(IC) or Waitlist Control Condition (WC). IC participants received six weekly and 2 monthly classes on lifestyle changes (e.g. reduce dietary sodium, increased physical activity, etc.) to improve blood pressure. Automated BP measurement and questionnaires were completed at Baseline, 3 months, and 5 months post randomization. Results: Of the 80 screened, 57 were eligible and randomized. Sample was primarily female (80.7%); young old (mean = 70.5 + 6.4 years); non-U.S. born (96.5%); separated/widowed/divorced (71.9%); average years in the U.S. was 46.8 (SD = 9.4). Further, participants had on average 8 years of education (SD = 4.5); were low income (87.5% < \$20,000/year income); received Medicare (80.4%). Mean systolic and diastolic blood pressure were 134.2 + 19.9 mm Hg and 72.3 + 9.0 mm Hg, respectively. Participants were prescribed an average of 1.6 antihypertensive medications (SD = .86); one third of the sample (29.6%) were taking a diuretic; one quarter (14.8%) had resistant hypertension; over one third (38.5%) reported medication non-adherence. Most (96.4%) reported one or more comorbid medical conditions, with over half (83.9%) reporting two or more. Conclusions: Participants in this Spanish-speaking, low income sample had multiple medical barriers to BP control. Results of the trial will shed light on efficacy of implementing an evidence based intervention in senior center settings for older adults with multiple comorbidities and significant barriers to behavior change, and initial estimates of the impact of such an intervention on change in BP.

### IMPROVING HYPERTENSION CONTROL OF RURAL, OLDER ADULTS

C.J. Dye, J.E. Williams, J. Evatt, *Public Health Sciences, Clemson University, Clemson, South Carolina*

Use of Community Health Workers (CHWs) is a cost-effective strategy in facilitating individuals' adherence to recommended health behavior changes, self-management of their health conditions, and access to health care (Brownstein, Bone, Dennison, Hill, Kim, & Levine, 2005). This presentation will report results of a program delivered by trained, volunteer CHW's, known as "Health Coaches" to older patients with hypertension residing in a rural county in South Carolina. In this county, 42 percent of those over 65 years have less than a high school education, experience poverty rates as high as 27%, and suffer higher rates of hypertension and heart disease than state peers. The program, developed through a partnership between primary care physicians, state and local health departments, and university researchers, is funded by Health Resources and Services Administration (HRSA). Health Coaches provide classes, support group facilitation, and telephone counseling to patients in order to facilitate improvement of hypertension self-management behaviors. The presentation will provide evidence of program impacts measured by changes in self-efficacy, knowledge and beliefs of program participants as well as changes in hypertension self-management behaviors such as sodium intake, physical activity, blood pressure monitoring, and stress management. Changes in blood pressure levels (primary outcome) and process evaluation findings will also be presented.

### FACTORS ASSOCIATED WITH HYPERTENSION SELF-CARE IN AFRICAN AMERICAN ADULTS

J. Warren-Findlow[1], R. Seymour[2], *1. Department of Public Health Sciences, The University of North Carolina at Charlotte, Charlotte, North Carolina, 2. Center for Research on Health and Aging, University of Illinois at Chicago, Chicago, Illinois*

The importance of chronic illness self-management in improving individual health outcomes has been well-documented. This exploratory study examined hypertension self-care practices in African Americans aged 22-88 (mean age 53.1, n=180). We assessed 6 hypertension self-care behaviors using self-report measures. Fifty-eight percent reported consistently taking medications as directed; 48% engaged in physical activity 7 days a week; 75% were non-smokers; two-thirds abstained from alcohol; 30% practiced good weight management techniques; 22% followed low salt diet guidelines. Logistic regression analyses were conducted for each self-care practice using the following hypothesized factors: greater age, being female, home ownership, education, greater religiosity, living alone, BMI, years with hypertension, and higher self-efficacy to manage hypertension. For medication, age (OR 1.03, CI 1.00-1.05) and religiosity (OR 1.09, CI 1.04-1.114) were associated with consistent adherence. For weight management, home ownership (OR 2.45, CI 1.16-5.16), living alone (OR 2.69, CI 1.19-6.08), and self-efficacy to manage hypertension (OR 1.51, CI 1.14-2.01) were associated with good practices. Years with hypertension was associated with better low salt diet behaviors (OR 1.03, CI 1.01-1.06). Age (OR 1.04, CI 1.02-1.07), home ownership (OR 2.15, CI 0.95-4.86), a college degree (OR 2.98, CI 1.21-7.34), and BMI (OR 1.07, CI 1.01-1.14) were associated with being a non-smoker. No factors were associated with exercise. Age (OR 1.06, CI 1.03-1.08), gender (OR 3.79, CI 1.77-8.11), and BMI (OR 1.07, CI 1.01-1.13) were associated with abstaining from alcohol. These findings highlight the need for multifaceted approaches in diverse settings to improve the health behaviors needed to manage hypertension.

## SESSION 2355 (PAPER)

## DRIVING AND ALTERNATIVES

### SELF-REGULATION OF DRIVING: FACILITATING THE TRANSITION FROM DRIVING

L.J. Molnar[1,4], D.W. Eby[1,4], S. Roberts[2], J. Langford[3], J. Charlton[3], *1. University of Michigan Transportation Reseach Institute, Ann Arbor, Michigan, 2. University of Michigan School of Public Health, Ann Arbor, Michigan, 3. Monash University Accident Research Centre, Melbourne, Victoria, Australia, 4. Michigan Center for Advancing Safe Transportation throughout the Lifespan, Ann Arbor, Michigan*

Appropriate self-regulation of driving (i.e., adjusting driving patterns by driving less or avoiding specific situations) shows considerable promise as a strategy for compensating for functional declines and enabling older drivers to extend safe driving. However, there is considerable variation across studies, making it difficult to determine the extent of self-regulation by older drivers. This study involved: developing a computer-based questionnaire to measure self-regulation; and pilot testing it with a sample of older drivers with clinically-determined impairments in vision, cognition, or psychomotor ability, as well older adults from the general population. Feedback on the questionnaire was positive, with most participants from both groups considering questions easy to read and understand (98.5%, 89.1%, respectively) and the length reasonable (93.4%). Most (91.2%) were satisfied with the computer format, despite only 11% reporting a high level of computer experience. A majority of participants reported trying to avoid a variety of specific driving circumstances including driving at night or in rush hour traffic, in bad weather, and at night in bad weather. Other circumstances avoided by one third or more included making unprotected left turns, driving on high traffic roads, and in unfamiliar areas. Many planned their trips ahead of time or reduced overall travel by combining trips. Few reported making modifications to their vehicles. A majority tried to avoid in-vehicle distractions with the exception of changing radio stations, and most tried to leave more room between their cars and the cars ahead of them. Differences by sex, functional ability, and age group are discussed.

### AN EVALUATION OF THE CORAL GABLES' SENIOR TAXI DISCOUNT PROGRAM

D.P. McCarthy, A. Haskell, S. Salazar, G.M. Anderson, P.C. Hunt, *Occupational Therapy, Florida International University, Miami, Florida*

Background: Automobile preference and barriers to alternative modes of transportation have caused seniors to experience difficulties with community mobility. There is a need for acceptable alternatives to driving. Many communities are now turning to taxi discount programs to help fill the mobility needs of seniors. The purpose of this study was to examine seniors' experiences with the use of taxis. Methods: A telephone survey was conducted with participants of the Coral Gables Senior Taxi Discount Program, open to residents aged 60 and older. Each participant was allowed to purchase up to eight vouchers, each worth $10 in taxi rides, for $5 per voucher. Results: In this on-going study, of the 22 participants who used their vouchers so far, 16 responded to survey questions (72.7%). Seventy percent reported having driven a car within the previous month and 80% had used a taxi. Other modes of transportation included walking (44%) and MetroRail (38%). Most taxi trips (37%) were for medical/health reasons, while 32% of trips were to the Miami airport. Riders reported a high satisfaction level in nine of 10 categories including ease of use, wait time, and safety (100%). Lower levels of satisfaction were seen for driver-provided assistance, when needed (60%). Conclusion: Few new taxi users were attracted to this program. Those purchasing vouchers were likely to be current drivers. If communities choose to address senior mobility issues with taxi discount programs, methods for exposing former drivers and new users to taxis should be considered.

### FATALITY TRENDS FOR YOUNGER, MIDDLE-AGED, AND OLDER DRIVERS AND PASSENGERS

N.W. Mullen[1], S. Dubois[2], M. Bedard[1,2], *1. Lakehead University, Thunder Bay, Ontario, Canada, 2. St. Joseph's Care Group, Thunder Bay, Ontario, Canada*

Using data from the United State's Fatality Analysis Reporting System (FARS), Bédard et al. (2001) examined fatality trends from 1975 through 1998 and projected future trends to 2015. The present project included FARS data from 1975 through 2008 to examine the accuracy of Bédard et al.'s projections and to project future trends to 2025. It was hypothesized that, as Bédard et al. projected, 1) the number of fatalities involving younger drivers and passengers (<30 years) would decrease from 1999 to 2008, while the number of fatalities involving middle-aged (30-64 years) and older (65+ years) adults would increase; and 2) older female fatalities would increase from 1999 to 2008 at a faster rate than older male fatalities. Data for driver and passenger fatalities were stratified by age group (younger: <30 years, middle-aged: 30-64 years, and older: 65+ years) before fitting least squares regression models. These models were used to perform fatality projections to 2025. Data for older adults were also examined by gender. Results showed that from 1999-2008, fatalities decreased for younger drivers and passengers, and increased for middle-aged adults. Since 1997, fatality rates of middle-aged adults have exceeded those of younger individuals. If these trends continue, by 2025 fatalities for middle-aged adults will be approximately twice as high as fatalities for drivers and passengers aged <30 or 65+ years. Unexpectedly, fatalities decreased for older adults, decreasing at a faster rate for females. Future research could investigate the cause of this trend-reversal and reasons for the gender difference.

### THE SAFE DRIVING BEHAVIORS MEASURE: A SELF-REPORT FOR OLDER DRIVERS AND THEIR CAREGIVERS

S. Classen, *University of Florida, Gainesville, Florida*

This paper will address the results of a collaborative NIH-NIA funded project entitled: Community Participation in developing a Safe Older Driver Behaviors Measure(SDBM). The goal of the research project was to use converging evidence and community participation to develop and pilot test a safe driving behaviors measure for older adults with potential for public health application. We will provide a systematic overview of the research process to develop and test, and improve upon a 68-item self/ proxy Safe Driving Behaviours Measure that has application to the broader population of older drivers and caregivers in North America. We will address (1) the item development to capture safe driving behaviors that was based on theoretical frameworks, previous research, and measurement theory; (2) establishing face validity and content validity; (3) psychometrics properties of the SDBM, specifically construct validity and criterion validity; (4) rater effects (leniency vs. severity of ratings) and rater reliability among three groups of raters, i.e. the older drivers, caregivers and the driving evaluators (gold standard). Future directions for translational research will be outlined.

## SESSION 2360 (PAPER)

## MARRIAGE AND HEALTH

### THE ASSOCIATION OF COMORBID CHRONIC ILLNESS SYMPTOMS AND DAILY MARITAL INTERACTIONS IN OLDER COUPLES

J. Yorgason, S.O. Roper, J. Sandberg, *Brigham Young University, Provo, Utah*

Physical health symptoms in one spouse have been linked to partner mood in later life couples (Yorgason, Almeida, Neupert, Spiro, Hoffman, 2006). Health declines have also been linked to marital quality within long-term panel studies (Booth & Johnson, 1994). However, the micro links between daily illness symptoms and daily marital interactions are less well understood. Using data from 28 married couples wherein one spouse was diagnosed with both diabetes and osteoarthritis, the current study explored the links between daily illness symptoms and daily marital interactions. Results from multilevel models indicated that when the wife was the partner with the illnesses, higher average daily concerns with blood sugar levels (grand mean centered) were predictive of higher positive marital quality reported by husbands. In addition, higher than average blood sugar concerns (person mean centered) were also related to higher negative marital interactions as reported by husbands. When husbands were the ones with chronic illnesses, their higher average arthritis symptoms and higher average activity limitations (both grand mean centered) were positively related with negative marital interactions as reported by wives (although only at the trend level). Findings related to wife blood sugar concerns are consistent with the idea of support mobilization, in that husbands interact more with their spouse in positive and negative ways when their wife has higher health concerns. Findings related to husband arthritis symptoms and activity limitations appear to support a stressor model, where only negative interactions increase.

### EFFECTS OF ONE'S OWN AND SPOUSE'S HEALTH ON OLDER ADULTS' PERCEIVED MARTIAL SUPPORT

J. Ha, J. Kim, L. Waite, *University of Chicago, Chicago, IL*

Previous research has suggested that spouse's illness has a negative impact on marital quality and tends to produce shared emotional distress among couples. However, few studies have examined the unique effects of one's own and spouse's health on older adults' perceived levels of marital support based on dyadic data. Using data from 2006-2008 waves of the Health and Retirement Study, this paper examines: (1) the effects of one's own and spouse/partner's self-rated health on the level of perceived marital support among older adults and (2) the extent to which these effects differ by gender. Data on self-rated health and marital support are collected from both the respondents and their spouses/partners. We used Actor-Partner model (multi-level model for dyadic analysis) to estimate the effects of one's own (actor effect) and spouse's (partner effect) health, taking into account the unobserved couple-level variances. The results suggest that those who are healthier report higher levels of marital support. However, there is no significant gender difference in this actor effect. Partner's health is also positively associated with marital support. Partner effect is stronger for women than men, suggesting that the effect of men's health on the women's perceived support is stronger than the effect of women's health on the men' perceived support. The findings highlight the important role of one's own as well as spousal health in marital relationship and encourage us to think about the ways to assist older adults in maintaining their social support in the face of health deteriorations.

### MARITAL QUALITY, AGE, AND FUNCTIONAL LIMITATIONS

H. Choi[1], M. Sliwinski[2], *1. Penn State University, Altoona, Pennsylvania, 2. Penn State University, State College, Pennsylvania*

Most research on marital quality and physical health has focused on examining the negative health consequences of marital strain. Building from the broader literature on social relationships and health, we evaluated positive as well as negative marital quality in relation to functional health. Guided by a life course perspective, we also explored how age might moderate the association. Our data consisted of 727 adults aged 23 or older who participated in two waves of the National Survey of Midlife Development in the United States (T1: 1995-1996, T2: 2004-2006) and who remained continuously married to the same spouse between the waves. We fitted two-level individual growth models to estimate the contribution of marital support, marital strain, and age to baseline and change in functional health over 10 years. Results indicated that marital support at T1, marital strain at T1, and age were not associated with baseline functional health. Regarding their effects on functional health change over time, marital quality, either positive or negative, did not appear to have significant influences among younger adults. For older adults, however, higher levels of both marital support and marital strain at T1, with each as the control for the other, were associated with greater increases in functional limitations over the 10-year period. These findings suggest that marital quality may have a greater impact on physical health later in the life course, and the physical health implications of marital support further need to be examined.

### ONSET OF AND RECOVERY FROM FUNCTIONAL IMPAIRMENT AMONG OLDER ADULTS: THE IMPORTANCE OF MARRIAGE

D.F. Warner, S. Adams, *Sociology, Case Western Reserve University, Cleveland, Ohio*

Older adults are at significant risk of disability. Far from being universal though, disability is experienced unevenly across social groups. Prior research indicates that marriage is particularly salient for disablement: married persons exhibit lower risks for the onset of disability relative to the unmarried. However, understanding how marriage affects disablement requires knowledge of both how marriage influences the onset of functional impairment and how it is associated with improvements in functioning (recovery). Yet prior research has not addressed whether the protective influences of marriage extend to recovery and result in greater rates of improvement once disabled. To address this gap in the literature, we used data from the 1992-2006 Health and Retirement Study (HRS) to estimated sex-stratified discrete-time hazard models to examine marital status differences in the onset of and recovery from functional impairment. We found that not only do divorced, widowed, and never married older men and women have higher risks of disability onset than their married counterparts, but that they also experience lower rates of recovery. Divorced and never married men and women demonstrate the greatest disparities in onset and recovery relative to their married counterparts. Widows and widowers, while still disadvantaged, are more similar to married individuals—and this is especially the case for men. Overall, socioeconomic characteristics and health behaviors reduce—but do not eliminate—the marital status differences in disability onset and recovery. The findings suggest that the marriage institution shapes the disablement process both through differential onset and differential ability to recover once impaired.

### DIFFERENTIAL IMPACTS OF SENSORY IMPAIRMENT ON SUCCESSFUL AGING FOR OLDER MARRIED COUPLES

W. Strawbridge[1], M.I. Wallhagen[2], S. Shema[3], *1. Institute for Health and Aging, San Francisco, California, 2. University of California, San Francisco, San Francisco, California, 3. Northern California Cancer Center, Fremont, California*

We analyzed longitudinal relationships between older spouses' baseline sensory impairment and subsequent successful aging for them and their partners five years later. All measures were by self-report. Subjects were 352 Alameda County Study community-dwelling older husbands and wives age 65 – 91 married to each other. Baseline sensory impairment was assessed by scales measuring difficulty hearing and seeing in three different settings. Logistic regression models adjusted for paired data and included both spouse and partner sensory impairments as well as adjustments for age, chronic conditions, and financial problems. Interaction tests assessed gender differences. Overall 57% of the wives and 45% of the husbands reported aging successfully. For wives, both impairments negatively impacted their own subsequent successful aging with hearing impairment having the stronger relationship. Wives' assessment of their own successful aging was also negatively impacted by their husbands' hearing impairment but not by his vision impairment. In contrast, neither sensory impairment had any impact on husbands' successful aging regardless of the impairment's source. These gender differences were statistically significant. Our results suggest that hearing impairment is more important for wives' successful aging than is vision impairment. That older wives' but not older husbands' successful aging is impacted by their partners' hearing impairment is consistent with research suggesting that older wives value spousal communication more than do older husbands. An important additional implication of our results is that older wives use different criteria for assessing successful aging than do older husbands.

## SESSION 2365 (PAPER)

## PERSONALITY AND DISPOSITIONS

### USING AUTOBIOGRAPHICAL MEMORY SHARING TO ELICIT EMPATHY FOR OLDER AND YOUNGER ADULTS IN CHRONIC PAIN

J.M. Baron, S. Bluck, K. Gold, A. Gesselman, *Psychology, University of Florida, Gainesville, Florida*

One theorized social function of autobiographical memory is the use of memory-sharing to elicit empathy for others. The current study investigates the role of autobiographical memory-sharing in increasing empathy towards older and younger persons in chronic pain. What is the relation of empathy to memory? Empathy is a psychological process involving affective and cognitive (perspective-taking) components. When individuals lack an understanding of another's suffering they can draw on autobiographical memories of their own experiences as a basis for relating to how another person feels. Participants' empathy levels were assessed after reading a pain narrative by a person thought to be either

85 or 25 years of age (pre-test) and again after assignment to one of two conditions (post-test). Conditions included either sharing one's own autobiographical memory of having been in pain, or as a comparison, recalling a movie in which a character was in pain. Attitudes toward aging, personality, social desirability, and memory characteristics were also assessed. Empathy for both older and younger target persons increased in the autobiographical memory condition but not in the comparison condition. That is, participants did not show age biases: increases in empathy were reported across older and younger targets. Regression analyses identified two personality factors, conscientiousness and agreeableness, as predictors of increases in empathy. When social-desirability was entered in the model, however, only conscientiousness remained a significant predictor. Findings are discussed in the context of using personal memories to promote empathy in formal and informal caregiving settings for older and younger adults.

### EVALUATION OF TWO ELDER RISK BEHAVIOR MEASURES FOR IMPULSIVITY AND RISK-TAKING PROPENSITY

K. Daniel, M. Cazzell, C.L. Cason, *Nursing, University of Texas at Arlington, Arlington, Texas*

Background/Significance: Risk behaviors, studied in adolescents, are also reported in older adults. Elder risk behaviors include: alcohol and tobacco use, seatbelt use, omission of immunizations or preventive screenings, overweight, not exercising regularly, or using unprescribed medications. Risk-taking propensity, a predictor of risk behavior engagement, has been studied in adolescents using behavioral measures. Impulsivity behavioral measures have been correlated with prefrontal cortex functions: planning ability, response inhibition, emotional regulation, and working memory. No behavioral measures or neurobiological correlates have been identified for use in elder risk behavior research. Purpose: The purpose is to examine the reliability and validity of the Tower of Hanoi (TOH) and the Balloon Analogue Risk Task (BART) in an elderly sample. Methodology: In this correlational study design, a convenience sample of 50 community-living participants, 65 years or older, were recruited. Study measures included the Mini-Cog, Eysenck Impulsivity Subscale, self-reported elder risk behaviors, four trials of TOH, and 30 balloon inflation trials on the computerized BART. Results: BART, TOH, and Eysenck scores achieved internal consistency reliability of .926, .652, and .837, respectively. Moderate predictive validity correlations between TOH with yearly mammograms (-.320) and with no condom use (.249) were found. Mild predictive validity correlations between BART with alcohol use (.238) and yearly prostate exams (.361) were also found. Conclusions: BART provided strong reliability and TOH demonstrated moderately strong reliability, both with mild to moderate validity when correlated with self-reported risk behaviors. These behavioral measures could be used to prospectively identify elders with risk-taking propensity and impulsivity.

### PARTNER PERSONALITY AND HEALTH: A GROWTH CURVE ANALYSIS

L.L. Vie, C.A. Reynolds, M. Kern, H.S. Friedman, *Psychology, University of California, Riverside, Riverside, California*

Personality has increasingly been linked to subjective and objective health outcomes. Recent evidence suggests that in older couples, spouse personality, especially conscientiousness, is important to an individual's physical health. The extent to which personality relates to a partner's state of health versus his or her trajectory is unknown. The current study used data from the Terman Life Cycle Study to consider self and spouse conscientiousness and neuroticism, measured in early adulthood (mean age = 30 years), as predictors of initial self-rated health level and change across five decades for the Terman participants. Participants self-reported their physical health in 1940, 1945, 1950, 1955, 1960, 1972, 1977, 1982, 1986, and 1991 (N = 1,166 participants with health assessed at least once). Growth curve analyses determined the intercept (i.e., health status in 1940) and change in health status for each participant. Self- and spouse-rated conscientiousness and neuroticism were then used to predict initial level and change. For participant self-ratings on personality, higher levels of conscientiousness predicted better initial health for Terman males, whereas higher levels of conscientiousness in Terman females predicted a slower decline in health. Higher self-ratings on neuroticism predicted worse initial health for both Terman males and females, and did not predict the rate of health decline over time. Neither spouse self-ratings on conscientiousness nor neuroticism predicted the level or change in health for participants. Future work should consider longitudinally measured spouse personality and health ratings to further examine self-spouse dynamics, particularly when variability in self-rated health increases.

### PERSONALITY TRAITS SHAPE SENIOR HEALTH THROUGH EVERYDAY BEHAVIORS

J. Lodi-Smith[1], B.W. Roberts[2], *1. Behavioral and Brain Sciences, Center for Vital Longevity; University of Texas at Dallas, Dallas, Texas, 2. University of Illinois, Urbana-Champaign, Champaign, Illinois*

Individual differences in personality traits are robust predictors of physical health (Roberts et al., 2007; Mroczek & Spiro, 2007). In the present research, we provide evidence for this within the 617 adults assessed during the first wave of the Health and Aging Study of Central Illinois (HASCI; a large-scale study of adults age 18-89). Further investigation revealed that the relationship between personality traits and health is most robust in individuals past age 60. In addition, the relationship between personality traits and health is driven by the everyday experiences of seniors. For example, conscientious seniors in HASCI have better physical health because they engage in preventive health behaviors such as exercise and regular physician visits (Lodi-Smith et al., in press). The findings of this study inform our understanding of how personality traits shape individual lived lives, how this is of particular importance for seniors, and address how certain seniors stay physically healthy as they age.

## SESSION 2370 (PAPER)

## PREDICTORS OF SUCCESSFUL AGING

### SUCCESSFUL AGING IN URBAN CHINA: IS IT WHO THEY ARE, OR WHERE THEY LIVE

J. Zhang, *School of Social Work, University of Michigan, Ann Arbor, Michigan*

Frequently at the core of the research on successful aging is the notion of personal responsibility (e.g. personal lifestyle). However, whether there are larger macros issues affect individual opportunity to age well is rarely investigated. This study tries to expand this body of literature by identifying individual-level and macro-level factors associated with successful aging among non-Western older people. Data for this study came from the 2005 Chinese Longitudinal Healthy Longevity Survey and the 2005 China Provincial Statistical Yearbook. The sample consisted of 6,980 older adults (average age: 86) from 22 provinces across China. Respondents were classified as successful agers if they (1) had no cognitive impairment; (2) had no ADL limitations; (3) had no serious chronic diseases; and (4) were actively engaged in life. Individual-level factors included: (1) demographics; (2) lifestyle; (3) social support, and (4) psychological disposition. Macro-level factors include province-level GDP per capita and income inequality (calculated as log wage differentials between the 80th and 20th percentiles), given the fact that rapid economic growth and fast-growing income inequalities are the two most prominent issues in China since economic reforms. Multilevel logit regression analyses showed an independent effect of macro-level factors on successful aging after adjusting for individual variables. Individual background, lifestyle, and psychological disposition still mattered in terms of successful aging among Chinese older people, while the impact of economic development on aging well differed by the level of income inequality. This study thus suggests that promoting successful aging should be a joint effort from individual and government.

### FINDINGS ON SUCCESSFUL AGING IN BLACK OLDER ADULTS

M. Troutman, *UNC Charlotte, Charlotte, North Carolina*

Health disparities persist across older adult racial groups. Though research on successful aging has advanced during the past decades, there is a gap in knowledge of successful aging in Black older adults. The purpose of this study was to examine psychometric properties of the Successful Aging Inventory (SAI) in Black older adults and gain information on their perceptions of the phenomenon. Ninety-nine participants completed a demographic form, the SAI, Life Satisfaction Inventory-A, Purpose in Life Test, Mastery Scale, and Center for Epidemiologic Studies Depression Scale. Content analysis of responses to an open-ended question, “What does successful aging mean to you?” was done. Participants tended have high scores on successful aging, and lower scores on depressive symptoms and mastery (lower sense of personal control), relative to the range of possible scores for each instrument. The SAI demonstrated sound psychometric properties when administered to Black older adults. Content analysis revealed six broad themes of successful aging: health; family; independence/ability; activity/service; state of mind; and spirituality. These findings provide information about successful aging that can be used to develop tailored interventions for promoting successful aging in Black older adults, that that are relevant, acceptable, and more likely to be adopted by this group.

### RETIREMENT STATUS, PSYCHOLOGICAL WELL-BEING, AND INFLAMMATION: AN INTEGRATIVE APPROACH TO SUCCESSFUL AGING

E. Friedman, C. Ryff, *Institute on Aging, University of Wisconsin-Madison, Madison, Wisconsin*

Levels of systemic inflammation, which typically increase with age, are moderated by psychological and social factors. In this analysis we focus on inflammation in the context of both aging and an age-related life-course transition, retirement. We test the hypothesis that positive psychological functioning will moderate the associations of both (1) age and inflammation and (2) retirement status and inflammation. Data are from the biological subsample of the National Survey of Mid-Life in the United States (MIDUS; N = 950). Information on demographic characteristics, work status, health status, psychosocial functioning, and health behavior came from telephone interviews and self-administered questionnaires. Fasting blood samples for measurement of inflammatory proteins were obtained during an overnight clinic stay. Our analyses focused on interleukin-6 (IL-6), a pro-inflammatory cytokine that typically increases with age. Positive psychological functioning was assessed using Ryff’s (1995) Psychological Well-Being scales. Multivariate analyses adjusting for potential demographic and health confounds showed that age predicted higher levels of IL-6 ($p<.01$), while personal growth, a dimension of well-being that has previously been shown to decline with age, predicted lower levels of IL-6 ($p<.05$). Retirement status was marginally associated with IL-6 ($p=.06$) with retirees having higher levels of IL-6 than those still working. However, a significant interaction showed that personal growth was inversely related to IL-6 among retirees, but not among those still working ($p<.05$). These results suggest that positive psychological functioning, particularly the sense of self-realization, predicts lower levels of inflammation among retirees, and they highlight the importance a biopsychosocial approach to successful aging.

## SESSION 2375 (PAPER)

## PROMOTING PHYSICAL ACTIVITY AND EXERCISE

### IN CAREGIVERS’ VOICES: CREATING OPPORTUNITIES TO EXERCISE FOR COMMUNITY-DWELLING ADULTS WITH DEMENTIA

S.D. Rogers, *East Carolina University, Greenville, North Carolina*

Although there is growing research that documents the benefits of exercise for adults with dementia, evidence-based community-centered programs are unavailable. Notably, caregivers’ interest in or expectations for the effects of a community-based exercise intervention for their care recipient is undocumented. We investigated the views of local caregivers of community-residing adults with dementia (N=20). Focus group techniques were used to provide data regarding caregivers’ perceptions of the current status and anticipated trajectory of their care recipient’s physical abilities and functioning while living at home and their interest in and insights regarding the logistics of a community-based exercise program for their care recipient. Caregivers expressed motivation to care for the other at home as long as possible and had a strong preference to have their care recipient engaged in appropriate activities, including exercise. Caregivers expressed feelings of isolation and helplessness when discussing current options to keep the other stimulated. Most caregivers reported that mid-morning and early afternoon were optimal times for activity; yet, due to work or other obligations, caregivers would be unreliable to provide transportation, paying for activities would be difficult, and acclimatizing the care recipient to another routine would be challenging. Community activities for adults with dementia are scarce and although are wanted by caregivers, logistical hurdles may be prohibitive of participation. Partnering with local caregivers, support groups, adult day services, senior centers, and other local organizations may enable successful launching of such programs.

### ATTITUDES TOWARD PHYSICAL ACTIVITY IN AN URBAN AFRICAN-AMERICAN COMMUNITY

G.M. Huber[1], J. Lewis[2], W.E. Healey[1], C. Kohrman[2], *1. PTHMS, Northwestern University, Chicago, Illinois, 2. West Side Health Authority, Chicago, Illinois*

Purpose: Physical activity (PA) participation of older African-American (AA) men and women is lower than in either white or Hispanic groups. In the AA community, low levels of PA have been linked to many chronic diseases. The purpose of this study was to describe community members’ attitudes about PA to assist in the development of community interventions. Methods: Using principles of community-based participatory research (CBPR), a partnership between Northwestern University Department of Physical Therapy & Human Movement Sciences and the West Side Health Authority collaborated in developing focus groups to discuss attitudes toward PA in an urban, AA community. Four previously trained community health advocates (CHAs) assisted in the development of focus group interview guides and recruitment of focus group participants. Transcribed audiotapes from community focus groups were analyzed using qualitative methods. The analysis process included the authors and the CHAs. Results: Two focus groups were held with 22 participants (16 women, mean age=70.6 yrs). Four major themes were identified: 1) health was characterized as longevity, mental health, dependent on family history and not being housebound; 2) physical activity and diet contribute to health; 3) family/social support acted as both barriers and facilitators of PA; and 4) community members were knowledgeable about PA resources in the community but were concerned about safety and condition of the physical facilities. Implications: Based on the focus group results, future PA programming in this community should build on existing community resources. Strategies for PA promotion should focus on safety, social and environmental factors.

### PHYSICAL ACTIVITY AMONG URBAN AND RURAL AFRICAN AMERICANS

L. Hannon[1,2], R.M. Allman[2,3], P. Sawyer[2], *1. Tuskegee University, Tuskegee, Alabama, 2. University of Alabama at Birmingham, Birmingham, Alabama, 3. Birmingham/Atlanta VA GRECC, Birmingham, Alabama*

This study examines physical activity among urban and rural African American participants in the UAB Study of Aging (N=500). In-home interviews conducted in 1999-2001 included measures of physical and mental health, life-space, the Leisure Time Physical Activity (LTPA) Questionnaire, and the Short Physical Performance battery (SPPB). Chi square and ANOVA were used to examine bivariate comparisons. Excluding persons unable to perform the walking task of the SPPB, logistic regression was used to examine factors associated with kcal expenditure approximately equal to the recommended 30 minutes 5 times/week. Mean age was 75.9 (51% rural and 50% female). 35% reported incomes less than $8000/year and less than a 6th grade education. 40% reported difficulty walking; usual walking pace was reported as casual (<2mph) by 59% and 16% did not perform the timed walk of the SPPB. 23% reported no LTPA. Being "a lot less active" currently compared to their adult life before the age of 65 was reported by 47%. Rural African Americans had significantly lower incomes and fewer years of education, more symptoms, lower cognition, and higher depression. Rural persons were more likely to report a decline in their physical activity compared to their younger years (less than 65) however there were no significant differences in the SPPB or life-space mobility. Having more symptoms was significantly associated with not achieving the recommended weekly physical activity level (p=.013). Low physical activity was very common among older African Americans. Despite sociodemographic and health differences, this was true in both urban and rural settings.

### ARE PHYSICAL ACTIVITY AND PHYSICAL PERFORMANCE ASSOCIATED WITH BIO-MARKERS AMONG ELDERLY LATINOS?

G. Moreno[1], C.M. Mangione[2,3], P. Wang[3], L. Trejo[4], A. Butch[5], C. Sarkisian[6,3], *1. UCLA Dept. of Family Medicine, Los Angeles, California, 2. UCLA Dept. of Medicine, Division of General Internal Medicine & Health Services, Los Angeles, California, 3. UCLA, Dept. of Medicine, Division of Geriatrics, Los Angeles, California, 4. City of Los Angeles, Dept. of Aging, Los Angeles, California, 5. UCLA Pathology & Laboratory Medicine, Los Angeles, California, 6. VA Greater LA Healthcare System, Los Angeles, California*

Background: Physical activity is associated with better health outcomes but biological mediators for this relationship are unclear. They are even less understood among the growing elderly Latino population. We examined associations between physical activity and physical performance with biological markers of health among elderly Latinos. Methods: We examined baseline and 6-month data from 127 elderly sedentary Latinos (>60 years) recruited from 27 Los Angeles senior centers. We measured inflammatory (IL-6, CRP, and TNF-alpha), metabolic (waist circumference, HDL-cholesterol, triglycerides, insulin, glucose), and physiologic (blood pressure) markers of health, and self-reported physical activity (YALE survey). Physical performance was measured with the NIA battery (gait speed, chair stands, balance). We used Spearman's correlations, t-tests and linear regression adjusted for age and gender to explore correlations between physical activity, physical performance, and biological markers. Results: Eighty percent of the sample was female and mean age was 73 years. In cross-sectional analyses of baseline data, physical activity did not correlate with any biological markers. Total performance scores correlated ($p<0.03$ for all) with triglycerides ($R= -0.23$), insulin ($R=-0.20$), and waist circumference ($R= -0.31$). In adjusted models, higher summary performance scores were associated with lower waist circumference (b-coef. = -2.50; $p < 0.001$). In longitudinal analyses, change in physical activity level correlated inversely with change in insulin ($R=-0.25$, $p=0.02$) and CRP. Conclusions: In this sample of sedentary older Latinos, physical performance was associated with some biological markers of health in cross-sectional analyses. Increasing physical activity was associated with improvements in some metabolic and inflammatory markers of health.

### PREDICTING OPTIMAL HEALTH-RELATED QUALITY OF LIFE IN US ADULT TAIJIQUAN (TAI CHI) PRACTITIONERS

M.F. Komelski, R. Blieszner, Y. Miyazaki, *Virginia Polytechnic Institute and State University, Blacksburg, Virginia*

Working from the adaptive developmental theory of Selective Optimization with Compensation (SOC), we constructed and evaluated a framework for examining the contributions of Taijiquan (T'ai Chi) to optimal physical and psychological aging. The framework considers the effects of Taiji-related practice goals and environmental constraints (selection), organizes Taiji practices into domains based on their expected benefits (optimization), and details the importance of loss-based gains and adaptive strategies (compensation) in predicting optimal aging among Taiji practitioners. As a first step in evaluating the framework, we used a testing-the-limits design, focusing on experienced practitioners (N = 94; age range = 24-83, M = 55.82). We predicted optimal health status through analysis of Taiji practitioner data related to curricular complexity (total number of domains regularly practiced), frequency of practice, demographics, and lifestyle (including diet and other activities). A regression analysis showed that after controlling for age, practice experience, and practice frequency, diet and curricular complexity remained significant predictors of health status. Also, a significant interaction between out-of-class practice and curricular complexity suggested that the most integrated curricula were associated with better health across practice frequencies, but practitioners with simpler curricula could achieve comparable health outcomes by engaging in substantially more out-of-class practice. These findings suggest the importance of well-rounded curricula, out-of-class practice, and healthy diet for optimizing HRQoL through Taijiquan.

## SESSION 2380 (PAPER)

## SOCIAL NETWORKS AND HEALTH

### REVISION OF THE LUBBEN SOCIAL NETWORK SCALE FOR USE IN LONG TERM CARE SETTINGS

K. Brown, J. Munn, *College of Social Work, Florida State University, Tallahassee, Florida*

Background and Purpose: This study involves revising and adapting the Lubben Social Network Scale for use in assessing social support networks of older adults living in long term care settings. Assessment is important because adequate social networks are correlated with better well being in elderly populations (Lubben & Gironda, 2004). The current research is a unique contribution as no social network scale has been developed and validated for this population. Methods: The revised scale will have additional subscales for the purpose of capturing different aspects of the social networks of older adults residing in long term care. Those eligible to participate in the study are drawn from a sampling frame of older adults residing in long term care settings. Results: Reliability and validity statistics will be reported. Statistical results will be obtained for skewness and kurtosis of each scale item. The Cronbach's alpha will be reported for the subscales retained which measure the social networks involving family, residents, volunteers, friendships, and/or staff persons. The global and stratified alpha will be reported. Confirmatory factor analysis will be conducted to analyze factor structure and validity. Relevant model fit indices will be obtained and considered. Convergent and discriminant validity will also be analyzed and reported. Conclusions and Implications: The anticipated benefits of this research include a better understanding of social support experiences of older residents of long-term care facilities. The revised and adapted scale is expected to be able to more accurately identify levels of social support, for research and clinical purposes.

### ARE OLDER PEOPLE LIVING ALONE AT RISK IN TERMS OF HEALTH OR HEALTH SERVICE USE?

A. O'Hanlon[1,2], H. McGee[2], A. Hickey[2], *1. Dundalk Institute of Technology, Dundalk, Ireland, 2. Royal College of Surgeons in Ireland, Dublin, Ireland*

Living alone is an increasingly common experience for older people but it is unclear if this readily-identifiable characteristic should be considered a marker of risk by health and social service professionals. A nationally representative sample of community based older people (n=2,033; 68% response) were interviewed in their homes. Measures included household composition, health and health service use. Those living alone were more functionally impaired than those living with partners only and those in extended family groups. They also reported less support and higher levels of loneliness. However, those in extended family groups reported higher levels of support than others, but also higher levels of depression. No differences in general practitioner or hospital use were found among groups. Those living alone were more likely to avail of home services such as home help, while those in extended family groups were more likely to avail of community services such as hearing and dietician services. Living alone can be a marker of risk in terms of health and health service use. However, health and social service professionals should not always assume adequate psychosocial well-being for those living in extended family groups.

### SOCIAL SUPPORT DEFICIENCY IN HOME CARE CLIENTS

D.A. Forbes[1], M. Gibson[2,1], P. Montague[3], J. Hirdes[4], K. Clark[5], *1. Nursing, University of Western Ontario, London, Ontario, Canada, 2. Parkwood Hospital, St. Joseph's Health Care London, London, Ontario, Canada, 3. Custom Analytica, Guelph, Ontario, Canada, 4. University of Waterloo, Waterloo, Ontario, Canada, 5. Conestoga College, Waterloo, Ontario, Canada*

People in poor health tend to experience a reduction in social support as they age. The purpose of this research was to explore: (i) how social support deficiency (SSD) differs in male and female long-term home care clients; and (ii) how SSD is associated with health outcomes and use of health services in those who receive long-term home care services and the difference in men compared to women? Data from the Resident Assessment Instrument for Home Care (RAI-HC) was used. An Ontario, Canada sample was drawn from the fiscal years April 2006 to March 2007 and included 32,042 men and 68,852 women. Fourteen RAI-HC variables that reflected social support deficiency were identified. From a gender perspective, univariate and logistic regression analyses revealed that levels of SSD were similarly distributed in men and women, however, the variables tended to reflect social isolation in women and relationship issues in men. Interventions targeting these differences will be described. Significant, independent associations were found between SSD and a variety of health and service outcomes. Of concern is the finding that clients with fewer or no informal support received less home care services and day care compared to whose with greater social support. These clients may be particularly vulnerable to poor health outcomes. The RAI-HC instrument can be used to identify men and women who are deficient in social support. Approaches, supports and policies can then be implemented that aim to address the deficiency.

### TRANSITIONS IN HEALTH CONSULTATION NETWORKS AMONG ELDERLY RECIPIENTS OF LONG TERM CARE

K. Abbott[1,2], J. Prvu Bettger[1,2], A. Hanlon[1], G. Flanigan[1], M.D. Naylor[1,2], *1. University of Pennsylvania - School of Nursing, Philadelphia, Pennsylvania, 2. NewCourtland Center for Transitions and Health, Philadelphia, Pennsylvania*

We examined change in the size of health consultation networks (HCN) among elders receiving long-term care (LTC) services in three types of settings. Data were gathered through quarterly interviews with elders who had recently moved into a nursing home (NH), assisted living facility (ALF), or started to receive home and community based services (H&CBS). Elders identified people they consulted about symptom or disease information, what the doctor said, and about consulting health care providers. Data was analyzed for 208 adults enrolled in these three LTC options and interviewed at baseline, 12 months, and at least two of the three other interviews (3, 6 or 9 months). Generalized Estimated Equations were used to model repeated measures of HCN size as a function of baseline age, gender, self-rated health, functional status, depression, LTC setting, and cognitive status. On average, elders were 81 years of age and 72% were female with 12 years of education. One-third of the sample moved to ALF, 17% to NH, and 50% were receiving H&CBS. Bivariate analysis demonstrated that HCN size decreased over time ($p = .025$). Multivariate analysis show predictors of decreased HCN size were lower functional status ($p=.05$), lower cognitive status ($p= .004$), and being in a NH ($p=.002$). Findings show that HCN size decreases over time, which could lead to less support. Those who are in NH have the smallest HCN followed by ALF with H&CBS having the largest HCN. Facilitators and barriers to maintaining or increasing HCN size in elders receiving LTC are discussed.

## SESSION 2385 (SYMPOSIUM)

### TRANSITIONING TO HOME CARE: HEALTH AND FUNCTIONAL STATUS CHALLENGES AND SOLUTIONS

Chair: *K.H. Bowles, School of Nursing, University of Pennsylvania, Philadelphia, Pennsylvania*
Co-Chair: *M. O'Connor, School of Nursing, University of Pennsylvania, Philadelphia, Pennsylvania*
Discussant: *K.H. Bowles, School of Nursing, University of Pennsylvania, Philadelphia, Pennsylvania*

The experience for older adults transitioning to home care services is filled with challenges especially when the elder suffers from impaired functional status. Poor functional status is a prevailing risk factor for hospital admission and readmission. To compound this problem, hospitalization places elders at risk for further decline. This symposium reflects the interdisciplinary and collaborative research concerning geriatric transitions in care conducted by investigators in the University of Pennsylvania New Courtland Center for Transitions and Health. A state of the science describing the relationship between functional status and acute care hospitalization is presented as background then two potential solutions to combat declines in functional status and quality of life are presented in the remaining two papers. The first intervention, telehomecare is an emerging technological tool where medical devices and video technology are placed in patient homes and used by the patient daily to transmit data to the home health agency via the elder's telephone line. Results from an NIH funded randomized control trial will be presented to show the impact of telehomecare on the quality of life of heart failure patients. Next, results from an NIA funded study of the Transitional Care Model will elucidate the impact of advanced practice nurses working with hospital and community providers to support the transition of the cognitively impaired elder to home. This symposium highlights the functional status and quality of life needs of older adults and details two home based interventions that support the transition from hospital to home.

### THE RELATIONSHIP BETWEEN FUNCTIONAL STATUS AND HOSPITALIZATION AMONG GERIATRIC HOME CARE RECIPIENTS

M. O'Connor, *School of Nursing, University of Pennsylvania, Philadelphia, Pennsylvania*

This state of the science presents a synthesis of published empirical evidence regarding the relationship between functional status and hospitalization and includes a discussion of the latest strategies used to combat functional decline among elders living in the community. Thirty-one studies were reviewed between the years 2000 and 2010 and ranged from randomized controlled trials to feasibility pilots. Poor functional status is a prevailing factor in predicting hospital admission. Moreover, 30 to 60% of elders will experience further decline during a hospitalization, with decline beginning as early as day two. Strategies to overcome functional decline include assistive technology and home modification interventions, advance practice nurse-administered post-hospitalization management, telerehabilitation, functional decline risk assessments, and high intensity home-based progressive strength training programs. Further research is needed to discover the most effective ways to improve functional status and how to efficiently structure home care services to reduce hospitalization among this chronically ill population.

### TRANSITIONAL CARE FROM HOSPITAL TO HOME: COGNITIVELY IMPAIRED OLDER ADULTS AND FAMILY CAREGIVERS

K.B. Hirschman, M. Bixby, E. McPartland, K.H. Bowles, C. Bradway, K. McCauley, M.D. Naylor, *School of Nursing, University of Pennsylvania, Philadelphia, Pennsylvania*

Hospitalized older adults with cognitive impairment (CI) typically experience prolonged hospital stays, higher rates of complications, increased hospital readmissions and higher health care costs. Available evidence suggests that this population may benefit from interventions aimed at improving care management of both CI and co-morbid conditions. One potential intervention to improve transitions and health outcomes for this population is the Transitional Care Model (TCM) in which nurses work with the team of providers at the hospital and in the community to transition the patient home (average 1-3 months). Using a prospective cross-sectional design study, hospitalized older adults with deficits in orientation, recall or executive function or who had a diagnosis of dementia and who had a family caregiver were enrolled during an acute hospitalization. Changes in health status over time (through 24 weeks) for the first 150 dyads who received the TCM intervention will be presented.

### THE EFFECT OF TELEHOMECARE ON HEALTH STATUS

K.H. Bowles, *School of Nursing, University of Pennsylvania, Philadelphia, Pennsylvania*

Older adults hospitalized with heart failure were randomly assigned to skilled home care or skilled home care with telehealth (TH) (use of wireless blood pressure cuffs, scales, glucometers, pulse oximeters). Patients used the equipment daily and agency nurses monitored the data and interacted via video phones. The control group received skilled home care with in-person nurse visits. 218 patients were enrolled and assessed for 6 months for health status using the Kansas City Cardiomyopathy Questionnaire (KCCQ). The KCCQ is a 23 item questionnaire that quantifies physical limitation; symptom frequency, severity, and change over time; quality of life; social interference; self-efficacy and knowledge. A 5 point change in score is clinically significant. Control group patients had statistically and clinically significant improvements in symptom burden (mean 80 (SD23) vs 68 (SD27), p.03) and social limitation (mean 69(SD31) versus 52(SD36), p=.03). Use of telehealth had no effect on any of the KCCQ measures.

## SESSION 2390 (PAPER)

## VIOLENCE AND SELF-NEGLECT

### CORONER INVESTIGATIONS OF SUSPICIOUS ELDER DEATHS IN CALIFORNIA

A. Wiglesworth, L. Mosqueda, R. Austin, *Program in Geriatrics, University fo California, Irvine, Orange, California*

The decision by Coroner's and Medical Examiner's offices to investigate a suspicious elder death can be particularly challenging since disease and death are more likely with advanced age. Little work has been done to study this issue, despite evidence from research and Elder Death Review Teams that homicides due to physical abuse and neglect of elders go undetected. In an ongoing study, the 58 county coroner/medical examiner's offices in California were contacted to invite their participation in a phone survey. The purpose of the survey was to ask about decision-making processes currently used for assuming jurisdiction over a reported elder death. The counties were also asked for data associated with elder death investigations. Forty-seven counties participated and 31 shared their data on elder death investigations, autopsies and homicides. Survey questions covered a variety of issues such as current intake screening methods and staffing. Data were converted to ratios based on elder deaths in the county for the same year, so that they could be compared across counties. Participation was confidential and findings are reported by numbers of counties and groupings by county size. For example, there were more elderly homicides per total number of elderly deaths and more homicides per total number of autopsied cases in larger and medium-sized counties ($p<.05$ and $p<.001$, respectively). The final phase of the study will pilot test a brief questionnaire to be used by those who dispatch coroner investigators, evaluating its effectiveness in selecting suspicious elder deaths for further investigation and autopsy.

### A PROSPECTIVE POPULATION-BASED STUDY OF RACIAL/ETHNIC DISPARITY IN ELDER SELF-NEGLECT AND ALL-CAUSE MORTALITY

X. Dong[1], M.A. Simon[2], T. Fulmer[3], C. Mendes De Leon[1], D. Evans[1], *1. Rush University, Chicago, Illinois, 2. Northwesern University, Chicago, Illinois, 3. New York University, New York, New York*

Background: Elder self-neglect is associated with increased mortality. Report of elder self-neglect is more common among black older adults. However, the racial/ethnic differences in the association of elder self-neglect and mortality remain unclear. Methods: Chicago Healthy Aging Project (CHAP) is a prospective population-based cohort study conducted from 1993 to 2005. A subset of these participants had suspected self-neglect reported to social services agency. Mortality was ascertained during follow up and the National Death Index. Cox proportional hazard models were used to assess the black (non-Hispanic black) and white (non-Hispanic white) differences in elder self-neglect to mortality risk using time-varying covariate analyses. Results: There were 5,811 (63.8%) black older adults and 3,293 (36.2%) white older adults. Of the 1,461 reports of self-neglect from 1993 to 2005, 1,291 (88.4%) were black older adults and 170 (11.6%) white older adults. In multivariable analyses, reported self-neglect was associated with a significant increased risk of 1-year mortality in black older adults (HR, 7.99(6.99-9.12)) and in white older adults (HR, 4.56(3.35-6.21)). Mortality risk was lower but still elevated after 1 year for black older adults (HR, 2.62(2.21-3.13)) and white older adults (HR, 1.52(1.08-2.12)). Confirmed self-neglect was also associated with increased mortality. Reported and confirmed self-neglect was associated with increased mortality risk across multiple medical conditions in both black and white older adults. Conclusion: Black and white older adults with self-neglect reported to social services agency were both associated with increased risk of mortality. This increased mortality risk may be higher among black older adults.

### MID AND LATER LIFE INTIMATE PARTNER HOMICIDE SUICIDE: THE ROLE OF FIREARMS AND POLICY

S. Salari, *Family & Consumer Studies, University of Utah, Salt Lake City, Utah*

Intimate partner homicide suicide (IPHS) constitutes a psychological transition to commit fatal domestic violence followed by self abuse. This research focused on the methods used to end life in these events. Suicide represents a controlled, but potentially impulsive end of life decision. In contrast, the homicide victim is often unaware and unable to defend themselves. Firearm use significantly increases the lethality of the event. Quantitative and qualitative content analyses are used to examine 402 murder suicide events (830 deaths) among middle aged and elderly dyads collected from a national archive of news articles, transcripts, police reports and obituaries 1999-2005. Dyads are compared by age of oldest member 1) middle aged (age 45-59 n=177) or 2) elderly (age 60+, n=225). Most perpetrators were men (middle aged 91% and elderly 96%) and used firearms (91% and 88%), but some perpetrators used mixed methods. Primary intent (suicide vs. homicide) differed by perpetrator age, with older perpetrators characterized as more suicidal. Consensual suicide pacts and mercy killings (CDC defined) were rare (1% middle aged and 4% elderly). Illness was cited for elderly (55%) more than middle aged dyads (9%), but 30% of sick elderly and 70% of middle aged couples had only a perpetrator who was ill. State by state firearm restrictions and gun culture were examined with respect to mid and later life IPHS. Regions with greater firearm restriction and enforcement had fewer events. Implications suggest access to guns in the home should be limited among those who are at risk of IPHS.

### EXAMINATION OF DIRECT AND INTERACTION EFFECTS OF AGE GROUPS AND COPING STRATEGIES ON SUICIDAL IDEATION AND DEPRESSION AMONG KOREAN ELDERLY: A TWO-WAY ANOVA REPORT

M. Chun, *Social Work, Chongshin University, Kangnam-ku,, Seoul, Republic of Korea*

Based on the Life-course theory, it was suspected that different age cohorts among Korean elderly would use different coping strategies which subsequently affect their mental health, such as depression or suicidal ideation. This study examined the effect of age groups and coping strategies on suicidal ideation and depression. Research hypotheses were: 1) The older the age group, the lower the levels of problem-focused coping and the higher the levels of depression and suicidal ideation; 2) The older the age group, the higher the levels of emotion-focused coping and the higher the levels of depression and suicidal ideation. To examine these hypotheses, a sample of 247 elderly persons in Korea was interviewed using a structured questionnaire. For the analysis, the two-way ANOVA was conducted. The results indicated that according to the problem-focused coping model analysis, age groups and problem-focused coping showed direct effects on suicidal ideation and depression, however, interaction effects of age groups and problem-focused coping were only found in the depression. Additionally, the use of emotion-focused coping influenced the higher levels of suicidal ideation and depression. Age group only affected the levels of suicidal ideation in the emotion-focused model. In sum, the levels of suicidal ideation and depression were affected by the age groups and by the use of coping strategies. The results of this study suggest that to better manage suicidal ideation and depression among elderly persons in Korea, it is beneficial to pay attention to the use of coping strategies by different age groups.

## SESSION 2395 (PAPER)

## VULNERABILITY

### HOW TO BETTER ASSESS INDIVIDUALS' VULNERABILITY FOR ACTIVITY-RELATED PAIN INCREASE IN DEMENTIA

R. Kaspar, *Interdisciplinary Ageing Research, Faculty of Educational Sciences, Goethe University Frankfurt, Frankfurt am Main, Germany*

Guidelines for pain assessment in severe dementia suggest using observational tools under calm and activated conditions. Psychometric preconditions for comparing scores across observed conditions, however, often go untested. Objective. To assess the vulnerability of nursing home residents suffering from dementia to experience increased pain in activation. Method. Nursing staff observed N=196 residents with varying degrees of cognitive functioning (MMSE 12,5±10,0) using a total of 39 pain indicators extracted from the Pain Assessment in Advanced Dementia (PAINAD) and Checklist of Nonverbal Pain Indicators (CNPI) scales. Latent variable modeling with categorical indicators was used to estimate and compare item diagnostics across calm and activated conditions. A latent difference component model was employed to estimate an individual's vulnerability to experience augmented pain under activation. Results. Only a subset of pain behaviors satisfied both reliability and measurement invariance and therefore qualified as indicators for activity-related pain change. Estimated pain severity in activation was half a standard deviation in excess of baseline (i.e in rest). Impairment in ADL functioning was only marginally related to pain increase under activation. Non-cognitive dementia symptoms, however, were predictive for both pain at rest and pain change. Discussion. On the basis of these results, neither of the inventories could be suggested for the assessment of activity-related pain change without qualifications. The findings can be used as an item bank to inform the construction of more goal-specific pain observation tools in dementia. Evidence for substantial confounding of pain behavior and agitation questions the validity of intensity-oriented pain observation in dementia.

### DISPARITY IN DISABILITY BETWEEN NATIVE BORN NON-HISPANIC WHITE AND FOREIGN BORN ASIAN OLDER ADULTS IN THE UNITED STATES: EFFECTS OF EDUCATIONAL ATTAINMENT AND AGE AT IMMIGRATION

M. Lee, *Dept. of Sociology, Chung-Ang University, Seoul, Republic of Korea*

Objectives. The purposes of this study were to compare disability of native born non-Hispanic White and foreign born Asian older adults in the United States and examine if and how educational attainment and age at immigration are associated with disability of foreign born Asian older adults. Methods. 2006 American Community Survey Public Use Microdata Sample (ACS PUMS) was analyzed by logistic regression techniques. Results. Logistic regression analyses reveal that educational attainment has differential effects across the two groups. Foreign born Asian older adults are likely to have disability more than native born White counterparts with same educational levels in general. Also, foreign born Asian older adults are less likely to have disability if they migrated earlier in life time. Interestingly, testing interactions between age at immigration and educational attainment for foreign born Asian older adults shows that early migration is beneficial to less educated older adults. Discussion. The study shows that educational attainment has differential effects not only between the two racial groups but also within the Asian group by timing of immigration. Elaborated theoretical frame and careful analytic approach are required to explain immigrant health dynamics in the United States.

### TRAUMATIC BRAIN INJURY IN OLDER ADULTS: NEWLY RELEASED NATIONAL ESTIMATES

L.C. McGuire, M. Faul, M. Wald, L. Xu, V. Coronado, S. Basavaraju, V. Kapil, *CDC, Atlanta, Georgia*

For U.S. adults 65 years old and older, approximately 5.8 million persons in 2006, reported at least one fall during the preceding 3 months. For this age group, falls are the leading cause of all injuries and the leading external cause of traumatic brain injury (TBI). Our presentation will describe the latest national incidence numbers, rates, and trends of TBI and fall-related TBIs among U.S. adults aged ≥ 65 years old. Data from the 2002-2006 National Hospital Ambulatory Medical Care Survey, National Hospital Discharge Survey, and the National Vital Statistics System was used. Our findings indicated that annually, 1.7 million people sustained a TBI. Of those with a TBI, approximately 52,000 died, 275,000 were hospitalized, and 1.3 million were treated and released from an emergency department. For older adults (≥ 65 years old), 237,844 people received a TBI and 14,347 died, 81,500 were hospitalized, and 141,998 were treated and released from emergency departments. Approximately 60% of TBIs among persons aged ≥ 65 years old were fall related compared to 35% in the general population. The trends from 2002-2006 for fall-related TBI visits to emergency departments increased while hospitalizations and deaths remained relatively stable. Our presentation will discuss modifiable fall-related risk factors that have a potential to decrease the likelihood of fall-related TBIs and methods that caregivers can use to help older adults live better lives and stay independent through TBI education and prevention activities.

### SEVERITY OF DEPRESSIVE SYMPTOMS BEFORE AND AFTER FIRST STROKE: EFFECTS OF GENDER AND OTHER FACTORS

M. McCarthy[1], J. Newsom[1], N. Huguet[1], M.S. Kaplan[1], B. McFarland[2], *1. Portland State University, Portland, Oregon, 2. Oregon Health and Science University, Portland, Oregon*

Depression is the most common psychological condition associated with stroke, affecting approximately 33% of survivors. While the association between stroke and depression is well-established, it is less clear whether stroke, with its associated physical and social sequela, contributes to survivors' experiences of depression or whether, conversely, depression contributes to stroke risk. This presentation describes preliminary analyses of the Health and Retirement Study with respect to this issue. The CES-D was used to assess depression symptomatology before and after stroke in 8 waves (1992 to 2006) of a nationally representative sample of adults aged 50 to 85 (N = 302). Results indicated that, while the severity of men's depression did not change significantly after stroke (n = 152, mean difference = .05, ns), the severity of women's depression increased significantly at the trend level (n = 150, mean difference = .34, $p < .10$). Hierarchical lagged regression was used to control for known correlates of post-stroke depression including demographic factors, premorbid depression, and post-stroke ADL dependence and self-rated health. The final model accounted for approximately 48% of the variance in post-stroke depression (R2 = .48, $p < .001$) and, after controlling for these factors, female gender remained a significant independent predictor of post-stroke depression ($\beta = .09$, b = .38, $p < .05$). Further analyses of other physical and psychosocial factors are underway but these findings, derived from an extremely rich longitudinal dataset, provide evidence about the direction of the relationship between stroke and depression and the potential influence of gender.

## SESSION 2400 (SYMPOSIUM)

### EXPLICATING INEQUALITY: APPLYING THE THEORY OF CUMULATIVE INEQUALITY FROM CELL TO SOCIETY

Chair: *T. Kruger, Graduate Center for Gerontology, University of Kentucky, Lexington, Kentucky*

The theory of cumulative inequality (CI), as outlined by Ferraro and colleagues (Ferraro & Shippee, 2009), provides an evidence-based and intuitively appealing framework under which gerontological research can be conducted at any level, from cell to society. In this symposium three scholars will present the findings that indicate the applicability of CI to a wide range of research in the field of aging. First, through the lens of Alzheimer's disease, Rodney Guttmann will discuss the evidence regarding the unequal accumulation of genetic and cellular risk and protective factors over the life course that differentially predispose older adults to positive or negative outcomes. Next, Tina Kruger will discuss the unequal accumulation of risk and protective factors at the level of the individual, highlighting the processes by which personal factors such as prenatal and early childhood experiences, educational attainment, engagement in exercise and appropriate diet as well as mental activity throughout life provide cognitive protection or increased risk of cognitive decline in old age. This symposium will conclude with Amanda Sokan's presentation on the accumulation of social/societal risk and protective factors across the lifespan and how such unequal accrual affects an older adult's likelihood of being abused or mistreated. This symposium will contribute to the development of CI theory as requested by Ferraro as well as incorporating a bidirectional component to CI, highlighting how biological processes affect individual and societal outcomes rather than focusing solely on the biological implications of societal forces as Ferraro describes.

### ACCUMULATION OF INEQUALITY WITHIN PERSONS: HOW INTRA-INDIVIDUAL FACTORS BUILD OVER THE LIFECOURSE TO AFFECT RISK OF COGNITIVE DECLINE

T. Kruger, *Graduate Center for Gerontology, University of Kentucky, Lexington, Kentucky*

The unequal accumulation of risk and protective factors at the level of the individual greatly affect the likelihood that a person will age with their cognition intact or experience significant cognitive decline or dementia. In this presentation I highlight the processes by which intra-individual factors such as prenatal and early childhood experiences, educational attainment, exercise habits and diet as well as patterns of mental activity throughout life accumulate unequally both within a person and across people to provide cognitive protection or increased risk of cognitive decline in old age. Furthermore, I address the bidirectional nature of the relationship between societal factors and the biological features that accumulate unequally across the lifecourse to influence each person's cognitive outcomes. This discussion furthers the work of Ferraro and colleagues on Cumulative Inequality by stressing the relevance of the accumulation of inequality within a person over the lifecourse to cognitive outcomes in old age.

### ACCUMULATION OF INEQUALITY AT THE CELLULAR LEVEL AND RISK MODULATION OF ALZHEIMER'S DISEASE

R. Guttmann, *1. Gerontology, University of Kentucky, Lexington, Kentucky, 2. Sanders-Brown Center on Aging, Lexington, Kentucky*

Cumulative inequality begins at conception, as the shuffled genetic material from haploid cells pair together to form each human being. Although Alzheimer's Disease (AD) is a disease of the aged, we are discovering that genetic makeup as well as the environment in which genes are expressed impact the likelihood of developing or avoiding AD. Many genetic contributions (e.g., APOE, APP) have been discovered through observation of inheritance patterns and modern DNA methodologies that likely protect from or contribute to AD. Additionally, there are numerous heritable traits that may affect, for example, levels of motivation, blood pressure, and risk of diabetes that are also likely to accumulate unequally over the lifecourse and increase or decrease one's risk of AD. Thus, through the lens of AD, we suggest cumulative inequality theory to be a usable framework for the study of aging from cell to society.

### THE NOTION OF ACCUMULATION: HOW RISK/PROTECTIVE FACTORS DETERMINE ELDER MISTREATMENT POTENTIAL

A.E. Sokan, *Graduate Center for Gerontology, University of Kentucky, Lexington, Kentucky*

Cumulative inequality theory posits that social systems produce inequalities, which, subject to available resources and human agency, accumulate and influence lifecourse trajectories with advantages increasing an individual's exposure to opportunity and disadvantages increasing exposure to risk (Ferraro & Shippee, 2009). This notion of accumulation of inequalities provides a means to understand the potential for elder mistreatment as the result of a complex balancing of personal risks (negatives) and opportunities (positives) that the potential victim and perpetrator have accumulated over time. The result is a system of checks and balances in which an abundance of positives is protective against mistreatment while the abundance of negatives creates disequilibrium - conditions for the "perfect storm," leading to mistreatment.

Understanding the role of accumulation may help explain how and why factors work to protect older adults or trigger abuse and illuminate how risk indicators can be used to predict mistreatment, ultimately informing preventive strategies.

## SESSION 2405 (PAPER)

## KEY CONCEPTS IN PHYSICAL PERFORMANCE

### PREDICTION OF MINOR SOFT TISSUE INJURIES IN OLDER COMMUNITY-LIVING PEOPLE: AN EXPLORATIVE STUDY

I. Logghe[2,1], A. Verhagen[1,6], A. Rademaker[2], S. Bierma-Zeinstra[1], E. Van Rossum[3,4], M. Faber[5], B. Koes[1], *1. Departement of General Practice, Erasmus MC, Rotterdam, Netherlands, 2. Avans University of Applied Sciences, Research Group Gerontology, Breda, Netherlands, 3. Department of Health Care and Nursing Science, Faculty of Health, Medicine and Life Sciences, Maastricht University, Maastricht, Netherlands, 4. Zuyd University of Applied Sciences, Centre of Research on Autonomy and Participation, Heerlen, Netherlands, 5. Scientific Institute for Quality of Healthcare, Radboud University Nijmegen Medical Centre, Nijmegen, Netherlands, 6. Avans University of Applied Sciences, School of Health, Breda, Netherlands*

Background. Few studies have investigated risk factors for minor fall related injuries. Clinicians may use predictive information on minor fall related soft tissue injuries to refine their referral to a full falls risk assessment. Objective. To evaluate which circumstances are related to falls and to build a predictive model for falls related to minor soft tissue injuries in community–living people with high fall risk. Methods. Participants (n=269) filled out a fall calendar on a daily basis for one year, including circumstances and consequences of falls. Prior to analyses possible predictors for minor soft tissue related injuries were identified from literature. Multivariate logistic regression techniques were used to build predictive models related to these injuries. Results. Over a period of 12 months 205 falls were reported of which 108 were injurious. Most injurious falls resulted in minor soft tissue injuries (94%); six falls resulted in a fracture. The most common fall type were falls on level due to slipping, tripping and stumbling (38%). In a model for clinical usage including age, female sex, previous falls and fear of falling the AUC was 0.67 (95% CI 0.59-0.75). Conclusion. Preliminary results show that most falls resulted in minor soft tissue injuries. The probability in which falls in community-living people with high fall risk will be related to minor soft tissue injury can predicted with a model. After validation, this model could be used to refine referral to a full falls risk assessment.

### THE RELATIONSHIP OF VITALITY WITH ADL AND IADL DISABILITY IN MEXICAN AMERICAN OLDER ADULTS

G.D. Weaver, K. Ottenbacher, *Rehabilitation Sciences, University of Texas Medical Branch, Galveston, Texas*

Evidence suggests that low vitality (lack of energy, tiredness) is a common health complaint among older adults. This study examined the extent of vitality in Mexican American community-dwelling older adults. It also examined if vitality was independently associated with disability status after accounting for the effects of socio-demographic characteristics, muscle strength, mobility (rapid walk & repeated chair stands), body mass, depressive symptoms, cognitive status, and chronic medical conditions. A cross-sectional study of a subsample of the Hispanic Established Population for Epidemiologic Study of the Elderly was conducted on 791 participants, ages 75-100 years. Bilingual interviewers administered structured questionnaires and physical measures of mobility performance and muscle strength. ADL and IADL indexes were used to measure disability status. A subscale from the SF-36 Health Survey was used to measure extent of vitality in the last four weeks. Chi square and multiple linear regression analyses were performed. Moderate to low vitality was reported by 26% of men and 42% of women. Regression analyses showed that vitality maintains its independent association with ADL ($\beta$=-.14, p<.001) and IADL ($\beta$=-.27, p<.001) disability after controlling for all covariates. However, ADL disability was most strongly associated with repeated chair stands, rapid walk and hand grip strength, while vitality and cognitive status were the strongest predictors of IADL disability. These findings support previous research that vitality is common among older adults and that vitality is an important indicator of ADL and IADL disability status along with gender, repeated chair stands, hand grip strength, and cognitive status.

### AEROBIC EXERCISE IMPROVES ORTHOSTATIC TOLERANCE IN OLDER ADULTS WITH TYPE 2 DIABETES

K. Madden[1,2], C. Lockhart[1,2], T. Potter[1], D. Cuff[1,2], *1. Medicine, University of British Columbia, Vancouver, British Columbia, Canada, 2. VITALiTY (Vancouver Initiative to Add Life To Years) Research Laboratory, Vancouver, British Columbia, Canada*

**BACKGROUND:** Previous investigations of aerobic exercise as treatment for orthostatic intolerance have shown mixed results, demonstrating either an improvement or a worsening of orthostatic tolerance with training. We examined whether aerobic exercise improved orthostatic tolerance in older adults with Type 2 diabetes. **METHODS:** Forty older adults (25 males and 15 females, mean age 73.4±0.7, ranging in age from 65 to 83) with diet-controlled or oral hypoglycemic-controlled Type 2 diabetes were recruited. Subjects were randomized to each of 2 groups: an aerobic group (AT, 3 months vigorous aerobic exercise), and a non-aerobic group (NA, no aerobic exercise). Exercise sessions were supervised by a certified exercise trainer 3 times per week, and utilized a combination of cycle ergometers and treadmills. After being given 400 micrograms of sublingual nitroglycerin (GTN), each subject was placed in a 70 degree head-up tilt for 30 minutes. **RESULTS:** When the two groups were compared using a Cox proportional hazards model (with length of time on the tilt table on the x-axis), tilt table tolerance (TTT) at baseline was no different between the NA group and the AT group ($\chi^2_{MC}$=1.309; p=0.253). After 3 months vigorous training TTT was significantly better in the AT group as compared to the NA group ($\chi^2_{MC}$=7.271, p=0.007). After the exercise intervention, the AT group demonstrated an average tilt table duration of 22.29±2.32 minutes as compared to 13.22±2.07 minutes for the NA group. **CONCLUSIONS:** Our findings indicate that a relatively short aerobic exercise intervention can improve orthostatic tolerance in older adults with Type 2 diabetes.

### PHYSICAL PERFORMANCE AMONG OLDER ADULT MEN: THE PRIEST STUDY

D. Klima[1], R.A. Newton[2], A. Davey[2], E. Keshner[2], *1. UMES, Princess Anne, Maryland, 2. Temple University, Philadelphia, Pennsylvania*

Purpose/Hypothesis: Studies examining physical performance among older adult men remain limited. The purpose of this study was to compare gait and balance ability among two cohorts of Roman Catholic priests(age 60-74 years of age and 75+ years) and to confirm the hypothesized prediction that markers used to traditionally track the frailty trajectory (body mass index, physical activity, and grip strength) would significantly contribute to balance and gait performance among the clergy. Participants: Subjects included 131 community-dwelling Roman Catholic priests over 60 (x= 76.1 yrs;SD=9.0;range:60-97 yrs) living in rectories, senior housing, or religious communities in 10 states. Materials/Methods: Subjects completed a basic demographic profile, the Berg Balance Scale (BBS), Timed Up and Go (TUG) Test, and the Dynamic Gait Index (DGI). Additional assessments included BMI, blood pressure, grip strength, and the Physical Activity Scale for the Elderly (PASE). Data were analyzed using descriptive statistics, ANOVA tests, and multiple regression modeling. Significance was set at the 0.05 level. Results: Demographic profiles revealed that 46 subjects (35%) had fallen over the past year. Eighty-six (65%) subjects were taking four or more medications. Significant differences (p<0.001) in physical performance between the younger (n=56) and older age cohorts (n=75) were noted on the BBS(53.4+/-4.8 vs. 45.5+/-7.5), TUG(10.4 sec.+/-2.3 vs. 13.4 sec.+/-4.2), and DGI(22.6+/-2.6 vs. 19.0+/-4.2) respectively. Multiple regression analysis demonstrated that BMI, grip strength, and physical activity predicted 32% of the variance in the BBS, 29% of the variance in the DGI, and 22% of the variance in the TUG(all p<0.001). Conclusions: Physical activity, BMI, and grip strength are predictive determinants of the functional profile of the older adult priest. Data findings suggest that markers of frailty should be addressed in tandem with common tests of physical performance to establish target interventions for balance, gait, and functional mobility.

## SESSION 2410 (PAPER)

### MEDICATIONS IN CHRONIC DISEASE MANAGEMENT

### MEDICATION ADHERENCE EXPERIENCES AND CHALLENGES AMONG OLDER ADULTS LIVING WITH HIV/AIDS AND CO-MORBIDITIES

E.H. Anderson[1], R. Fortinsky[2], T. Pare[1], J. Song[1], *1. School of Nursing, University of Connecticut, Storrs, Connecticut, 2. Center for Aging University of Connecticut Health Center, Farmington, Connecticut*

Background: Adults aged >50 years (older adults by CDC definition) represent a growing proportion of the U.S. population living with HIV/AIDS. Adherence to anti-retroviral therapy (ART), required to improve immune system function, is especially important for older adults living with HIV/AIDS due to increased likelihood of comorbid conditions that could compromise health status. Little is known about medication-related challenges among older adults living with HIV/AIDS and other co-morbidities. Therefore, we asked an open-ended question about this topic as part of a larger study. Methods: Older adults with HIV/AIDS and other co-morbidities were recruited from clinics and community-based centers. Using the phenomenological method, audiotaped interviews were conducted until saturation; three independent reviewers identified significant phrases, formulated meanings, and developed themes regarding ART adherence. Results: 56 subjects completed interviews (39% female; 41% African-American, 30% Caucasian, 22% Hispanic). Seven themes emerged from 249 significant phrases: Constant Battle; Motivators to Adherence; Missing Doses Won't Hurt; I Do What I Have to Do Like Clockwork; Side Effects; Mood-Adherence Interactions; and What Condition (HIV or co-morbidity) Is More Life-threatening. Motivators to adherence included having insurance, desire for quality of life, and family relations. Adherence ranged from leniency with missed doses to medication regimens imbedded in their minds. Negative moods and side effects reduced adherence, while positive moods and encouraging motivators improved adherence. Some individuals valued medications for heart disease and diabetes more than HIV medications. Conclusions: Results suggest that a variety of psychological and environmental factors must be addressed to assist older adults with ART adherence.

### ARE PATIENTS WITH DEMENTIA LESS LIKELY TO RECEIVE RECOMMENDED DIABETES CARE?

C. Thorpe[1], J.M. Thorpe[2], A. Kind[1], M.A. Smith[1], *1. University of Wisconsin School of Medicine and Public Health, Dept. of Population Health Sciences, Madison, Wisconsin, 2. University of Wisconsin School of Pharmacy, Division of Social and Administrative Sciences, Madison, Wisconsin*

Diabetes treatment guidelines for complex, older patients recommend less stringent disease control, but continued monitoring of HbA1c, cardiovascular risk, and diabetes complications. In dementia patients, receipt of these care processes can inform treatment decisions and may minimize further decline of cognition, function, and quality of life. However, it is unclear if and when dementia patients receive these processes. We analyzed 2003-2004 Medicare claims and electronic health records for 4,091 fee-for-service diabetes patients receiving outpatient care within a large academic group practice, to determine whether receipt of diabetes care processes in 2004 differed for patients with and without dementia, and factors associated with receipt of these processes in dementia patients. Multivariate logistic regression models, adjusted for clustering within clinics, included socio-demographics, co-morbidities, HCC risk score, and diabetes complications assessed in 2003. 321 (8%) patients had dementia per an established claims-based approach. Dementia patients tended to be older, female, and have greater co-morbidity. 80% of dementia patients received ≥1 A1c test, 40% received ≥1 LDL test, and 35% received an eye exam, versus 87%, 71%, and 40% of non-demented patients, respectively. After adjustment, patients with dementia were less likely to receive A1c tests (OR=0.59, p<.01), LDL tests (OR=0.37, p<.01), and eye exams (OR=0.83, p<.05). Older age, higher HCC risk score, depression, and absence of hypertension reduced likelihood of receiving an LDL test for dementia patients. More research is needed to understand reasons for reduced diabetes monitoring in patients with dementia and how this impacts patient functioning, adverse events, and quality of life.

### DOES INCREASED MEDICATION ADHERENCE LOWER MEDICARE SPENDING AMONG BENEFICIARIES WITH CONGESTIVE HEART FAILURE?

J. Lloyd[1], J. Shoemaker[1], R. Lopert[2], A.J. Davidoff[1], B. Stuart[1], T. Shaffer[1], *1. University of Maryland, Baltimore, Baltimore, Maryland, 2. Therapeutic Goods Administration, Woden, Australian Capital Territory, Australia*

Background: Hospitalizations attributed to heart failure cost the Medicare program 10 billion dollars in 2007. Better disease management through adherence is postulated to result in lower Medicare expenditures. Objective. To measure medication adherence for recommended heart failure medications and to assess whether higher adherence is associated with lower Medicare spending, controlling for biases common to previous adherence studies. Data Source: Medicare Current Beneficiary Survey (1997-2005) Study Design. Longitudinal study of renin-angiotensin-aldosterone system (RAAS) inhibitors, beta blockers, diuretics, and cardiac glycosides utilization over 3 years in 2,310 beneficiaries with heart failure. Adherence to heart failure medications is measured by three-year medication possession ratios (MPR). Data Collection. Relationship between MPR and Medicare costs was tested among users in a sequence of uncensored multivariate models with extensive behavioral variables to control for healthy adherer effects and reverse causality. Principal Findings. Over three years, median MPR values ranged from 0.77 for RAAS, to 0.28 for cardiac glycosides. The highest reduction in Medicare spending was found for cardiac glycosides with a 10-point increase in MPR being associated with a reduction of $2318 Medicare spending (p<.01). Additionally, a 10-point increase in MPR for beta blockers, diuretics, and RAAS similarly reduced Medicare spending by $861 (p<.01), $520 (p<.01) and $390 (p<.05), respectively. Conclusions. Greater adherence to treatment heart failure medications by Medicare beneficiaries with heart failure is associated with lower cumulative Medicare spending over three years.

### ELDERS' RATE OF HOSPITALIZATIONS AND COSTS OF MEDICATIONS

J.H. Van Cleave, K. Abbott, A.L. Hanlon, M.D. Naylor, *University of Pennsylvania, Philadelphia, Pennsylvania*

Purpose: Illustrating the relationship between elders' rate of hospitalizations and inability to obtain medications due to costs may inform public policy and practice. The primary aim of this study was to examine the relationship between elders' report of medication costs as a barrier to filling prescriptions and hospitalizations per three month period. Sample: Elders (mean age 82.4) newly enrolled in long term care (LTC) residing in assisted living facilities (N=158) and nursing homes (N=105) in northeastern United States. Methods: Baseline data from LTC patients enrolled in a study of natural history of changes in Health Related Quality of Life. Chronic illnesses and hospitalizations were abstracted from medical records. Activities of daily living (ADL), symptoms, depression and demographic data were gathered by patient self report. Elders were also asked to rank from 1 to 5 whether costs prevented filling prescriptions (1=strongly agree, 5=strongly disagree). Statistical analysis: Descriptive statistics and regression analysis using Poisson distribution with number of hospitalizations as outcome variable. Results: Greater than 85% of elders in this study agreed that costs prevented filling their prescriptions. While controlling for age, race, facility type, depressive symptoms, ADL, total co-morbidities, and functional status, those who strongly agreed that costs prevented them from filling their prescriptions had significantly higher number of hospitalizations during previous three months than those strongly disagreeing (p<0.001). Conclusion: These results suggest a high prevalence of elders newly enrolled in long term care report that costs of medications prevent filling prescriptions and this may be associated with rate of hospitalizations.

## SESSION 2415 (PAPER)

### PSYCHOSOCIAL FACTORS AND HEALTHCARE

### EFFICACY OF PSYCHOSOCIAL GROUP REHABILITATION ON LONELY, OLDER PEOPLE: A RANDOMIZED, CONTROLLED TRIAL

K.H. Pitkala[1,2], P. Routasalo[1,2], H. Kautiainen[3], R.S. Tilvis[4,2], *1. University of Helsinki, Department of General Practice, University of Helsinki, Finland, 2. The Central Union for the Welfare of the Aged, Helsinki, Finland, 3. Orton Foundation, Helsinki, Finland, 4. University of Helsinki, Department of General Internal Medicine and Geriatrics, Helsinki, Finland*

Introduction: Loneliness predicts impaired cognition, well-being and health, and survival. The aim of this study is to determine efficacy of psychosocial group rehabilitation on lonely older individuals. Methods and material: This multicenter trial included 235 older people (>74 years) suffering from loneliness randomized into intervention and control arms. Rehabilitation groups (7-8 participants + two professional leaders) met once a week for 3 months (12 times). Intervention based on closed group dynamics aimed to empower participants, to enhance their self-efficacy, and to promote their social engagement. Subjects participated in activities according to their interests 1) Therapeutic writing 2) Exercise, and 3) Art. Results: Mean age was 80 years, 73% were females. Psychological well-being score improved significantly in the intervention group compared to the control group. The ADAS-Cog scale improved more in the intervention group than in the control group, with mean changes of -2.5 points (95%CI -3.2 to -1.8) and -1.3 points (95%CI -1.9 to -0.7), respectively. At two years, survival was 97% in the intervention group and 90% in the control group (p=0.047) (Adjusted HR 0.39, 95% CI 0.15 to 0.98). The intervention group had significantly lower health costs in 2-year follow-up: the difference between the groups was -943 [|#8364#|]/person per year; (95% CI -1955 to -127; p=0.039). Conclusions: Intervention improved lonely older people's health, psychological well-being, and cognition, and reduced their mortality and use of health services.

### HEALTH CARE AIDES' PERCEPTIONS OF RAI-MDS 2.0 FEEDBACK REPORTS

A.E. Sales[1], H.M. Jerke[1], M.B. Baylon[1], C. Schalm[2], G. Gao[1], *1. Faculty of Nursing, University of Alberta, Edmonton, Alberta, Canada, 2. Shepherd's Care Foundation, Edmonton, Alberta, Canada*

Background: The Resident Assessment Instrument-Minimum Data Set (RAI-MDS 2.0) is a long-term care (LTC) resident assessment tool. Resident health and functional status information from the RAI-MDS 2.0 may be used to improve quality of care. However, LTC organizations rarely use RAI-MDS 2.0 data to inform health care aides (HCAs), who represent 70% of LTC care providers, about their respective unit's performance. Objectives: To describe how HCAs in long-term care facilities respond to feedback reports focused on improving quality of care and to understand (i) HCA perceptions of comprehensibility and utility of the feedback reports and (ii) the influence of these reports on self-reported intent to change behavior. Methods: We delivered monthly RAI-MDS 2.0 feedback reports to HCAs in four LTC facilities for 13 months. Reports described a unit's performance compared to the eight other units in the study in relation to falls, depression, and pain. Post-feedback report surveys captured HCA perceptions of the feedback report and intent to change practice behavior. Results: Preliminary results indicate that over half of the HCAs surveyed found the report useful (51% to 74% per cycle) and those perceptions of utility showed an increasing trend over time. Responses were frequently more positive about intent to change practice behavior than about usefulness of the report (66% to 84% per cycle). Conclusions: This suggests that RAI-MDS 2.0 data can be presented to HCAs in a way that they find useful and has an influence on their intent to change behavior. Future analysis will examine whether intent to change behavior is correlated with changes in resident outcomes over time.

### SELF-REPORTED AGE-RELATED EYE DISEASE AND VISUAL IMPAIRMENT IN THE NYC SENIOR CENTER POPULATION

L. Evans, M.C. Fahs, *Hunter College / City University of New York, Hunter Brookdale Center for Healthy Aging & Longevity, New York, New York*

The National Eye Institute estimates the number of Americans with age-related eye disease and vision impairment will double within the next three decades. Visual disability lowers one's quality of life and reduces functional ability, increasing risk for depression, falls and social isolation. Yet determinants of prevalence and eye care utilization across racial/ethnic groups remain under-studied. In this presentation, we report results from a representative sample (n=1870) of the NYC senior center population. The estimated lifetime prevalences for diagnosed eye diseases are: cataract, 54.42%; glaucoma, 17.61%; macular degeneration 5.97%; and diabetic retinopathy, 5.43%. Analyses reveal striking differences by ethnicity. Compared to their white counterparts, African Americans were 3.972 times more likely to have been diagnosed with diabetic retinopathy (95% CI 2.256, 6.992; p < .0001); those of Hispanic/Latino ethnicity were 2.619 times more likely (95% CI 1.462, 4.691; p < .0012). Factors related to appropriate eye care utilization include gender; men were .576 times less likely than women to have utilized eye care within in the past two years (95% CI .437, .759; p <.0001). Further results of multi-level models will be presented. These analyses underscore the pressing need to improve older adult eye care across gender and ethnicity. Results may help inform effective prevention strategies to increase eye care utilization and reduce disability in the aging population.

### FACTORS ASSOCIATED WITH HOSPITALIZATION AMONG OLDER LATINO ADULTS

B. Meisner[1], L. Trejo[2], J. Wang[3], J. Frank[3], C. Sarkisian[3], *1. York University, School of Kinesiology & Health Science, Toronto, Ontario, Canada, 2. City of Los Angeles, Department of Aging, Los Angeles, California, 3. UCLA, Division of Geriatrics, Los Angeles, California*

BACKGROUND/OBJECTIVE: Older Latinos are the fastest growing sociodemographic group in the United States and it is important to understand which older Latinos are most likely to be hospitalized. This study explores demographic, biomedical, and psychosocial factors as associates of hospitalization among sedentary older Latinos. METHODS: In-person interviews were conducted with sedentary Latinos aged >=60 years, recruited from 27 Los Angeles senior centers participating in an exercise intervention (Caminemos!). Logistic regression was used to examine factors relating to hospitalization in the past year (yes/no). Independent variables were age, gender, annual household income, education, and previously-tested measures of aging expectations, intrinsic religiosity, physical and mental health-related quality of life (HRQoL), activities of daily living, co-morbidities, and depression. RESULTS: Mean age was 73 years, 77% were female, 14% reported no formal education, and 15% reported having been hospitalized in the previous year. In the bivariate analyses, low income and education, depression, and activities of daily living impairments were associated with greater odds, while better physical and mental HRQoL were associated with lower odds of previous hospitalization (P<0.05). In a multivariate model, adjusting for all independent variables, only depression and education were independently associated with previous hospitalization: older Latinos with depression had 1.8 greater odds of hospitalization than those without depression (CI=1.0-3.3) and those with no formal education had 2.5 greater odds of hospitalization than those with any education (CI=1.4-4.4). CONCLUSIONS: In this community-based sample of urban older Latinos, having depression and no education were independently associated with hospitalization in the previous year. Funded by National Institute on Aging (5 R01 AG024460-05).

## SESSION 2420 (PAPER)

## THE SCOPE OF DEPRESSION: COMORBIDITIES, INTERVENTIONS AND OUTCOMES

### IMPACT OF COMORBID DEMENTIA ON ANTIDEPRESSANT UTILIZATION IN MEDICARE POPULATION WITH DEPRESSION

H.K. Yang[1], L. Simoni-Wastila[1], G.B. Rattinger[1], I.H. Zuckerman[1], S.W. Lehmann[2], J. Qian[1], S.K. Dutcher[1], B. Stuart[1], *1. Peter Lamy Center on Drug Therapy and Aging, University of Maryland, Baltimore, Baltimore, Maryland, 2. Johns Hopkins University, Baltimore, Maryland*

Objective: To examine how the presence of comorbid dementia impacts antidepressant utilization in depressed Medicare beneficiaries. Methods: We conducted a retrospective analysis of Medicare beneficiaries in the MarketScan Medicare Coordination of Benefits database. The study cohort included beneficiaries ≥ 65 years old, diagnosed with depression, and continuously enrolled from 2006-2007. Using descriptive and regression analyses, we examined the impact of dementia diagnosis on antidepressant utilization and duration of antidepressant therapy, controlling for sociodemographics, hospitalization, physician visits, and comorbidities (using hierarchical condition categories [HCC]). Results: The prevalence of dementia in this depressed Medicare population (n=27,066) was 12.4%. Depressed beneficiaries with dementia were significantly older (79.1 vs. 73.9 years), had more comorbidities (mean HCC=7.1 vs. 5.7), more hospitalization days (12.9 vs. 5.6), and more medications (9.5 vs. 8.4) than their non-demented peers (all p<0.0001). Antidepressant use was 80% among the entire depression elderly cohort, with no difference by dementia status. However, mean duration of antidepressant therapy was significantly shorter for depressed beneficiaries with dementia than those without (507 days vs. 557 days; p<0.0001). Multivariable regression analyses demonstrated that dementia was associated with 4% lower use (p<0.0001) and 3% shorter duration of antidepressant therapy (p=0.0001). Conclusion: Depressed Medicare beneficiaries with dementia were less likely to use any antidepressant medication and use was of shorter duration than non-demented beneficiaries. Older adults with comorbid depression and dementia may be unable to express depressive symptoms and consequently, may receive inadequate treatment. The complexities of caring for this comorbid vulnerable population warrant awareness among practitioners.

### ASSOCIATION BETWEEN DEPRESSION PREVALENCE AND AGE IN A LARGE REPRESENTATIVE GERMAN SAMPLE OF PEOPLE AGED 53 TO 80 YEARS

B. Wild[1], W. Herzog[1], D. Schellberg[1], H. Brenner[2], E. Raum[2], *1. University Hospital Heidelberg, Department of General Internal Medicine and Psychosomatics, Heidelberg, Germany, 2. German Cancer Research Center, Division of Epidemiology and Aging Research, Heidelberg, Germany*

Introduction: The association between depression prevalence in late life and age is controversially discussed. The aim of the study was to determine the association between prevalence of clinically significant depression and age in a large representative sample of elderly German people. Method: In the second follow-up (2005-2007) of the German ESTHER cohort study, the 15-item geriatric depression scale (GDS-15) was administered to a representative sample of 8270 people aged 53 to 80 years. Prevalence of clinically significant depression was estimated using a GDS cut-off score of 5/6. The association between depression prevalence and age was investigated using the age categories [53-59; 60-64; 65-69; 70-74; 75-80]. The final logistic regression model included known risk factors for depression: gender, education, marital status, chronic disease, smoking, physical activity, cognitive impairment, and antidepressive medication. Results: 7897 participants (=95%) completed more than 12 GDS items and were included in the study. The prevalence of clinically significant depression was 15.9% (95%CI = [15.1; 16.7]. In the youngest age group, prevalence of depression was highest compared to the other age groups. Female gender, education of eighth grade or less, being separated, current smoking, multimorbidity, little physical activity, cognitive impairment, and antidepressive medication were significantly associated with higher depression prevalence. Adjusted Odds Ratios for the various age categories still reflected a U-shape association between age and depression. Conclusion: Depression prevalence in late life is associated with age. People older than 59 years have a significantly lower chance to be depressive than people aged 53 to 59 years.

### DEPRESSIVE SYMPTOMS, CHRONIC DISEASE, AND PHYSICAL DISABILITY AS PREDICTORS OF COGNITIVE FUNCTIONING

J. Chodosh[1,2], D. Miller-Martinez[1], C. Aneshensel[3], R.G. Wight[3], A.S. Karlamangla[1], *1. UCLA Division of Geriatrics, Los Angeles, California, 2. VA Greater Los Angeles Healthcare System, Los Angeles, California, 3. Community Health Sciences UCLA, Los Angeles, California*

Objective: The concurrent influence of depressive symptoms, medical conditions, and disabilities in activities of daily living (ADL) upon the rates of decline in older Americans' cognitive function is unknown. Design: This study examined a national sample of 6,476 adults born before 1924 to determine differences in cognitive function trajectories by prevalence and incidence of depressive symptoms, chronic diseases, and ADL disabilities. Cognitive performance was tested 5 times between 1993 and 2002 with a multifaceted inventory that we examined as a global measure (range: 0-35, standard deviation (SD) 6.00) and with word recall (range: 0-20, SD 3.84) analyzed separately. Results: Baseline prevalence of depressive symptoms, stroke, and ADL limitations were each independently and strongly associated with lower baseline cognition scores, but did not predict future cognitive decline. Each incident depressive symptom was independently associated with 0.06 point reduction (95% confidence interval (CI):0.02-0.10) in recall score, incident stroke with 0.59 point reduction in total score (95% CI:0.20-0.98), each new basic ADL limitation with 0.07 point (95% CI:0.01-0.14) reduction in recall score and 0.16 point reduction in total score (95% CI:0.07-0.25), and each incident instrumental ADL limitation with 0.20 point reduction in recall score (95% CI:0.10-0.30) and 0.52 point reduction in total score (95% CI:0.37-0.67). Conclusion: Prevalent and incident depressive symptoms, stroke, and ADL disabilities contribute independently to reductions in cognitive functioning in older Americans, but do not appear to influence rates of future cognitive decline. Therefore, prevention, early identification, and aggressive treatment of these conditions may ameliorate the burdens of cognitive impairment.

### QUALITATIVE FINDINGS FROM A RANDOMIZED CLINICAL TRIAL OF PSYCHOTHERAPY FOR ELDERS WITH DEPRESSION

E.K. Dakin, *School of Social Work, Colorado State University, Fort Collins, Colorado*

One advantage of qualitative research is its ability to elicit valuable data beyond the original, intended area of inquiry. This qualitative study examined the treatment experiences of participants in a 12-week course of psychotherapy as part of an NIMH-funded randomized clinical trial (RCT) comparing Problem Solving Therapy (PST) to Supportive Therapy (ST) for depressed older adults with mild cognitive impairment. In addition to the intended purpose of evaluating the research participants' therapy experiences, this study also revealed meaningful information about ways that their experiences as research subjects in an RCT had impacted their depression. Semi-structured individual qualitative interviews were conducted with 22 older adults with depression and mild cognitive impairment who had participated in the RCT. Individual qualitative interviews elicited participant perspectives about various aspects of their treatment experiences (e.g., expectations regarding treatment, what was most and least helpful about treatment). Interviews were digitally recorded and transcribed, and a transcript analysis was conducted using the qualitative analysis software NVIVO. A useful finding was participants' indication that the research component of the study impacted their treatment experience in both positive and negative ways. For example, some participants found that quarterly neuropsychological assessments associated with the study contributed to a marked increase in depressive symptoms. Findings from this study urge the consideration of possible unintended clinical implications when planning geriatric mental health interventions research. The implications of research participation as a treatment effect in addition to the psychotherapy itself must be considered when translating new psychotherapies from research to community settings.

## SESSION 2425 (SYMPOSIUM)

### USING VIDEO ANIMATION TO ASSESS MOBILITY IN OLDER ADULTS

Chair: *A. Marsh, Health and Exercise Science, Wake Forest University, Winston Salem, North Carolina*

The importance of the context of task performance in the assessment of mobility in older adults is generally understood but there is little empirical evidence that demonstrates how sensitive older adults might be to subtle changes in task demands. We collected data from 234 older adults (mean age=81.9y) on item responses to animated video clips, where mobility-related tasks were modified in a systematic fashion. There was a profound and systematic effect of walking speed, using a handrail while negotiating stairs, walking at different speeds outdoors, and carrying an object on older adults' perception of function, e.g., a three-fold increase in reporting the inability to walk at the fast speed compared to the slow speed for a minute or less. The data provide evidence that the contextual features and demands of a simple task such as stair climbing have a significant impact on older adults' self-reporting of ability related to mobility.

### VIDEO-ANIMATION ITEM BANKING, CALIBRATION, AND SELECTION USING ITEM RESPONSE THEORY

E. Ip, *Biostatistical Sciences, Social Science & Health Policy, Wake Forest University School of Medicine, Winston-Salem, North Carolina*

The development of the Mobility Assessment Tool—MAT-involves several components: (1) item bank of animation-based items, (2) item selection for a short-form, and (3) computerized adaptive test (CAT) implementation. We focus on (1) and (2). Item banking includes: domains identification, item generation and refinement, data collection, and item calibration. Using item response theory (IRT), a sample of 234 of older adults was used to calibrate the items. Based on item performance and other substantive considerations, we selected 10 items from the item bank to form the short form: MAT-sf. The IRT framework provides a rigorous scientific approach to assess mobility and also allows future adaptation of MAT to computer adaptive testing and the assessment of possible differential item bias across different subpopulations. To facilitate the general use of the MAT-sf, both a portable program that could be downloaded to a local computer and a web-based program were developed.

### DEVELOPMENT AND VALIDATION OF A VIDEO-ANIMATED TOOL FOR ASSESSING MOBILITY

W. Rejeski, *Wake Forest University, Winston-Salem, North Carolina*

We describe the development and validation of the Mobility Assessment Tool—MAT-sf—that consists of 10 animated videos. Measures used in validation included the Pepper Assessment Tool for Disability (PAT-D), the Short Physical Performance Battery (SPPB), and 400-m walk test. Participants (166 women, 68 men, average age=81.9y) had a variety of comorbidities. The study sample had evidence of compromised physical function, yet was heterogeneous on the SPPB (Mean = 8.6, range 2-12). The MAT-sf had good content validity, excellent test-retest reliability (r = 0.93), and criterion validity with the PAT-D. The MAT-sf added unique variance to the prediction of SPPB scores and 400-m gait speed over and above the PAT-D mobility subscale. The MAT-sf also discriminated between older adults who completed or failed the 400-m walk test. The MAT-sf is an innovative, psychometrically sound measure of mobility. It has utility in epidemiological studies, translational science, and clinical practice.

## SESSION 2430 (SYMPOSIUM)

### ART CART: DOCUMENTING THE CULTURAL LEGACY OF AGING ARTISTS

Chair: *V.H. Raveis, Psychosocial Research Unit on Health, Aging and the Community, New York University, New York, New York*

Co-Chair: *J. Jeffri, Teachers College Columbia University, New York, New York*

Discussant: *L. Quijano, Colorado State University, Fort Collins, Colorado*

A recent study of professional NYC visual artists (n=146) age 62+ (ABOVE GROUND, www.tc.edu/rcac ), revealed that 61% have made no preparation for their work after their death, 75% have no will, 95% have not archived their work; 75% made no use of services offered by arts service organizations, and 20% have no documentation of their work at all. These statistics are even more alarming due to the fact that more than half feel they have done the best work of their lives. This symposium will describe ART CART, an innovative, intergenerational, arts legacy educational project. ART CART connects aging professional artists with graduate students from different disciplines to undertake the preparation and documentation of the artist's creative work. It offers artists and students an educational experience that will help shape the future of our cultural legacy. Over the course of an academic year, after completing a targeted curriculum in gerontology, teams of students, each working with a single visual artist, document a number of works, guided by standards and tools developed by the Research Center for Arts & Culture and the Joan Mitchell Foundation, e.g., obtaining high-quality digital images and relevant historical, biographical, and artistic background information. A University-wide partnership of graduate programs in Arts Administration, Art Education, Public Health, Social Work, and Occupational Therapy at Columbia University is piloting ART CART, establishing a replicable methodology and comprehensive toolkit to implement this interdisciplinary, intergenerational gerontological educational program in other academic settings throughout the country.

### PERSPECTIVES ON USING THE ARTIST'S STUDIO AS AN EDUCATIONAL RESOURCE

J. Jeffri, *Teachers College Columbia University, New York, New York*

The ABOVE GROUND study revealed an unmet need as artists "transition" into older age and confront end-of-life issues. ART CART represents an innovative educational program that both educates and provides an important service to the aging population while preserving our cultural legacy. By pairing interdisciplinary teams of graduate students with some of the study's aging artists, we help artists document and review their life's work, create a deeper understanding of the aging population across disciplines, and educate younger artists about what it takes to create, cultivate and document work to help them make informed decisions about their professional practice and artistic legacy. Working in an older artist's studio to help the artist document his artistic efforts will give graduate students exposure to the lived experiences of aging artists and hands-on experience applying classroom instruction to a real world setting and will counter positive and negative stereotypes of aging.

### INVOLVING AGING ARTISTS IN INTERDISCIPLINARY ACADEMIC TRAINING AND SERVICE PROGRAMS: LESSONS LEARNED

V.H. Raveis, *Psychosocial Research Unit on Health, Aging and the Community, New York University, New York, New York*

ART CART's intergenerational, educational experience and mentorship in the preservation of artistic and cultural legacy is contributing to the volunteerism and generativity paradigms. The program includes formal course instruction as well as didactic learning experiences. Older artists are actively engaged in the program's instructional activities, serving as exemplars of the continuity and evolution of artistic expression across the life course and challenging students to rethink the way one grows old. In turn, aging artists participating in the program receive assistance in the process of organizing their studios and documenting their work. The presentation will describe ART CART's program components as well as the initiative's strategic planning phase and the development of the interdisciplinary university partnerships. Lessons learned from the program implementation process will be discussed with specific focus on strategies to sustain interdisciplinary academic training and service programs and procedures to facilitate replication of this program in other institutions nationwide.

### ART CART: INTERDISCIPLINARY TEAMWORK TO MAXIMIZE OLDER ADULTS' CONTINUED PARTICIPATION AS ARTISTS

P.A. Miller, *Columbia University, New York, New York*

ART CART, a didactic, community service-learning project, incorporates interdisciplinary teamwork. The project represents an academic partnership involving faculty and students from six different schools. Two-person teams of graduate students from the humanities and allied health sciences are paired with an aging artist. Working in the classroom and artists' studios, the student teams, guided by program faculty, learn together the process of documenting the artists' work, defining and negotiating their role while ensuring that the individual artists are included in collaborative strategies to meet their identified needs, specific objectives and goals. Consistent with adult learning theory, interdisciplinary teamwork and collaborative action research, the team members will ask each other regularly: "To what extent did we meet our objectives today? How might we do better?" This process is ongoing and evaluative. This pilot program illustrates the complementary relationship and combined utility of adult learning theory, interdisciplinary teamwork, and collaborative action research.

### INFUSING GERONTOLOGICAL CONTENT INTO AN INTERDISCIPLINARY ARTS ACADEMIC PROGRAM

V.M. Rizzo, *Columbia University, New York, New York*

Students participating in the ART CART educational program are likely to have limited knowledge of the current aging demographics, theories of aging behavior and human development, social/cultural issues factors related to the aging experience, coping with change and loss, and theoretically based skills that students can apply to their work with the aging artists. These skills include, but are not limited to social work/occupational therapy assessments, communication skills and techniques used for work with older adults, and strategies for teaching older adults new skills, such as the use of the computer software to document their art work. This presentation will describe the infusion of gerontological content into academic course work and the ART CART internship experience to help students gain knowledge about, and experience working with older adults, and aging artists in particular. Participants will be provided with the syllabus for the interdisciplinary graduate course in gerontology specifically designed for students participating in the ART CART Program. We will discuss lessons learned from the implementation of this course in the pilot program. We will also discuss other ways to infuse gerontological content into the program including supervision, collaboration with student organizations focused on aging to sponsor events focused on innovative educational programs in aging and the arts, and presentations by students in the ART CART educational program.

### INTEGRATING FIELD EDUCATION IN SOCIAL WORK WITHIN AN ARTS AND AGING SERVICE PROGRAM

W.B. Nowell, *Columbia University, New York, New York*

For the last ten years with funding from the John A Hartford Foundation, the Social Work Leadership Institute at the New York Academy of Medicine has developed and implemented the Hartford Partnership Program in Aging Education (HPPAE), a specialized rotation model of field education for masters degree level social work students interested in working with the older adult population. Seventy-two U.S. schools of social work currently offer HPPAE in their graduate level programs. Social work students participating in the ART CART internship program are HPPAE Fellows, who will complete their spring internship rotation in the ART CART program. In this presentation, we will discuss the integration of the ART CART educational program into an existing graduate education program specifically designed for social workers interested in the older adult population. We will discuss: 1) how the HPPAE model, training materials, and ongoing evaluation informed the development of the ART CART implementation; 2) how the ART CART program has encouraged further innovation in the existing HPPAE model; and, 3) how the multi-disciplinary faculty/student participation in ART CART has enhanced learning and raised awareness of aging issues across disciplines on the university campus.

## SESSION 2435 (PAPER)

## DISABILITIES IN THE LIVES OF OLDER ADULTS

### PATHWAYS TO SUCCESS: EMPLOYMENT JOURNEYS OF OLDER WORKERS WITH DISABILITIES

N. Shugrue, I.C. Reed, J. Robison, *University of Connecticut Center on Aging, Farmington, Connecticut*

Older adults with disabilities are an often-overlooked group of existing and potential workers, despite having a strong desire to work. The combination of age and disability presents unique challenges for those who wish to remain in or re-enter the workforce. It also presents public policy issues for state and federal governments attempting to encourage employment of older adults and people with disabilities. This qualitative study, funded by the Centers for Medicare and Medicaid Services Medicaid Infrastructure Grant, employs a longitudinal series of in-depth, in-person interviews chronicling the experiences of people with disabilities in their journeys, over time, to find and maintain meaningful, competitive employment. The study began in early 2008 and has continued with interviews at six-month intervals. Twenty-nine people have enrolled in the study, ten of whom (34%) are over the age of 50. Participants were recruited through follow-up telephone calls to people who sought information and assistance from a state-run technical assistance center for people with disabilities. This paper describes results, with particular emphasis on the cohort of adults age 50 and above and how their journeys differ from their younger counterparts. Themes that emerged in the study include employment-related issues such as finding a job, problems on the job due to disability, experiences with external sources providing help, barriers encountered, and the importance of personal and family attitudes. Results for the first two years of the study provide insight into the employment barriers, challenges, and successes of study members, and how they differ by age.

### THE IMPACT OF AGING AND DISABILITY ON LABOR FORCE PARTICIPATION RATES

K. Robinson[1], C. Roehrig[1], D. Klayman[2], K. Lida[3], P. Hughes-Cromwick[1], *1. Altarum Institute, Alexandria, Virginia, 2. Social Dynamics, LLC, Gaithersburg, Maryland, 3. U.S. Department of Labor, Washington, District of Columbia*

Labor force participation (LFP) rates decline steadily after people reach age 50. Using data from the American Community Survey, this study compares LFP rates for employees with disabilities, to those without, to calculate a ratio to estimate labor force years lost to disability. Between ages 50 and 60, 20 percent of the decline is attributable to increased prevalence of disabilities; and by age 70, only a small portion of the decline is attributable to disabilities. The types of disabilities that have the greatest impact on LFP are difficulty walking, dressing, and doing errands; least impact, difficulty seeing and hearing. Disabilities associated with concentrating, while a significant barrier to LFP, do not grow in prevalence between the ages of 50 and 75. As more people, especially women, remain in the labor force past age 50, these findings will help policymakers better understand the growing trend in older workers with disabilities.

### FRAILTY, DISABILITY AND OLD AGE: A REAPPRAISAL

P. Higgs, C.J. Gilleard, *Research Strategy, UCL, London, United Kingdom*

Frailty has become a topic of increasing interest in health care. No longer treated as a catch-all term for agedness, decline and disablement it has acquired a more precise definition, applied to those individuals whose ‘aged’ state is seen to put them at risk of adverse outcomes. This transformation is we argue the outcome of a more general differentiation of terms that were previously used to categorise the weak and marginal within society. Old age now labelled as ‘later life’ has become re-articulated as a successful life stage relatively free from impairment. Disability has been re-positioned and its links with impairment attenuated while chronic illness has acquired a new narrative of its own. This has left frailty behind, redolent still with all the old negative attributes of marginality, but now more than ever evacuated of any remaining elements of ‘status’ or ‘agency’. Frailty is defined less by the identities of those who are deemed frail than by what frailty seems to augur in its direction of travel – a journey toward unspecified adverse outcomes. This re-positioning, we suggest, helps lay the foundation of a social imaginary of ‘the fourth age’.

# SESSION 2440 (PAPER)

## FAMILIES AND SOCIAL RELATIONSHIPS

### THE GRANDPARENT-GRANDCHILD INTERACTION AND ITS IMPACT ON GRANDPARENTS’ WELL-BEING

S. Won, *Social Welfare, Daegu Cyber University, Gyeongsan, Republic of Korea*

Grandparents are considered a resource in the family because they provide alternative child care support and serve as role models for grandchildren. Thus, the purpose of this study was to identify factors associated with the closeness between the grandparent and the grandchild. Also, the researcher sought factors affecting the association between the grandparent-grandchild relationship and the grandparent’s well-being. This study conducted secondary data analysis using the National Survey of Families and Households (NSFH). Structural Equation Modeling (SEM) was applied to address the relationship among variables. Findings indicated that grandparents who spent more nights with their grandchild had lower levels of the well-being than those who rarely spent nights with their grandchild. On the other hand, frequency of communication, frequency of meeting, and the grandparent’s self-rating of closeness with his or her grandchild were positively related to the well-being of grandparents. Thus, it is assumed that the grandparents’ well-being increased up to the point where grandparenting became a burden for them. In this study, spending nights with the grandchild without the parent of the child seems to be the point where the grandparents start feeling burdened. This study suggested that social support should target both custodial and noncustodial grandparents because noncustodial grandparents who put great effort into child care feel the same kind of stress as custodial grandparents. In addition, cultural diversity should be considered in work with grandparent caregivers because various factors are associated with the well-being of the grandparents.

### INTIMATE PARTNER VIOLENCE AND OLDER WOMEN: A EUROPEAN STUDY

B. Penhale[1], T. Goergen[2], B. Nagele[3], B. Haller[4], H. Perista[5], M. Halicki[6], O. Toth[7], *1. Centre for Health & Social Care Studies, University of Sheffield, Sheffield, United Kingdom, 2. German Police University, Munster, Germany, 3. Zoom NGO, Gottingen, Germany, 4. IKF (Institute of Conflict Research), Vienna, Austria, 5. CESIS NGO, Lisbon, Portugal, 6. University of Bialystok, Bialystok, Poland, 7. Hungarian Academy of Sciences, Budapest, Hungary*

This EU-funded (Daphne III programme) study on Intimate Partner Violence (IPV) and Older women includes partners from Austria, Germany, Great Britain, Hungary, Poland, and Portugal. The study runs between January 2009 and December 2010 and addresses the question to what extent women aged sixty or older experience violence by partners or ex-partners (intimate partner violence), what kind of help and support they seek and receive and what kind of support they need. Until now, comparatively little is known about this issue and this research will help to address that knowledge deficit. The first phase of the study consisted of data collection about IPV and older women from a variety of sources (criminal justice agencies, social services etc) in each country. Phase two consisted of a survey of organizations about the extent to which they have worked with older women who have experienced IPV since 2006 and a number of interviews were held with professionals who had experience of work in this area. The final phase consists of interviews with a small number of older women who have experienced IPV in later life. This presentation will outline the method and content of the study. Findings from the different phases will be presented. This will be followed by discussion of some of the issues raised by the topic and the research. This paper will provide participants with an understanding of the key issues relating to Intimate Partner Violence and older women in Europe. It will provide opportunities for international discussion and comparison.

### AGE AND LONELINESS: A COMPARATIVE ANALYSIS OF 25 EUROPEAN COUNTRIES

C. Victor[1], K. Yang[2], *1. Brunel University, Uxbridge, United Kingdom, 2. Durham University, Durham, United Kingdom*

Background: The relationship between age and loneliness is intriguing. While loneliness is perceived as a problem of old age, there is some evidence suggesting that the peak age for experiencing loneliness is adolescence. Examining this relationship demonstrates more complexity if we adopt a cross-national perspective. Data for examining both the prevalence of loneliness across age groups and a range of nation states are sparse. This exploratory study describes the prevalence of loneliness across different age groups in twenty-five European nations, focussing upon those aged 65+. Method: Analysis of 3rd wave of the 2006/7 European Social Survey which included a 'self rating' loneliness scale asked of all 47,099 participating adults aged 16+. Results: Significant' loneliness demonstrates an 'age-related' linear trend from 6.9% (aged 15-19) to 16.9% (aged 80+): the trend for intermediate loneliness is U-shaped with the highest rate, 29.5%, reported by those aged 20-29. We developed a tripartite typology of countries based upon age-related trends and levels of significant loneliness thus: (a) Western and Northern European countries with age related linear trend but low prevalence rates (6% aged 65+); (b) Eastern European countries with the same pattern but high prevalence rates (25% aged 65+); and (c) a diverse range of countries with a U-shaped distribution with the youngest and the oldest groups reporting the highest levels of loneliness Conclusions: We need to examine the common features among countries included in our differing groups as a first step towards explaining these significant variations in loneliness in later life across Europe.

### FRAMING SOCIAL ISOLATION IN LATER LIFE: A LIFE COURSE PERSPECTIVE

D. Cloutier-Fisher, K. Kobayashi, *Geography and Centre on Aging, University of Victoria, Victoria, British Columbia, Canada*

According to the literature being socially integrated is health promoting, while social isolation increases individual vulnerability in relation to health and well-being. Social isolation refers to having limited access to positive social supports. This paper uses a life course perspective (LCP) to frame our understanding of how the risk of social isolation is influenced by the interplay between occupational, family and geographical trajectories and not just the size of support networks in later life. An interdisciplinary research team analyzed data from qualitative interviews with 27 older adults living on Vancouver Island, British Columbia. The results, organized into four categories, underscore the importance of personal identity (e.g., preferences for solitude vs. social integration), support network composition (e.g., the nature of social relationships), life transitions and trajectories (e.g., work and family) and geographical/environmental characteristics (e.g., residential mobility of families) as key influences on experiences of social isolation. Findings indicate that older adults are a very diverse group and relationships in later life are highly variable. The LCP is an appropriate analytical framework for examining the highly complex, multilayered nature of social isolation, an experience that cannot simply be understood with reference to the number of friends or family one has to rely upon. Policymakers must remain attentive to the diversity of individual characteristics and experiences among older adults, acknowledging the insights that emerge from such individuals' narrated life histories in order to more fully interpret the meaning of social isolation and its implications for health and well-being in later life.

## SESSION 2445 (PAPER)

## HOSPICE UTILIZATION

### STATE POLICIES ON FREESTANDING HOSPICE FACILITIES

K. Chung, E.L. Essex, J. Jung, I. Sheelam, *Governors State University, University Park, Illinois*

While hospices usually provide care at patients' homes, one in 5 hospices also operate facilities. Particularly, a recent growth in the number of freestanding hospice facilities (FHF) is noticeable. FHFs are defined as freestanding facilities (not in a hospital or a nursing home) owned and operated by hospices that also operate home hospice programs. Despite this new trend, no systematic study has been done on the state policies that may affect the supply and the geographical distribution of FHFs. To identify classification themes for the policies, we examined state hospice licensure law, certificate of need (CON) law, and administrative rules on FHF licensure applications. This examination has led to the identification of seven themes for classifying FHF state policies: 1) whether state licensure law recognizes FHF as a licensure type; 2) whether state licensure law limits the number of FHFs; 3) whether state licensure law specifies rules that will ensure an equitable distribution of FHFs; 4) whether there is a CON law requiring the permission for establishing FHFs; 5) whether a state imposes a bed-number limit on a FHF; 6) whether there are distinctions in the bed type (e.g., a bed licensed for inpatient care only, or a dual bed licensed for both residential and inpatient uses); 7) whether there are reimbursement policies for Medicaid eligibles who stay in FHFs. This study will help state policy makers compare their own policies with other states' and adopt features that are most relevant to their evolving circumstances surrounding the supply/demand for FHFs.

### THE ROLE OF HOSPICE IN MAINTAINING RESIDENTS IN ASSISTED LIVING

D.J. Dobbs, *School of Aging Studies, University of South Florida, Tampa, Florida*

In these times of fiscal constraint, state policymakers find it necessary to provide the most cost effective LTC. In Florida, assisted living (AL) is a LTC option that is potentially more cost effective than a nursing home (NH). The provision of hospice care in AL may be a way to reduce state costs of LTC while providing necessary palliative care to residents. This study conducted Cox proportional hazards regression models to estimate risk of NH placement over a 2-year study period (2005-2007) (N=2,615). The Cox model was used to estimate whether the risk of discharge varied according to individual covariates (age in years, gender, 12 month total Medicaid claims, race, Charlson Comorbidity baseline index, hospice use, and hospital use, and facility covariates (for profit status, bed size category, geographic location, and licensure type). Datasets included FL Medicaid Utilization files, Hospice Medicaid claims data, publicly available provider information and vital statistics. Approximately 22% of decedents had used Medicaid hospice while residing in AL. There were 720 (27.5%) who had the event of discharge to NH. Individual covariates that increased the risk of discharge to NH included female, increased 12 month total Medicaid claims, White race, higher CCI score, and receiving hospice. Facility covariates that increased the risk of discharge included urban location, larger bed size category, and limited mental health license. Implications for the role of hospice in maintaining residents in AL will be discussed.

# SESSION 2450 (PAPER)

## SPIRITUALITY AND RELIGION - SRPP PAPER SESSION

### COMPARING THE ASSOCIATIONS OF WELLBEING, FAITH AND RELIGIOUS PRACTICE DURING MIDLIFE AND OLDER LIFE

C. Waldegrave, *Family Centre Social Policy Research Unit, Wellington, New Zealand*

The aim of this research is to identify the drivers of wellbeing and quality of life among the midlife and the older population. Amartya Sen's capabilities approach has formed the conceptual basis of the theoretical framework (Sen, 1999). This paper will report on the results of a study of ageing and wellbeing with two national random samples of 1,680 New Zealanders aged 65 to 84 years and 1,958 aged 40 to 64 years, using computer assisted technology interviewing (CATI). A theory driven approach to the survey questionnaire construction led to the selection of the domains of wellbeing, which included faith and religious practice. These variables were compared with a range of objective and subjective wellbeing measures, including the World Values Survey Life Satisfaction Question and various leisure pursuits. For the older group, significant associations were found between the importance of faith, religious practice and wellbeing. A higher than expected number of older people considered faith to be important to them. Strong gender and significant cultural differences were found. Other important associations included the importance of faith and particular community involvement and leisure pursuits. For the midlife group similar significant associations were found, but fewer were affiliated to some form religion and considered faith to be important. Gender differences were less apparent. The results demonstrate significant associations between faith, religious activities and wellbeing. The findings are particularly important given the general neglect of this area of satisfaction and wellbeing for many older people in ageing research and public policy environments.

### SPIRITUALITY IN CHINESE CONTEXT: A PERSPECTIVE FROM ELDERS AND THEIR RELATIVES IN HONG KONG

C. Chan[1], “. Lou[2], S. Fok[1], A. Tsui[1], *1. Elderly Services Section, Community Services Division, Tung Wah Group of Hospitals (TWGHs), Hong Kong, Hong Kong, 2. Department of Social Work & Social Administration, Sau Po Center on Ageing, The University of Hong Kong, Hong Kong, Hong Kong*

Aims: Spirituality is the basic dimension of human development and plays an important role in performing a holistic care of the human being. This study aims to explore the elder's views on the perception and conceptualization toward spirituality in Chinese context. Method: Four focus groups were run that guided by a semi-structured interview guideline. Participants were purposefully recruited from residential homes and community centres run by TWGHs including elders, staff and carers. Results: In the views of the Chinese older adults and their caregivers, the conceptualization of spirituality is in line with Chinese collective culture tradition such as family-oriented and relationship-directed with very limited religious element. Traditional Confucian value also guided them to interaction with those complex social relations. Maintaining a harmonious relationship is a way to achieve their spirituality and optimal being in life. The framework of Chinese spirituality model is then developed, which conceptualizes spirituality as a dynamic status of purposing harmonious relationships between the person and his/her environment. This includes his/her ancestors, and/or "God", the nature, the people around and him/herself. Conclusion: The findings of the current study suggest that from elders' and their relatives' perspective, the concept of spirituality in Chinese context should be understood in regard with relation-orientation and interdependent self-construct of Chinese people. Emphasis on helping elders to expand harmonious relationships with different systems can improve their spirituality in holistic care.

### FACTORS RELATED TO JEWISH AND CHRISTIAN ELDERS HELP SEEKING FROM CLERGY VERSUS FORMAL MENTAL HEALTH SERVICES

J. Pickard[1], F. Tang[2], *1. Universtiy of Missouri-St. Louis, St Louis, Missouri, 2. University of Pittsburgh, Pittsburgh, Pennsylvania*

Background: Clergy provide substantial amounts of counseling services to older adults, and they are an important component of the de facto system of mental health services. The purpose of this study was to determine which factors are predictive of older adults' seeking help from clergy versus other forms of mental health counseling. Methods: This study used the Andersen's behavioral model of health service utilization. Data were from the Naturally Occurring Retirement Community (NORC) Demonstration Project in which study participants (N=317) were over age 65 and lived in the community; 65% were Jewish, 25.6% were Christian, and 9.5% reported another or no faith tradition. Multinomial logistic regression was used to compare sources from which help was sought. Results: Study participants reported seeking help from clergy at rates greater than from other sources. Younger age, higher levels of intrinsic religiosity, and greater feelings of stress were associated with seeking help from clergy versus not seeking help. Feelings of stress and attendance at religious services were positively associated with seeking help from a formal source versus not seeking help. Those most frequently attending religious services were likely to seek help from clergy rather than from other formal sources. No differences were found between Jewish and Christian participants. Discussion: The demand for limited resources will leave a shortage of trained workers to address older adults' mental health issues. This shortage requires creative solutions, such as public private partnerships in which mental health professionals can help clergy better to identify problems and make referrals.

### FACTORS RELATED TO CLERGY REFERRAL OF OLDER ADULTS FOR MENTAL HEALTH SERVICES

J. Pickard, *Universtiy of Missouri-St. Louis, St Louis, Missouri*

Background: Clergy provide large amounts of counseling and mental health services to older adults experiencing emotional upset, yet at times clergy need to refer older adults for more in-depth mental health services. The purpose of this study is to determine what factors are associated with clergy referral of older adults to social workers and other professionals for further mental health services. Methods: This study employed Dillman's tailored design method (Dillman, 2007). Clergy from St Louis City and County (N=521) completed the survey that included basic demographic information, questions regarding training, relationships with mental health professionals, and a 7-item measure of attitudes toward older adults and mental illness. Logistic regression was used to test the hypothesis that clergy with more positive attitudes toward older adults' mental illness are more likely to refer older adults that they counsel for further help from mental health professionals. Results: Results indicate that clergy who report better relationships with mental health professionals, those with higher levels of education, females, and those reporting more positive attitudes toward older adults' mental illness are more likely to refer older adults to further help from mental health professionals. Discussion: To help improve the efficacy of this important part of the de facto mental health system, social workers should consider taking the lead in reaching out to clergy to improve relationships and to help reduce stigmas and misinformation regarding older adults and issues of mental health.

## SESSION 2455 (SYMPOSIUM)

### THE 2010 NATIONAL SURVEY OF RESIDENTIAL CARE FACILITIES (NSRCF): A NEW RESOURCE ON A KEY SECTOR OF THE LONG-TERM CARE INDUSTRY

Chair: *L. Harris-Kojetin, National Center for Health Statistics, Hyattsville, Maryland*
Co-Chair: *E. Rosenoff, Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services, Washington, District of Columbia*

The aging of the U.S. population, particularly those 85 and older, will lead to an increase in the number of people who need long-term care services and supports. This is especially true for people who can no longer live alone but do not require the skilled level of care provided by a nursing home. No national data collection effort exists for residential care settings, yet previous estimates suggest their magnitude may rival that of nursing homes. This symposium introduces a first time nationally representative survey by the federal government—conducted by the U.S. Department of Health and Human Services—that focuses on residential care facilities and residents. The main goals of NSRCF are to estimate the size of the U.S. residential care industry and determine the characteristics of facilities and residents. This symposium will inform the research community about NSRCF and future data availability, as the results will be of interest to policy makers, researchers, and providers. Individual presentations in this symposium will cover: 1. Purpose and Goals of NSRCF; 2. Sample Design and Sample Frame Development for NSRCF; 3. Data Collection Approach, Challenges, and Experience on NSRCF; and, 4. Overview of Content in NSRCF.

### PURPOSE AND GOALS OF THE NATIONAL SURVEY OF RESIDENTIAL CARE FACILITIES (NSRCF)

E. Rosenoff[1], L. Harris-Kojetin[2], *1. US DHHS- Assistant Secretary for Planning and Evaluation, Washington, District of Columbia, 2. National Center for Health Statistics, Hyattsville, Maryland*

This presentation highlights the need for NSRCF, explains why the U.S. Department of Health and Human Services is conducting NSRCF, and describes the goals of NSRCF. A shift in Medicaid long-term care policy towards community-based care over the past 30 years and independent growth in private-pay residential care since the late 1980s have led to a growing, yet still not clearly understood, set of alternatives to care provided at home and in nursing homes. NSRCF fills a gap in our knowledge of the long-term care system by providing estimates of the universe of residential care places (e.g., assisted living, board and care homes, etc.) and the characteristics of people living in these settings. Collecting this information is critical because it is impossible to understand the changing dynamics of long-term care without a complete picture of the entire spectrum of options available to elders who need assistance with daily living activities.

### SAMPLE DESIGN AND SAMPLE FRAME DEVELOPMENT FOR THE NATIONAL SURVEY OF RESIDENTIAL CARE FACILITIES (NSRCF)

J. Wiener[1], A.M. Greene[1], L.J. Lux[1], R.E. Johnson[1], E. Rosenoff[2], *1. RTI International, Washington, District of Columbia, 2. U.S. Department of Health and Human Services, Washington, District of Columbia*

Constructing the sample frame and sample design for the NSRCF was complicated. Definitions and nomenclature regarding residential care facilities (RCFs) vary widely across states. Two difficult issues in applying the study definition of RCFs were identifying and excluding licensure categories that exclusively serve persons with intellectual disabilities or severe mental illnesses and determining whether the regulations required 24-hour care supervision. Obtaining lists of licensed facilities, contact information, owners, administrators, and other information was an arduous process involving extensive interaction with state officials. Developing an effective sample design was challenging because of the large number of small facilities that accounted for a small proportion of beds. Criteria to evaluate alternative designs included their ability to detect differences of varying magnitudes. The final study design is a random sample stratified by bed size with a goal of obtaining 2,250 facility interviews and 8,190 interviews about residents.

### DATA COLLECTION APPROACH, CHALLENGES, AND EXPERIENCE OF THE 2010 NSRCF

M. Sengupta, A. Moss, E. Park-Lee, C. Caffrey, L. Harris-Kojetin, *CDC/NCHS, Hyattsville, Maryland*

A new establishment survey presents new challenges in data collection, requiring practical and innovative approaches to enhance the field experience. This presentation will outline the challenges during data collection, and the strategies and tools used to overcome these challenges, in the context of the first national survey of residential care facilities. These include approaches to improve response to the survey and to enhance data quality. Approximately 2,250 facilities were selected for the study to be representative of all state-regulated residential care and other assisted living providers in the United States with four or more beds. Within participating sampled facilities, between three and six residents were randomly sampled per facility, based on facility size. Between April and October 2010, in-person interviews were conducted with residential care administrators and their staffs to collect information about the facilities and residents; no residents were interviewed.

### CONTENT OF THE 2010 NATIONAL SURVEY OF RESIDENTIAL CARE FACILITIES (NSRCF)

C. Caffrey[1], E. Park-Lee[1], E. Rosenoff[2], L. Harris-Kojetin[1], *1. National Center for Health Statistics, Hyattsville, Maryland, 2. Assistant Secretary for Planning and Evaluation (ASPE), Washington, District of Columbia*

This presentation provides an in-depth look at the content collected in the NSRCF and provides examples of potential policy and practice-relevant topics that may be explored using the data. NSRCF will collect facility level information as well information on sampled residents. Using data from NSRCF, researchers and policymakers will be able to describe facility characteristics, services provided, and fees charged; describe the socio-demographic characteristics and physical and cognitive functioning of residents; and compare these facility and resident characteristics by facility size or geographic region. Of interest for researchers, providers, and policymakers, it will also be possible to explore special topics, such as electronic information systems, end-of-life care, medication management, dementia special care units, staffing, admission and discharge policies, use of Medicaid coverage for services, emergent care use, and vaccination programs. The presentation will also discuss the limitations in survey content.

## SESSION 2460 (SYMPOSIUM)

### THE MONEY FOLLOWS THE PERSON REBALANCING DEMONSTRATION: FINDINGS FROM NATIONAL AND STATE EVALUATIONS

Chair: *J. Robison, University of Connecticut Health Center, Farmington, Connecticut*
Co-Chair: *S. Simon, Mathematica Policy Research, Inc, Washington, District of Columbia*
Discussant: *D. Lipson, Mathematica Policy Research, Inc, Washington, District of Columbia*

The Money Follows the Person Rebalancing Demonstration (MFP) is a multi-year, 30 grantee program, funded by the Centers for Medicare and Medicaid Services (CMS), seeking to help states shift long term care (LTC) Medicaid services from a historical institutional orientation to greater use of Home and Community-Based Services (HCBS). All participating states set benchmark goals for transitioning people out of nursing homes and other institutional settings and for increasing the proportion of Medicaid LTC dollars spent on HCBS, in addition to other state-specific benchmarks related to rebalancing. The national MFP evaluation examines extensive financial, quality of care and quality of life data for participants who transition out of institutions at multiple time points. Further, many ongoing state-level evaluations examine other aspects of the transition process and their own success at reaching state-specific goals. This symposium includes one paper with results from the national evaluation and two papers from MFP state evaluations. The national evaluation paper presents quality of life data collected from residents of institutions prior to transition to the community. A second paper addresses the myriad challenges to transitioning out of an institution, collected by the Connecticut MFP evaluators. The third paper focuses on the economic impact of an MFP-supported program in Arkansas, identifying Medicaid recipients living in the community in need of HCBS, and diverting them from institutionalization. Taken together, these three papers illustrate the broad reach of MFP to demonstrate long term care rebalancing on a large scale.

### INSTITUTIONAL QUALITY OF LIFE AMONG MONEY FOLLOWS THE PERSON PARTICIPANTS: VARIATION ACROSS POPULATIONS

S. Simon, C. Irvin, *Mathematica Policy Research, Cambridge, Massachusetts*

Because transition to the community is likely to have a differential effect across target populations, the objective of this paper is to examine variation in quality of life across institutional long-term care settings for MFP participants prior to transition to the community. We examined a cross-section of 999 participants' MFP-Quality of Life survey responses prior to discharge from an institutional setting. Our initial analyses indicate that, in terms of general satisfaction with the way they live their lives in institutional settings and help received in the institution, younger nursing home residents (under age 65) and elderly nursing home residents (aged 65 and older) were significantly less satisfied compared with residents of ICFs-MR. Due to lower levels of self-reported quality of life, younger nursing home residents may be the most interested in participating in transition programs and have the greatest potential for improvement in quality of life.

### CHALLENGES TO TRANSITIONING OUT OF AN INSTITUTION: FINDINGS FROM THE CONNECTICUT MFP PROGRAM

J. Robison[1], M. Porter[1], N. Shugrue[1], D. Lambert[2], *1. University of Connecticut Health Center, Farmington, Connecticut, 2. CT Department of Social Services, Hartford, Connecticut*

Almost 200 people moved from institutions to the community during the first 14 months of Connecticut's Money Follows the Person Rebalancing Demonstration. Transitions took from 3 days to almost a year. Further, over 350 cases closed without transitioning. Numerous challenges arise that slow or even prevent transitions. Understanding the types and frequency of specific challenges is critical for successful program implementation. This paper reports data from a systematic, standardized transition challenge tracking process that is part of CT's MFP evaluation. MFP Transition Coordinators complete a cumulative Transition Challenge checklist in a web-based consumer tracking system. The most common challenges are physical health problems (16%), lack of consumer engagement or life skills (15%), mental health problems (13%), difficulties with HCBS waivers (13%), and housing (11%). We present differences in challenges between those who transition versus close without transition, and across disability types. Strategies developed to address common challenges will be discussed.

### USING COMMUNITY HEALTH WORKERS AND CONSUMER CHOICE TO REBALANCE LONG-TERM CARE AND COSTS IN ARKANSAS

G.P. Mays, H. Felix, *University of Arkansas for Medical Sciences, Little Rock, Arkansas*

Consumer preferences and cost pressures led Arkansas to develop a two-pronged approach to redirect long-term care. Upstream, the Arkansas Community Connector Program (CCP) uses community health workers to identify residents at high risk of entering institutional care and link them to needed home and community-based services (HCBS). Downstream, the Arkansas MFP Transitions Program gives institution-dwelling residents expanded choices for returning to HCBS care. Using a pre-post analysis of 919 CCP participants compared with a propensity-score matched group of nonparticipants, we find that HCBS use increased and nursing home admissions declined significantly under the program ($p<0.01$), resulting in a 24% reduction Medicaid spending over three years. Correspondingly, the MFP program transitioned 63 institutionalized recipients to HCBS care during its initial two years, with a reinstitutionalization rate of less than 5%. Findings suggest that LTC models using community health workers and consumer choice may help rebalance service needs, preferences, and resources efficiently.

## SESSION 2465 (PAPER)

## ASSESSMENT OF NEEDS AND CAPACITIES

### INSTRUMENTS FOR COMPREHENSIVE NEEDS ASSESSMENT IN INDIVIDUALS WITH COGNITIVE IMPAIRMENT AND DEMENTIA

R. Schmid[1,2], A. Eschen[1], B. Ruegger-Frey[2], M. Martin[1], *1. Center for Gerontology, University of Zurich, Zurich, Switzerland, 2. City Hospital Waid, Zurich, Switzerland*

Background: In recent years, it has become more common to complement the objective assessment of symptoms with an assessment of individual need patterns that are created by the individual symptomatology. However, little is known on need patterns in individuals with cognitive complaints, MCI and dementia. Moreover, there is no agreement between clinicians on instruments covering subjective needs with regard to a biological, psychological, social, and environmental level. Based on a process model of needs development, we provide an overview on the existing needs assessment instruments with respect to feasibility, validity, and reliability. Methods: We conducted a literature search in PsychINFO and PubMed including all publications until September 2009. We included needs assessment instruments for use in older individuals with mental or cognitive disorders and dementia. Results: We identified 17 needs assessment instruments mainly for older individuals with mental disorders, cognitive impairment or dementia. The analysis of selected articles demonstrated a wide range of needs indicators within different subgroups. Validity and reliability range between moderate and good. Conclusion: Even though a wide range of needs assessment instruments is available, most instruments lack sensitivity to comprehensively assess the needs in individuals with cognitive complaints, MCI and dementia. In addition, the development of improved instruments would profit from a model-based approach and standardised procedural guidelines.

### COGNITIVE CAPACITY AND FUNCTION ASSESSMENTS IN HEALTHY ELDERLY ADULTS

S.L. Schandler[1,2], J.V. Flowers[1], G. Meir[2], R. Ho[2], M.J. Cohen[2], *1. Psychology, Chapman University, Orange, California, 2. California State University Long Beach, Long Beach, California*

The burgeoning population of healthy adults aged 60 years through the early nineties places new demands on the assessment of function in these persons. Cognitive function is related directly to the person's ability to maintain acceptable quality of life as physical function reduces with advancing age. Most instruments designed to assess cognitive function in the elderly either provide a general yes/no verification of global deterioration (e.g., dementia) or are more precise existing instruments normed on younger populations and statistically extended to provide a very general idea of cognition function. Four instruments were used to examine cognitive function in two groups each of 50 healthy elderly adults without history of dementia. Using National Institute on Aging criteria, one group was classified as Young-Old (YO, 61-74 years) and the other Old-Old (OO, 75-92 years). The instruments were the Mini-Mental State Examination (MMSE); Blessed Information-Memory-Concentration Test (BIMC); Shipley Institute Living Scale (SILS); and Reynolds Intellectual Screening Test (RIST). RIST possesses norms extending to 94 years while SILS norms are statistically extended beyond 70. All subjects scored in the instruments' normal range. Lacking normative data and precision, MMSE and BIMC yielded similar, very general assessments of cognitive status. With their higher resolution, RIST and SILS showed age-related patterns in function. However, SILS scores were significantly elevated and more variable for OO subjects. The findings demonstrate the viability of assessing cognitive function in the elderly and emphasize the importance of applying assessment instruments with high resolution and actual norms rather than statistical extrapolations.

### ASSESSING HEALTH CONCERNS AND CARE NEEDS OF LESBIAN, GAY, BISEXUAL, AND TRANSGENDER (LGBT) ELDERS: LESSONS FROM A MIXED-METHOD PILOT STUDY

A. Van Wagenen, J. Bradford, *Center for Population Research in LGBT Health, The Fenway Institute, Boston, Massachusetts*

LGBT aging is a significant and emerging research area. In this paper, we review the growing literature in the field, present findings from our mixed-method pilot research, and reflect upon methodological challenges of studying older LGBTs. A confluence of findings from a small number of community-based studies and convenience samples has shown that LGBTs face distinct health concerns, care needs, and challenges as they age. They are more likely than heterosexual peers to live alone, less likely to have children, and more likely to rely upon "chosen family"—networks of friends and partners—rather than biological family in times of need. They experience and expect to face discrimination in accessing formal care, health and social services designed for older adults. Further, social isolation, social support, loneliness, depression, alcohol use, living with HIV (for men), and smoking (for women) have been shown to be areas of increased concern for older LGBTs. Our own pilot research has confirmed several of these findings. In our analysis of a pooled Massachusetts Behavioral Risk Factor Surveillance System dataset, we found population-based evidence that older LGBs are more likely than heterosexuals to live alone. Our qualitative data sheds light on the systems of informal caregiving provided by families of choice. The young field of LGBT aging research faces several methodological challenges, including the lack of routine collection of sexual orientation data in older adults, the hidden nature of the characteristics that define the populations of interest, and the practical challenges of sampling small populations.

## SESSION 2470 (PAPER)

## FAMILY AS A SAFETY NET

### "BREAKABLE LIKE GLASS" SKIPPED GENERATION FAMILIES AFFECTED BY HIV/AIDS: A FOCUS ON OLDER CAREGIVERS IN VIETNAM

L.B. Maradik Harris, B. Kim, *Social Welfare, University of California, Los Angeles, Los Angeles, California*

Increasingly, older adults are parenting grandchildren in "skipped generation" families, defined as households where both grandparents and grandchildren reside without either biological parent present. The HIV/AIDS epidemic in Vietnam has claimed the lives of many parents and is a contributing factor to the skipped generation phenomenon. Little is known about the lives of older caregivers in terms of role, access to HIV/AIDS education and support systems. The study aims to explore the impact of caregiving on the lives of older adults in the wake of HIV/AIDS in Vietnam. In-depth qualitative interviews with 15 older caregivers of skipped generation households and 7 service providers examined the vulnerability of these households and their coping mechanisms. The study found that older caregivers of skipped generation families suffered from 1) financial struggles 2) stigma 3) limited access to schooling for children 4) limited access to government subsidies 5) lack of HIV/AIDS educational information 6) social isolation and 7) age related cognitive impairments. Older caregivers coped with their financial struggles through taking out small loans from individuals within their social networks, and found strength through familial love and social support. Key to this discussion will be how these qualitative findings can be utilized in future interventions to create programs that offer HIV/AIDS education, economic opportunities and psychosocial support for older caregivers of persons affected by HIV/AIDS. The study will be used to develop recommendations for the humanitarian and HIV/AIDS sectors on how to identify and support skipped generation households in Vietnam.

### EXPECTATIONS VERSUS REALIZATIONS OF FAMILIAL INSURANCE: EVIDENCE FROM THE GREAT RECESSION OF 2008

D. Cox[1], M.M. Way[2], *1. Economics, Boston CollegE, Chestnut Hill, Massachusetts, 2. Babson College, Wellesley, Massachusetts*

How much did private transfers alleviate the financial distress of older Americans during the great recession of 2008? Were transfer receipts in line with expectations of households? The question is important since private transfers can often act like public transfers for insuring families against income shortfalls. But while eligibility for public transfers is usually transparent to researchers—e.g. Medicaid benefits are available to those who fulfill means tests and age cutoffs—coverage by private familial networks is generally not. So we know little about which families can rely (or think they can rely) on private safety nets in the event of financial distress; nearly all studies of private transfers concentrate on realized rather than potential private transfers. We take advantage of a unique question asked of Health and Retirement Survey (HRS) respondents, who indicated whether they could depend on family members for substantial financial assistance from family members in the event of severe financial distress. We investigate the connection between the expectation of familial safety nets and the realization of private transfers during the Great Recession. Our preliminary work indicates that actual transfers are an exceedingly poor guide to the prevalence of familial safety nets; receiving a transfer turns out to be neither necessary nor sufficient for the availability of help in time of severe need. One implication is that surveys seeking to gauge the extent of familial safety nets should expand the domain of their attention from actual transfers to potential transfers.

### INFLUENCE OF INTERGENERATIONAL SUPPORT ON OLDER ADULT'S PSYCHOLOGICAL WELL-BEING IN JAPAN

E. Takagi[1], Y. Saito[2], *1. Health Science, Towson University, Towson, Virginia, 2. Nihon University, Tokyo, Japan*

This study investigated differential impacts of support exchange between older parents and adult children on Japanese older adult's psychological well-being. We analyzed two waves of data in the Nihon University Longitudinal Study of Aging (NUJLSOA) in 2003 and 2006 (n=3,311). We categorized support exchange patterns as: only receiving support from adult children, only providing support to adult children, and both receiving and providing support. We categorized intergenerational support by three different types of assistance: instrumental support, financial support, and emotional support. The study examined exchange patterns of these three types of support and analyzed their impact on older adult's psychological well-being measured by the PGS morale scale. The analysis showed that the most commonly exchanged type of support was instrumental support (40%), followed by emotional support (31%) and financial support (29%). Regression analyses suggested that while exchange of emotional and financial support did not have a significant impact on older adult's psychological well-being, only receiving instrumental support from adult children (but not providing) appeared to have a negative impact on older adult's psychological well-being. We also identified that living with an adult child tended to have a strong positive influence on older adult's psychological well-being. These results suggest that although to some extent, older adults express cultural acceptance and expectation towards intergenerational dependency on their adult children, one-way flow of hands-on support from adult children tends to have a negative impact on their sense of well-being.

### PREDICTORS OF NUTRITIONAL STATUS IN GRANDPARENT CAREGIVERS IN KENYA

G. Ice[1], J.V. Yogo[1], V. Heh[1], E. Juma[2], *1. Social Medicine, Ohio University, Athens, Ohio, 2. KEMRI, Nairobi, Kenya*

Due to the HIV/AIDS pandemic, an increasing number of grandparents are caring for orphaned children. Several early reports suggested that grandparents, particularly grandmothers suffered ill health and poor nutrition. The Kenyan Grandparents study is a longitudinal study, with participants (age 73.6 ± 7.9) from three districts within Nyanza Province. The sample consists of 60+ year olds, half caregivers and half non-caregivers, who were enrolled on a rolling basis over four waves of data collection. Approximately 400 grandparents participated in each of four waves. Standard anthropometric measures were used to determine nutritional status. The impact of caregiving was examined using SEM. There was little impact of caregiving on the nutritional status of men or women, although different indicators responded differently across time. When there was an impact, female caregivers were advantaged and male caregivers were disadvantaged. When examined cross-sectionally, the set of predictors were different for men and women. Generally household composition variables, including adult children and orphans were more important in the models of women's nutritional indicators. SES, caregiving status and number of recent sick household members were more important indicators for men. Taken as a whole these results suggest that grandmothers may benefit from more children and fewer adults, while the opposite is true for grandfather's. This is possibly due to the impact on household income and production and gender patterns food distribution within the household. This project was funded by the National Science Foundation, Grant No.0515890.

### THE PREVALENCE OF IADL LIMITATIONS IN ELDERLY COUPLES AND FACTORS ASSOCIATED WITH RECEIVING HELP

H. Shen, S. Feld, R. Dunkle, H. Kim, J. Kim, *University of Michigan, School of Social Work, Ann Arbor, MI*

Recent research has identified a significant proportion of married elders with IADL limitations. However, little is known about IADL prevalence and help receipt within couples. Using Andersen-Newman's health service utilization model, we examined the influence of predisposing, enabling, and health need factors on help receipt among older couples. Nationally representative data from the 2004 Health and Retirement Study identified 3,265 elderly couples (at least one age 65+). Among these couples, 697 (17.8%) were ones in which at least one member had any IADL limitation. Logistic regression was used to model the likelihood that each member of these couples with any IADL limitation received some IADL help. Results showed IADL help receipt was more likely when the couples had certain enabling resources (Medicaid coverage for health care), and health needs (only one partner had IADL limitations; one or more partners had several IADL limitations, any chronic health condition, or used equipment for walking or bed transferring). Help receipt was not associated with other enabling resources (number of proximate daughters and of proximate sons, the poverty ratio), health needs (cognitive problems, any ADL limitation), or the predisposing factors (race/ethnicity, age). We conclude that among couples in which at least one member has any IADL limitation, the likelihood that each member with any limitation receives some IADL help may be lower when both partners have any IADL limitation and the couple does not have additional health needs. Ways to target interventions to meet the needs of such high risk couples will be discussed.

# SESSION 2475 (PAPER)

## GRANDPARENT ROLES, NORMS AND IMPACT

### FAMILY NATIONAL GUARD, ECONOMIC HELP AND CHILDCARE: COMPARATIVE ANALYSES OF GRANDPARENTING NORMS

R. Shura, P. Uhlenberg, B. Danforth, *Carolina Population Center, University of North Carolina, Chapel Hill, North Carolina*

Do perceptions of grandparents' responsibilities to help with grandchildren vary within and across countries? Are norms of grandparenting monolithic within countries, or are attitudes about grandparenting diverse and patterned according to gender, cohort, social class, intergenerational family structure, and country-specific contexts? Using SHARE data from 14 European countries, this paper explores older adults' attitudes about grandparents' intergenerational responsibilities. Attitudes about three grandparent responsibilities – helping in times of difficulty, providing economic support, and assisting in childcare – are analyzed. A central hypothesis of this research is that the grandparent role and grandparents' experiences may vary considerably within and across countries due to different cultural norms and expectations regarding grandparents; due to different levels of resources such as social class and time; and due to different country-specific structural circumstances which relate to provision of welfare and support to families. Results indicate meaningful differences in attitudes about the grandparent role across and within countries.

### DO WE WANT TO SPEAK OF A GRANDPARENT ROLE? THEORETICAL REFLECTIONS AND NEW RESEARCH FINDINGS

G.O. Hagestad, *NOVA, Oslo, Norway*

In my first publication on grandparenthood, 25 years ago, I questioned whether there was a grandparent role. My view was in part based on content analyses of a well-known woman's magazine in the US. Around the turn of the century, there were conflicting images, in the press and in research reports. Time Magazine called grandparents "child-savers"; a well-known researcher described them as "redundant". Recently, several large-scale European studies have explored the question of how much consensus we find in different societies regarding what grandparents should do and how the role is enacted in different contexts. Do welfare regimes account for variations in enactment? The presentation is based on material from SHARE, which covers ten different countries, and two waves of NorLAG, the Norwegian study of Life Course, Ageing and Generation. In addition, I use data from NorGRAND, my own study of how Norwegian children and their parents view grandparents. In all these data sets, there is remarkable consensus that grandparents should help and support their adult children in their role as parents. In the Norwegian data, 90 % of both parents and grandparents agreed on this expectation. We find more consensus regarding role expectations than we observe communalities in grandparent behaviours. The findings are discussed in relation to cultural and structural factors. How do social structures, such as welfare regimes, create family interdependencies that shape grandparent roles?

## SESSION 2480 (PAPER)

## ISSUES OF RELOCATION

### MAKE MINE HOME: THE ROLE OF CUSTOMIZATION IN INDEPENDENT LIVING OPTIONS FOR OLDER ADULTS

T. Perry, *University of Michigan, Ann Arbor, Michigan*

Purpose: This paper examines individual and community-wide challenges that occur when residents are permitted to customize their living spaces. Design and Methods: Ethnographic data are drawn from interviews, participant observation and document review with 20 older adults from Ann Arbor, MI, their kin and retirement community professionals in three stages: pre-move planning, move in-process, and post-move adjustment. Findings: After following the first cohort of older adults moving into an independent retirement community, this research on residential transitions for older adults indicates challenges in personalizing one's units while maintaining the retirement community's interest in uniformity and ability to market to future residents. Secondly, there remains an individual and community dilemma of mixing style and individuality with cost-efficiency. The tension between present residents' interests and future residents' concerns as the first residents aim to "customize" their spaces serves as a detailed example of complex residential concerns in line with the conference's theme of "Transitions of Care." Implications: In order to consider ways to support older adults and their families in residential transitions, the practice-based implications of this research address the role of personalization of one's residential space as a way to control part of the moving process which often experienced as a series of losses by older adults. The policy implications of this research identifies possible approaches retirement communities may utilize to set policies around housing modification.

### ASSESSING FUNCTIONAL WELL-BEING AFTER RELOCATING TO AN INDEPENDENT LIVING COMMUNITY

K. Hiroto, L.N. Anderson, S.H. Qualls, B. Yochim, *University of Colorado, Colorado Springs, Colorado*

Tailoring smooth transitions of care from independent to assisted living presumes that residents are matched to an appropriate level of supportive services based on their functional abilities. Few facilities assess functional well-being however, and very few studies have described cognitive and psychosocial functioning upon moving into independent living communities (ILC). This paper describes the psychosocial and cognitive profiles of the first 29 IL residents within one year post-relocation into a new senior community. Residents of this university-affiliated ILC engaged in wellness checks assessing cognition, general health, and psychosocial well-being. Residents were European American, primarily female (70%), and approaching old-old age (age R=64-93, M=83.37). Despite relative psychosocial health (i.e., low rates of anxious and depressive symptoms; general satisfaction with quality of life and emotional and functional support from family and friends), signs of cognitive impairment also surfaced. A brief cognitive screen (St. Louis University Mental Status exam; SLUMS) revealed levels of cognitive functioning (maximum score 30; R=13-29, M=21.11; SD=5.50) that would typically be associated with need for substantial support. Residents with lower cognitive functioning did not differ from those with more intact cognitive abilities in terms of education and overall psychosocial well-being. Discussion of results will include the importance of assessing functional well-being to identify residents' needs in order to create a smooth continuum of care between independent and assisted living communities.

### LESBIAN AND GAY ELDERS AND RESPECTFUL LONG-TERM CARE: IDENTIFYING THE UNIQUE PSYCHOSOCIAL PERSPECTIVES AND CHALLENGES

G.L. Stein[1], N.L. Beckerman[1], P.A. Sherman[2], *1. Wurzweiler School of Social Work, Yeshiva University, New York, New York, 2. Kean University, Union, New Jersey*

Little is known about the experiences, concerns, and perspectives of lesbian, gay, bisexual, and transgender (LGBT) elderly living in residential care facilities, or contemplating such a move. While LGBT seniors have been residents of long-term care facilities, community members are generally invisible to staff and other residents. This may result in the failure to receive adequate services; unaddressed needs for emotional and social support; failure to acknowledge and respect partners and close friends; and isolation from the wider residential community. An exploratory inquiry comprised of two focus groups was conducted among 16 gay and lesbian elders receiving services at a community-based social service organization and a long-term care setting. Participants were asked about their thoughts and experiences regarding community living, retirement communities, and long-term care, as well as how providers could be more responsive to gay individuals. Participants reported fear of being rejected or neglected by healthcare providers, particularly personal care aides; fear of not being accepted by other residents; fear of having to go back into the closet if placed in a long-term care setting; and a preference for gay residential options. Participants suggested staff training to promote acceptance and respect for gay people. All favorably perceived gay-specific and gay-friendly living arrangements, and emphasized a preference for having gay or gay-friendly healthcare providers so they would not worry about discrimination. These findings will promote awareness of the special concerns of gay and lesbian seniors, and form the basis for a larger research project.

### PHYSIOLOGICAL AND PSYCHOSOCIAL STRESS REACTIONS IN RESPONSE TO A LATE-LIFE STRESSOR: RELOCATION TO CONGREGATE SENIOR HOUSING

H. Ewen, J. Chahal, *Miami University, Oxford, Ohio*

One of the most significant late life stressors is relocating to a new residence. Previous research has shown that forced moves result in increased illness, mortality, and dissatisfaction, while planned moves may facilitate increases in social contact and support, independence, and well-being. Psychosocial reactions to relocation stress may vary, but the physiological stress response is uniform. The primary stress hormone, cortisol, provides benefits in the short-term, while extended secretion can increase co-morbidity and mortality. This presentation presents findings from a mixed-method study of relocation stress examining the relationship between self-reported experiences of stress and physiological reactivity for older women relocating to congregate senior housing. It was hypothesized that recent movers who: a) reported the move as a significant life stress would show greater physiological stress reactivity (via salivary cortisol measures) and b) planned the move would have less physiological reactivity, greater psychosocial well-being, and better health. Only partial support was found for these hypotheses. Findings indicate that recent movers who reported the move as stressful showed elevated cortisol levels, but the differences were not significant. Movers who chose the move showed better overall well-being, as measured by the PANAS (Mrozek & Kolarz, 1998), but differences in cortisol reactivity were not significant. These results support extant findings that control over the decision to move is beneficial to the older adult. Despite the stresses surrounding the move, the diurnal cortisol profiles remained intact.

## SESSION 2485 (SYMPOSIUM)

### LATE-LIFE SUICIDE RISK AND RESILIENCY

Chair: *S. Nazem, Department of Psychology, West Virginia University, Morgantown, West Virginia*
Co-Chair: *M. Smith, Department of Psychology, West Virginia University, Morgantown, West Virginia*
Discussant: *M.J. Heisel, The University of Western Ontario, London, Ontario, Canada*

This symposium will focus on the nature of suicide risk in older adults. Older adults have the highest rate of death by suicide in the United States, with 16% of all deaths by suicide in the United States occurring in adults over the age of 65, despite only comprising 12.4% of the population (CDC, 2006). The objective of the symposium is to highlight current research on cognitive, behavioral, and environmental variables that may operate as protective or risk factors in suicide among older adults. A study examining the relations among perceived burdensomeness, meaning in life and depression, will be presented. Second, functional and dysfunctional coping strategies and their relation to suicide ideation and reasons for living will be presented. Third, results from younger and older adult samples will illustrate the differential relation between autonomy and suicidal behaviors across the life-span. Fourth, a population based longitudinal study will examine the relation between cognitive impairment and suicide risk. Finally, a critical review will evaluate the literature on suicide, suicidal ideation, and indirect self-destructive behavior prevalence rates in long-term care facilities. This symposium will present critical risk and protective factors essential in suicide research, assessment and treatment.

### PROSPECTIVE ASSOCIATION BETWEEN BURDENSOMENESS AND MEANING IN LIFE IN OLDER ADULT OUTPATIENTS

P. Bamonti, K. Van Orden, D. King, P. Duberstein, *University of Rochester, Rochester, New York*

The current study investigates the relationship between the belief that one is a burden on others and the belief that one's life lacks purpose among older adults. We hypothesized that greater perceived burdensomeness would be prospectively related to lower perceived meaning in life, and that this relationship would remain even when controlling for current depressive symptoms. Patients (n=56) 60 years of age or older receiving care at an outpatient mental health clinic with a chart diagnosis of a mood, anxiety, or adjustment disorder were recruited. Results indicated that greater perceptions of burdensomeness significantly predicted lower perceived meaning in life one month later after controlling for depression ($\beta = .55$, $t = 4.67$, $p < .001$). Beliefs about burdensomeness were associated prospectively with beliefs about meaninglessness, suggesting that one mechanism whereby perceived burdensomeness confers risk for suicidal ideation and other adversities in older adults is by decreasing meaning in life.

### RELATIONSHIPS BETWEEN DISPOSITIONAL COPING STRATEGIES, SUICIDAL IDEATION, AND PROTECTIVE FACTORS AGAINST SUICIDE IN OLDER ADULTS

M. Marty, D.L. Segal, *Psychology Department, University of Colorado at Colorado Springs, Colorado Springs, Colorado*

The present study examined the associations between diverse dispositional coping strategies, suicidal ideation, and protective factors against suicide in community-dwelling older adults. Participants (N = 108, M age = 71.5 years, age range = 60-95 years) completed the Coping Orientations to Problems Experienced Scale, Geriatric Suicide Ideation Scale, and Reasons for Living Inventory. Problem- and emotion-focused coping were associated negatively with suicide ideation and positively with reasons for living. Dysfunctional coping was associated positively with suicide ideation, but results did not support the hypothesized negative relationship with reasons for living. Thus, problem- and emotion-focused coping appear to be adaptive, whereas dysfunctional coping appears to be somewhat less related to resilience to suicidal ideation among community-dwelling older adults. Implications of the results are that some coping strategies may serve as protective factors against suicide and should be evaluated as part of a thorough assessment of suicidal risk among older adults.

### THE RELATION BETWEEN AUTONOMY AND SUICIDAL IDEATION IN YOUNGER AND OLDER ADULTS

A. O'Riley, *1. West Virginia University, Morgantown, West Virginia, 2. University of Rochester, Rochester, New York*

Researchers have hypothesized that certain vulnerabilities might increase risk for depression. For example, Beck and colleagues (1982) have postulated that a style marked by an excessive need for control, defensive separation, and perfectionism (a style Beck has labeled "autonomy") might increase risk for depression. It is unclear whether this same vulnerability might increase risk for suicidality. Two studies will be presented which examined the relation between aspects of autonomy and suicidal ideation (SI) in younger and older adults. These studies indicated that perfectionism ($B = .149$, $SE = .03$, $p <.01$, and defensive separation ($B = .04$, $SE = .01$, $p = .003$) significantly predicted SI in younger adults and need for control($B = .234$, $SE = .10$), $p <.05$) significantly predicted SI in older adults. These findings provide further evidence of age differences in suicidality, which may have important implications for the development of interventions for preventing suicidal behavior.

### THE RELATION BETWEEN COGNITIVE DYSFUNCTION AND SUICIDE IN A POPULATION-BASED SAMPLE

S. Nazem, A. Fiske, *Department of Psychology, West Virginia University, Morgantown, West Virginia*

Previous research on the relation between cognitive impairment and suicide is inconclusive. Studies using in-patient registries or selected clinical samples suggest that early cognitive changes may increase the risk for suicide whereas dementia may serve as a protective factor. The present study evaluated the risk of suicide (or undetermined death) associated with cognitive dysfunction or dementia in the HARMONY study (Gatz et al., 2005). The population-based study ascertained dementia in 14,435 individuals aged 65 or older in the Swedish Twin Registry. Cognitive screening was conducted by computer-assisted telephone interview; clinical diagnoses were based on in-home cognitive testing and somatic examination. It was hypothesized that cognitive dysfunction, but not dementia, would increase the risk of suicide. Survival analyses demonstrated a two-fold increase in suicide risk associated with cognitive dysfunction among individuals without dementia. Results highlight the need to evaluate suicide risk among individuals with early signs of cognitive dysfunction.

### A CRITICAL EXAMINATION OF RESEARCH ON THE PREVALENCE OF SUICIDE IN NURSING HOMES

M.R. Nadorff, P. Prentice, A. Fiske, *Psychology, West Virginia University, Morgantown, West Virginia*

There are reasons to believe that suicide rates may be higher in nursing homes than in the community. Nursing homes are home to nearly 1.5 million older adults (Jones et al., 2009), and older adults have the highest suicide rate of any age group (Heron et al. 2009). Additionally, more individuals are admitted to nursing homes with serious mental illness than with dementia only (Fullerton, et al. 2009). However, the literature on suicide in nursing homes is mixed. The authors will present a critical analysis of the literature on suicide, suicidal ideation, and indirect self-destructive behaviors in nursing homes. Although some studies have found lower rates of suicide in nursing homes than in the community (Abrams, et al, 1988; Copeland 1987), several methodologically-strong studies show higher rates (Menghini & Evans, 2000; Scocco, et al. 2006). The authors will discuss possible reasons for the differences and recommendations for further research.

## SESSION 2490 (PAPER)

## LEARNING ABOUT AGING

### PREEMPTIVE EXPOSURE TO GERIATRICS: AN UNDERGRADUATE CHRONIC CARE INTERNSHIP

M. Waldron[1], J. Eppensteiner[1], M.A. Paniagua[2], T. Malmstrom[2], *1. Saint Louis University, St. Louis, Missouri, 2. Saint Louis University Medical School, St. Louis, Missouri*

PURPOSE: The demographic imperative for preparing the physician workforce to care for increasing numbers of elder Americans is looming. To preempt efforts of medical schools to educate students in areas of gerontology, Saint Louis University has taken initiative at the undergraduate level with an experiential nursing home-based internship. This was conceived from a curricular need assessment utilizing student-derived course objectives. The topics desired included patient experience, medical school application enhancement, shadowing experience, exposure to medical professions, Geriatric Medicine exposure, and exposure to ethics-related issues. METHODS: A “Chronic Care Internship” was created to encompass six course themes through a weekly resident companionship, weekly Geriatric Medicine rounds, a student-initiated quality improvement project, and a topical weekly lecture series. Pre and post-course surveys examined students’ attitudinal changes towards elders. Weekly lecture reflections and a post-course essay qualitatively evaluated the effect on students’ perception of geriatrics. RESULTS: On a five-point Likert scale (strongly disagree to strongly agree), an average 0.77 point decrease was observed when asked if “Treatment of chronically ill old people is hopeless” ($p<.001$). This change indicates a reduction in negative attitudes toward the elderly. The qualitative analyses showed increased knowledge of aspects of geriatric medicine including learned helplessness, frailty, and effective communication. CONCLUSION: Early and frequent exposure to nursing home residents proved to be integral in decreasing students’ negative attitudes towards gerontology. Further analysis of qualitative data from the reflection exercises have illustrated a rich understanding of communication challenges as well as an appreciation of the concepts of learned helplessness and frailty.

### THE LIFE OF A TEACHER

M. Wolf, *Gerontology, Saint Joseph College, West Hartford, Connecticut*

The Life of a Teacher Can gerontological educators evolve? This awareness may strike the empirical world of social science as a nonlinear phenomenon. However, we know that growth and development of individual content specialists can be a marked result of interaction with students and colleagues. Can research and concrete findings shift? When are educators permitted to “ad lib” and refocus basic theoretical underpinnings in the world of gerontology? How do they revise and renew their understandings of curriculum, particularly in the light of new technology and learning styles? And, as they mature, how do they change and differentiate their constructs of the nature of the learning process? This presentation explores the growth and development of the teacher of gerontology within a constructive developmental framework. Using the psychosocial framework of Erik Erikson, Robert Kegan, as well as object relations (Piaget), it looks at other developmental discussions such as that of David Galenson, whose concept of the “life cycles of human creativity” can be applied to the understanding of the cognitive and affective growth of a teacher. It is based on narrative interviews (Seidman) and in-depth analysis of phenomenological literature (Wolf). A sample of Gerontological educators (N=12) was interviewed and reflected on how he or she has changed over the course of a career. Using data excerpts, we examine how the personal phases of the educators’ lives inform their 1) understanding of the literature of aging, 2) process within the classroom, and 3) meaning-making of our field and its relevance to education.

### AGING SAVVY SOCIAL WORKERS IN THE COMMUNITY: IMPACT OF A NATIONAL EDUCATIONAL MODEL

N. Rowan[1], A.C. Faul[1], J. Birkenmaier[2], J. Damron-Rodriguez[3], *1. Kent School of Social Work, University of Louisville, Louisville, Kentucky, 2. Saint Louis University, St. Louis, Missouri, 3. University of California at Los Angeles, Los Angeles, California*

Social work student knowledge of community services for older adults and community-based care is imperative for direct practice with older adults. Evaluation data will be presented on a national multi-site effort (N = 353) from a total of 35 schools to increase graduate social work student’s competency related to community services for older adults. Results suggest statistically significant improvement of pre and post mean scores on the Geriatric Social Work Knowledge of Aging Quiz and the Geriatric Social Work Competency Scale II. A positive trend was also noted in the pre and post test mean scores measured by the Community Care Quiz from all available sites involved with the project. The model of educating social workers as described in this presentation sets forth positive outcomes in the education of aging savvy social workers.

### LEADERSHIP DEVELOPMENT WITHIN A GERONTOLOGICAL FELLOWSHIP IN AN ADVANCED GENERALIST MSW PROGRAM

E.K. Dakin, L. Quijano, *School of Social Work, Colorado State University, Fort Collins, Colorado*

This presentation will describe the development of leadership skills among students participating in a gerontological fellowship program within an advanced generalist MSW program, funded through a three-year Hartford Partnership Program in Aging Education (HPPAE) grant. One cornerstone of this grant is the identification of specific geriatric social work competencies, including leadership competencies, that must be met by students enrolled in the HPPAE program through classroom and field instruction. We have implemented a number of activities to promote leadership development among our fellows. One component of this fellowship is our monthly gero-rounds, which involve education on topics that are relevant to policy and services within local aging services organizations. As part of their fellowship experience, each fellow takes a role as presenter at one of the monthly gero-rounds, often presenting on results of a master’s thesis or program evaluation project. In one case, fellows presented on findings from a major community Summit on Aging, the results of which are being summarized by a fellow and one of the presenters for submission in a peer-reviewed journal. Another unique aspect of this fellowship program is the requirement that each fellow have both a macro and a micro field placement. Fellows’ macro field placements have provided rich opportunities for leadership development, for example by the opportunity to participate actively in the board of a nonprofit organization or multidisciplinary community collaboration. This presentation will discuss how the leadership development activities through this grant may be implemented in other kinds of professional and educational settings.

## SESSION 2495 (PAPER)

## OLDER ADULTS’ ATTITUDES TOWARD AGING

### CULTURAL VARIATIONS IN ATTITUDES TO AGEING AND THE EXPERIENCE OF AGEISM

F. O’Donnell, A. O’Hanlon, M. Maguire, *Dundalk Institute of Technology, Dundalk, Ireland*

Evidence suggests that attitudes to ageing can predict morbidity and mortality, yet there continues to be little research in this area, not least given the paucity of measures available. This study describes the development of measures aimed at measuring general attitudes to ageing, and also cognitive-emotional evaluations about own ageing and later life. It also describes possible explanations for those attitudes. Possible items for scales were developed from focus group data and from a detailed critique of literature. Scales were piloted amongst a convenience sample of mid-life and older adults, and found to have good psychometric properties. They were then tested further with community based adults differing in cultural groups (geographical location, and social economic status). Well-being was assessed using measures of pathology and well-being including the Hospital Anxiety and Depression Scale (HADS-A), psychological well-being (Ryff, 1998), relationships with family and friends. The scales were short (typically 5 items), and easy for participants to rate and researchers to score. They have acceptable internal reliability and external validity. Multivariate analyses indicate that general attitudes to ageing were predicted by cultural differences including geographical location and social economic status. Health and relationships also contributed to variance in scores. Attitudes to ageing can impact adversely on health and well-being. The current study offers new tools for researchers in this area and new insights about explanations for attitudes based within the culture of the individual. Further research in this area can promote optimal well-being and quality of life for more people.

### PSYCHOLOGICAL WELLBEING IS ASSOCIATED WITH GREATER SATISFACTION WITH AGING AMONG OLDER ADULTS OVER 11 YEARS FOLLOW-UP

K.A. Sargent-Cox[1], K. Anstey[1], M. Luszcz[2], *1. Australian National University, Canberra, Australian Capital Territory, Australia, 2. Flinders University, Adelaide, South Australia, Australia*

Satisfaction with aging may reflect the ability to adapt to transition and change in late life. Recent studies have shown that satisfaction with aging declines over time in very old adults and this decline is associated with a decrease in functional health outcomes and an increase in mortality risk. We propose that psychological resources and well-being, mechanisms amenable to intervention, may be important in the preservation of positive satisfaction with aging. Our objective was to investigate how change in psychological resources (general Locus of Control: LOC) and well-being (number of depressive symptoms) is associated with change in satisfaction with aging over 11 years in a large representative sample (N=2034) of older adults (65+years) from the Australian Longitudinal Study of Ageing. Multi-level models revealed that decline in satisfaction with aging was significantly correlated with change in LOC and depressive symptoms. On average, participants satisfaction with aging decreased by .05 points (95% CI = -.07, -.05) for every 1 unit increase in LOC (more external LOC). Similarly, mean satisfaction with aging decreased by .09 points (95% CI = -.09, -.08) for each additional increase in depressive symptoms over time. There were considerable intra- and inter-individual differences in patterns and rates of change in satisfaction with aging. The findings demonstrate that maintaining well-being and psychological resources in later life is accompanied by positive perceptions of aging. Findings have clinical implications regarding psychological interventions aimed at improving resilience in older adults, which may ultimately increase health outcomes and quality of life.

### CHANGE IN PERCEIVED AGE IN MIDDLE AND LATER LIFE

R. Ward, *Sociology, SUNY-Albany, Albany, New York*

Studies of perceived age in middle and later life find that people feel and would like to be younger. Feeling younger is associated with positive self-assessments; wishing to be younger is associated with less positive assessments. Little research has investigated change over time in perceived age. Longitudinal patterns are analyzed for 1,815 respondents in two waves (1995-96, 2204-06) of the MIDUS survey who were aged 40+ at Wave 1, assessing the ages people "feel" and "would like to be" relative to current age. In aggregate people feel about the same amount younger but become increasingly distant from preferred age: mean felt age changed only 1.4 years; mean ideal age changed 5.8 years. Individual variability on these dimensions is investigated with the following predictors: age, gender, marital and employment status, and past and expected future health and financial situation. For felt age: older age is associated with feeling younger but not with change; better expected future health is related to feeling younger and change in that direction. For ideal age: older age and being male is associated with wishing to be younger and change in that direction; education and better expected financial future are associated with less youthful ideal age and less change. Associations between feeling younger and better health expectations reflect images of later life as a time of physical decline. Ideal age appears more to reflect economic considerations, with more youthful preferred age reflecting disadvantages of lower socioeconomic status in later life.

### OLDER AMERICANS AND OUT-GROUP TOLERANCE IN THE GENERAL SOCIAL SURVEYS: AGE, PERIOD & COHORT EFFECTS

N. Danigelis[1], S. Cutler[1], M. Hardy[2], *1. Sociology, University of Vermont, Burlington, Vermont, 2. The Pennsylvania State University, State College, Pennsylvania*

Recent evidence (Danigelis, Hardy & Cutler, 2007) has shown an unexpected intracohort aging effect on individuals' tolerance of five outgroups: atheists, communists, homosexuals, militarists, and racists. Specifically, the intracohort aging effect is decidedly liberal among those aged 60+, while trending toward conservative among those aged 25 – 39. However, we do not know whether this liberal trend among older people reflects aging itself, the historical period, or some combination of the two dynamics. After controlling for compositional effects, we employ linear decomposition analysis (Firebaugh, 1989, 1997) to disentangle intracohort aging from cohort replacement effects and then estimate a mixed effects model for hierarchical age-period-cohort (APC) analysis (see e.g. Yang, 2008) to further disentangle intracohort aging into its APC components. Data on 6,000+ adults aged 60+ from the 1972 – 2008 General Social Surveys show significant liberal intracohort trends regarding attitudes toward Communists and homosexuals, a nearly significant trend regarding atheists, and liberal but non-significant trends regarding militarists and racists. Our APC estimates suggest a significant age effect in the conservative direction regarding attitude toward racists and non-significant conservative effects regarding the other outgroups. By contrast, random effects solutions show period to have a consistently – and generally significant – liberalizing effect from the 1970s through the 1980s, 1990s, and the 2000s for all outgroups. Birth cohort membership, based on five-year intervals, has no effect. The clear reason for the liberal intracohort aging effect, therefore, appears to be historical period. Results illustrate the complementarity of linear decomposition and mixed effects modeling and are discussed accordingly.

## SESSION 2500 (SYMPOSIUM)

### REVEALING THE ONGOING CANCER EXPERIENCE: QUALITATIVE APPROACHES TO CANCER AND AGING

Chair: *T. Blank, Human Development and Family Studies, University of Connecticut, Storrs, Connecticut*

Discussant: *C.A. Leedham, Markey Cancer Center, University of Kentucky, Lexington, Kentucky*

This symposium, jointly sponsored by the Research on Cancer and Aging and Qualitative Research Interest Groups, explores the use of qualitative approaches to understand the rich, dynamic experience of cancer survivorship among older persons. The presentations present both focus group and interview data gathering and each addresses different major topics. Yet, they all center around one major theme: the construction of meaning and active quality of life after one has been significantly and permanently changed by one's cancer experience. Each presentation also indicates the complexity of impacts, including both negative and positive aspects. First, Kelly Trevino describes a focus group-based study of the role of religion/spirituality in the lives of older veteran cancer survivors, addressing how one's religion/spirituality level impacts coping with the cancer experience and is itself affected by that experience. Then, Heather Bell presents a study of how breast cancer survivors experience a group physical activity to reap mental and physical benefits in their survivorship. The final paper, presented by Boaz Kahana, uses thematic analysis of interviews with elderly survivors to reveal the richness of the cancer experience using a post-traumatic stress/post-traumatic growth orientation, in which negative change/suffering, positive change/growth, and sense of lack of change/stability all interact in complex ways to impact survivorship. Finally, Cynthia Leedham as discussant will integrate themes across these papers and discuss how they illustrate the ways that qualitative research on cancer and aging can be useful for theoretical understanding and development of intervention strategies with older persons surviving cancer.

### RELIGION AND SPIRITUALITY IN VETERAN CANCER SURVIVORS: A QUALITATIVE PERSPECTIVE

K. Trevino[1,2], E. Archambault[1], M.M. Hilgeman[1,2], R.L. Billings[1,2], J. Gosian[1], J. Schuster[1], J. Moye[1,2], *1. VA Boston Healthcare System, Brockton, Massachusetts, 2. Harvard Medical School, Department of Psychiatry, Boston, Massachusetts*

The purpose of this study is to explore the role of religion/spirituality in coping with cancer and the impact of cancer on individuals' religion/spirituality. Fourteen veteran cancer survivors participated in one of three focus groups. Participants were asked: "How have your spiritual or religious beliefs affected how you cope with your cancer? How have your spirituality or religious beliefs changed as a result of your experience with cancer?" Religion/spirituality was generally characterized positively. The role of God as a source of support who provides resources and has a plan for each individual was prominent. Participants reported that God had intervened to help ("God got me to that [doctor]"). Participants also generally reported that their religious/spiritual beliefs and the beliefs of others in their lives were strengthened as a result of their cancer. Although less frequent, some participants reported no change in their religious/spiritual beliefs or feeling "fed up" with religion.

### BREAST CANCER SURVIVOR SPORT TOURISM: DRAGON BOAT PADDLING EXPERIENCES

H.L. Bell, H. Gibson, *Tourism, Recreation & Sport Management, University of Florida, Gainesville, Florida*

The number of breast cancer survivors (BCS) continues to grow (NCI, 2006), and many enjoy mental and physical benefits through participation in leisure activities after completing treatment. BCS dragon boat paddling has become one way for survivors to find "life after breast cancer" (McKenzie, 1998, p. 378). Six women in their 50's and 60's who travelled from Pennsylvania and Ontario to take part in the 2009 Orlando Dragon Boat Festival were interviewed about their experiences in sport, travel and survivorship. The interviews were transcribed verbatim and analysed manually using thematic analysis. The data suggest there is a synergy between each participant's personal experiences with breast cancer, with sport and with travel. These aspects combine to create opportunities for participants in dragon boat paddling and other sports, to meet other survivors and to travel to destinations they "don't normally go".

### ELDERLY CANCER SURVIVORS REFLECT ON POSTTRAUMATIC GROWTH AND TRANSFORMATION

B. Kahana[1], E. Kahana[2], *1. Cleveland State University, Cleveland, Ohio, 2. Sociology, Case Western Reserve, Cleveland, Ohio*

We report on themes derived from 153 qualitative interviews with community dwelling older adults, who reported a cancer diagnosis. Survivors represented a broad range of cancer diagnoses and included both recent and long-term survivors. Themes were analyzed in relation to coping approaches and identity relevant transformations. Coping orientations ranged from a minority expressing passive acceptance, fear, and resignation, to a majority reporting preparedness and determination to fight. Themes of transformation reflected three typologies of response: positive change, lack of change, and suffering. Findings will be discussed in terms of typologies of survivorship in relation to theories of posttraumatic growth and posttraumatic transformation. Cumulative life experiences of older adults and their encounters with prior stressors may support constructive adaptations to life threatening illness.

## SESSION 2505 (SYMPOSIUM)

### TRANSITIONS OVER THE LIFE COURSE: REFLECTIONS OF LEADING GERONTOLOGISTS ON THE EVOLUTION OF THEIR CAREERS

Chair: *M. Castora-Binkley, Katz Policy Institute, Benjamin Rose Institute, Cleveland, Ohio*
Discussant: *L. Noelker, Katz Policy Institute, Benjamin Rose Institute, Cleveland, Ohio*

This session highlights the personal, social and historic events that shaped the lives of leading scholars in gerontology, some occurring by chance while others are by choice. The session brings together four individuals, each of whom has made distinguished contributions to the field, to give their accounts of how they became a leader in gerontology and how this has, in turn, affected their lives. Each will highlight transitions throughout his or her career as their thinking and work in the field of gerontology evolved. The objective of this session is to feature the personal perspectives of the panelists and acknowledge how the individual and personal is intertwined with the historical and social context influencing their lives and careers. Panelists will highlight their careers and what events or occurrences (e.g. places, projects, people, and political events) took place that led them to their work today. After attending this session, participants will have acquired a keener appreciation of the diversity of their backgrounds in gerontology and a greater understanding of career transitions in the field of aging.

### DEFINING THE FIELD OF AGING AMONG MEXICAN AMERICANS

K. Markides, *University of Texas Medical Branch, Galveston, Texas*

In graduate school in sociology at LSU (1970's) I specialized in demography and sociology of economic development. I had little exposure to gerontology. In 1976, at the UT Health Science Center, I ran a project evaluating a program for older people which covered aspects of lives of older people (health, mental health, family relations and other matters typical in studies of older people). Our experience enabled us to obtain NIA funding for the Three-Generations Study of Mexican Americans and, later, to analyze data from the Hispanic Health and Nutrition Examination Survey. Additionally, funding was obtained to conduct the Hispanic Established Population for the Epidemiological Study of the Elderly (EPESE). This study defined the field of aging among Mexican Americans. Being at the right place at the right time, and also doing the right thing were very much part of my story. Having a supportive network also plays a major role.

### STRATEGIES AND PARTNERSHIPS TO ENHANCE RESEARCH IN GERONTOLOGY IN A NON-TRADITIONAL ACADEMIC SETTING

B.A. Given, *Michigan State University, East Lansing, Michigan*

This presentation will focus on how the environment and deliberate choices made in response to that environment led to development of a professional career with a focus in gerontology. Being in a health care school without a traditional medical school and without an academic medical center challenges one to select colleagues and problems that are supportive of the existing environment. Discussion will focus on choices made. Traditional PhD programs were also missing interdisciplinary partnerships and community based settings fostered working in gerontology. The lack of strong research colleagues fostered external networking and partnerships. During this presentation discussion will focus on environment, opportunities and choices that led to research focus and research partnerships in gerontology.

### PERSONAL REFLECTIONS OF AN EXTENSIVE JOURNEY IN AGING AND PROFESSIONAL ADVICE ON GRANT WRITING

E. Kahana, *Case Western Reserve University, Cleveland, Ohio*

I will reflect on a career that started with a personal interest in old age and aging and was reinforced by reading Cumming and Henry's 1961 book Growing Old, found on the New Books shelf of the public library. My fascination with the topic and excitement about unraveling its secrets are still with me. In sharing my journey of almost 40 years I will reflect on the importance and interconnected roles of peers, mentors, and students as fellow learners. I will note that pursuit of a scholarly career demands that one's work also becomes well integrated and, hopefully a welcome friend to one's family. I will discuss important decisions that shape one's career trajectory focusing on choosing mentors, dissertation topics, jobs, collaborators and topics for study. Since my own career has been largely built on funded empirical research I will speak about the rapidly changing world of grant writing.

### FAMILIAL EXPECTATIONS AND POLITICAL INFLUENCES

A. Achenbaum, *University of Houston, Houston, Texas*

Familial directives and historical exigencies influenced my decision to become a gerontologist. My father expected me to become a doctor of medicine or a doctor of law; when I said I wanted to be a Ph.D. in the humanities, he winced, and told me to study something forward-looking. So I pursued a career in aging because I watched Richard Nixon preside over the 1971 White House Conference on aging. And the rest is history.

## SESSION 2510 (PAPER)

## WISDOM

### WISDOM AND LIFE STORIES: HOW DIFFERENT TYPES OF LIFE EVENTS FOSTER THE DEVELOPMENT OF WISDOM

S. Koenig, K. Naschenweng, U. Redzanowski, L. Dorner, I. Strasser, J. Gluck, *Psychology, University of Klagenfurt, Klagenfurt, Austria*

Although wisdom is a topic of growing scientific interest and is often considered as the ideal endpoint of human development (Clayton & Birren, 1980) only a few studies explored wisdom in real life so far. How does wisdom develop in the course of ones individual life – which role does the experience of different life events and the reflection upon these events play for becoming wise? These questions are in the focus of attention of a greater wisdom research project which is currently conducted at the University of Klagenfurt Through public calls people were asked to nominate a wise person they personally know. Nominees as well as age matched and young control participants were invited to participate in the study. In a first step participants listed their most important, most difficult and best life-events and evaluated them concerning several criteria (e.g. valence of the event, valence of consequences). In standardized interviews the most difficult and best events were investigated in more detail. Frequent contents were relationships, birth of children, death, illness and education/occupation. Although the majority of participants recalled single events, wisdom nominees also tended to talk about generic and extended events which were temporally and causally linked to later life events or their life story as a whole. Wise participants and control participants also differed concerning the event ratings. The results support theoretical notions about the importance of life experiences for the delopment of wisdom and offer new insights about ways of fostering the acquisition of wisdom in real life.

### WISDOM - BEST PRACTICE IN AGING

K. Naschenweng, S. Koenig, J. Gluck, *University of Klagenfurt, Klagenfurt, Carinthia, Austria*

Within the research project "The Development and Manifestation of Wisdom" (Glück et al., 2008) more than 40 wisdom nominees have participated both in established instruments for wisdom measurement (Ardelt, 2003, Webster, 2003) and a new approach using extended standardized interviews about important events and conflicts in their lives. Five particularly wise participants were reinvestigated using ethnographic methods (participant observation, extended interviews, document collection and analysis) to portray the lives of these wise people in detail. The main goal of the ethnographic research was to go beyond testing pre-specified hypotheses in the project and explore new facets in the life management of wise individuals. The first author spent two weeks with each of five wise individuals and collected various data to characterize the everyday-lives of wise people, their worldly wisdom, their philosophy of life, their handling of strokes of fate, special characteristics and important values in their lives. The results show that wise people are highly aware of their values like family and friends, honesty, gratitude, faith, and unpretentiousness. Their lives are also characterized through their housing situations which reflect specific needs and preferences and through a very deliberate use of media. Furthermore it could be shown how they are able not only to integrate, but also to appreciate difficult life events as enrichment for their lives. In the presentation, the five wise individuals are briefly characterized and relevant commonalities and differences are highlighted. The five wisdom-portraits could be viewed as a kind of best practice models for successful aging.

### WISDOM CONCEPTS IN THE WORLD RELIGIONS

S. Rappersberger, J. Gluck, *Psychology, University of Klagenfurt, Klagenfurt, Kaertnen, Austria*

Wisdom is one of a few positive concepts associated with old age (Heckhausen et al., 1989). Furthermore, wisdom is one of six core virtues, which are present in all world religions (Dahlsgaard et al., 2005). Indeed, a good deal of religious writings focuses on the development of wisdom (Brown, 2005). It has been shown that different cultures carry different wisdom concepts (e.g. Takahashi & Overton, 2005); still, religious concepts of wisdom have hardly been investigated. Hence, the aim of this study is to explore and compare Buddhist, Christian, Hindu, Islamic and Jewish views of wisdom. For this purpose, 20 representative dignitaries per religion are interviewed about their concepts of wisdom and its development. The recorded interviews are transcribed and content analyzed. Until now, interviews with 20 Buddhists and 20 Christians have been analyzed and revealed between-group differences as well as overlaps in definition, characterization, and development of wisdom. Buddhists defined wisdom as a "deeper understanding of reality" and underlined the importance of compassion, while Christians mostly mentioned "life experience." High overlap between the two groups was found concerning the meaning of reflection for the development of wisdom. Currently, Hindu, Islamic and Jewish responses are analyzed. This study gives a review of five mayor religious conceptualizations of wisdom and compares them Investigated aspects are the definition of wisdom, typical characteristics of wise people, development of wisdom and the age-dependency of wisdom. The discussion focuses on commonalities and differences and on implications of religious perspectives for wisdom research.

### ASSESSING EXPERIENCED MEANING IN LIFE AMONG OLDER ADULTS: THE DEVELOPMENT AND INITIAL VALIDATION OF THE EMIL

M.J. Heisel, *Psychiatry and Epidemiology & Biostatistics, The University of Western Ontario, London, Ontario, Canada*

Older adults have high suicide rates, necessitating research on resiliency, health, and well-being in later life (Heisel, 2006). Meaning in Life (MIL), an existential variable typified by a profound sense of worth, coherence, or purpose, is positively associated with psychological well-being (Braam et al., 2006; Krause, 2003; Nygren et al., 2005) and negatively associated with psychopathology (Prager et al., 1997) and late-life suicide ideation (Heisel & Flett, 2007, 2008). Existing MIL scales were typically neither developed nor validated with older adults and treat the construct as a unidimensional entity. The present study describes the development and initial validation of the Experienced Meaning in Life scale (EMIL), a novel measure of MIL developed to assess Viktor Frankl's (1985) multidimensional treatment of the construct, assessing Creative (what one contributes to the world), Experiential (what one receives through life experiences), Attitudinal (one's attitudes towards life's successes and challenges), and Ultimate MIL (one's sense of transcendence). A multidimensional approach to MIL fits well with the transitions characteristic of later life. The EMIL is the first measure designed specifically to assess these four sources of MIL among older adults. The EMIL was developed with a community-residing sample of adults 65 years or older in London, Ontario, a medium-sized Canadian city. The present study reports on the EMIL's initial internal consistency, 2-week test-retest reliability, convergent (life satisfaction, purpose in life, spirituality, and psychological well-being), discriminant (suicide ideation, depression, hopelessness, and physical health complaints), and predictive validity (depressive symptom severity and suicide ideation at follow-up assessment).

## SESSION 2515 (PAPER)

### ASSESSING PHYSICAL CHANGE IN OLDER ADULTS

### MEANINGFUL CHANGE IN MEASURES OF LOWER EXTREMITY STRENGTH AND PHYSICAL PERFORMANCE IN OLDER WOMEN WITH SARCOPENIA

A.M. Nguyen[1], V. Mehta[1], D. Papanicolaou[2], J. Liao[1], J. Chandler[1], *1. Merck & Co., Inc, North Wales, Pennsylvania, 2. Merck & Co., Inc, Rahway, New Jersey*

This study estimates meaningful change in physical performance measures for older women with sarcopenia. Blinded data from a RCT of an investigational drug for sarcopenia were analyzed. Lower extremity strength (LES), lower extremity power (LEP), physical performance (SPPB) and gait speed (GS) were assessed at BL, 3 and 6 months by bilateral leg press (1 rep max), stair-climbing power, SPPB, and 4-meter walk. Participants (n=170) were women ≥65 years, with sarcopenia and evidence of impaired mobility. Distribution and anchor based methods were used to estimate meaningful change in LES, LEP, GS and SPPB. Distribution-based methods included standard error of measurement (SEM) and minimal detectable change at 90% confidence level (MDC90). The anchor-based approach used the optimal operating cutpoints (OOCs) from ROC curves to identify 1) the increase in GS and SPPB that optimally predicts self-reported improvement at 6 months and 2) increases in LES and LEP that optimally predicts GS of ≥1.0 m/s or SPPB of≥10 at 6 months. The SEMs (minimum change above noise) were 13.4 lbs, 10.8 watts, 0.93 points and 0.08 m/sec for LES, LEP, SPPB and GS respectively. The MDC90s (considered 'true' change) were 31.1, 25.2, 2.15 and 0.18, respectively. OOCs for LES and LEP were similar to the MDC90 estimates (LES: 15-25; LEP 17-18). OOCs for SPPB and GS were consistent with established literature of 1.0 and 0.1 m/s, but lower than the MDC90 in this sample. These estimates of meaningful change may be used for planning and interpreting longitudinal assessments in this population.

### CHANGES IN GRIP STRENGTH OVER 6 YEARS AMONG OLDER WOMEN

P. Gaspar[1], M. Johnson[2], *1. University of Toledo, Toledo, Ohio, 2. Winona State University, Winona, Minnesota*

Grip strength (GS) has been identified as a predictor of overall function and mortality. Aims of this study were: 1) describe the changes in GS over 6 years of a select group of older women, and 2) explore differences among subjects who had decline in GS compared to those who without decline. The epidemiological web of causation was the framework that guided the study. This study was a secondary analysis using the database of the longitudinal study "Health Status and Behaviors of a Midwestern Community of Religious Sisters". Only those subjects who had 2 or more years of GS available on the database were included. Mean age of the 87 subjects was 75.6 (SD=7.4) ranging from 65 to 98 years. Data analyzed included: GS (dynamometer), cognitive status (MMSE), functional performance (Guralnik Battery) and general self rated health (SF-36). Highest GS (of either hand) for each year of participation was used for analysis. Mean GS each year was consistently 22 (+/- .5) kg, which is between the 50th and 75th percentile for females of the corresponding age group. Changes in GS ranged from a loss of 15 kg to a gain of 8 kg with 46 subjects having an improvement and 41 with a decline of 2 or more kg. Those with a decline in GS had more functional disability, lower self-rated health, and a greater chance of falling. A negative association of age and GS existed. Further study is necessary to identify clinical outcomes related to a decline in GS.

### ACCURACY OF 10-YEAR AND 20-YEAR RECALLED WEIGHT IN LATE LIFE

A. Dahl[1], C.A. Reynolds[2], N. Pedersen[3,4], *1. Institute of Gerontology - Jönköping University, Jönköping, Sweden, 2. University of California - Riverside, Riverside, California, 3. Karolinska Institute, Stockholm, Sweden, 4. University of Southern California, Los Angeles, California*

Weight changes might be better indicators of an ongoing pathological process than a single measure. Often, both in clinical practice and in research, self-report might be the only possibility to capture past weight. The objective of the study was to evaluate the accuracy of self-reported recalled weight in old age. Six hundred fourteen men and women (mean age, 71.3 years), participants of the Swedish Adoption/Twin Study of Aging (SATSA), were asked in a questionnaire to recall their weight ten and twenty years ago. Recalled weights were compared with self-reported weight ten years ago, and self-reported and assessed weight twenty years ago. Compared to self-reported weight, ten - year recall overestimated weight by 0.26 ± 5.0 kg and twenty year recall underestimated by 0.55 ± 5.2 kg. Moreover, twenty year recalled weight underestimated the assessed weight by 1.89 ± 5.9 kg. Recalled weight was influenced by present weight; overweight persons underestimated their past weight. The accuracy of recalled weight was not influenced by sex, age or low cognitive ability. At the mean level there were small differences between retrospective and initial self-reported and/or assessed weight, but at the individual level recalled weight was less reliable. Accuracy of recalled weight was influenced by present assessed weight. At the population level, recalled weight comes close to the truth, although accuracy is influenced by present weight.

### CHANGES IN LEAN BODY MASS, LOWER EXTREMITY STRENGTH AND PHYSICAL PERFORMANCE IN OLDER WOMEN WITH SARCOPENIA

J. Chandler[1], A.M. Nguyen[1], V. Mehta[1], J. Liao[1], D. Papanicolaou[2], *1. Merck & Co., Inc., North Wales, Pennsylvania, 2. Merck & Co., Inc., Rahway, New Jersey*

Sarcopenia, characterized by low lean body mass (LBM), is associated with impaired strength and physical performance. This study evaluated the relationships between 1) LBM and lower extremity strength and power (LES, LEP) and 2) LES, LEP and gait speed (GS). Blinded data from a RCT of an investigational drug for sarcopenia were analyzed. LBM, LES, LEP, and GS were assessed at BL, 3 and 6 months by DXA, bilateral leg press (1 rep max), stair-climbing power, and 4-meter walk, respectively. Participants (n=170) were women ≥65 years, with sarcopenia and impaired physical performance (SPPB score 3-9). Spearman correlations were calculated between: LBM and LES, LBM and LEP, LES and GS, LEP and GS at each timepoint and longitudinally (change [Δ] from BL to 6 months). Random effects regression models assessed the effect of ΔLBM on ΔLES and ΔLEP, and ΔLES and ΔLEP on ΔGS at 6 months. Cross-sectional/longitudinal correlations: between LBM and LES, LEP were weak (range: r=0.13-0.27 / 0.10-0.17); between LES, LEP and GS were 0.11-0.44 / 0.27-0.38, with higher correlations between GS and LEP. Regression results: the largest gain in LBM (>1.49 kg) was associated with increases in LEP ($p<0.03$) but not LES; highly significant relationship between LEP and GS ($p<0.001$) and a significant, modest relationship between LES and GS ($p<0.04$). Larger gains in LBM may contribute to LEP increases, but not to LES; both LES and LEP increases impact physical performance and may have important treatment implications.

## SESSION 2520 (SYMPOSIUM)

### CHALLENGES TO TRANSITIONS IN CARE AND HEALTH: STRATEGIES TO ENHANCE HOME HEALTH CARE

Chair: *J.K. Davitt, School of Social Policy & Practice, University of Pennsylvania, Philadelphia, Pennsylvania, New Courtland Center for Transitions and Health, University of Pennsylvania, Philadelphia, Pennsylvania*
Co-Chair: *K.H. Bowles, School of Nursing, University of Pennsylvania, Philadelphia, Pennsylvania*
Discussant: *M. Naylor, School of Nursing, University of Pennsylvania, Philadelphia, Pennsylvania*

This symposium highlights the interdisciplinary and collaborative research emphasizing transitions in health care and health status supported by the New Courtland Center for Transitions and Health (NCCTH) at the University of Pennsylvania. The NCCTH defines transitions broadly to include transitions between/within health care settings, transitions in an individual patient's health status, and transitions in practice methods to improve health status. The Center's research focuses on enhancing quality of life for chronically ill patients by enhancing our understanding of such transitions. This symposium presents innovative research in the area of post acute care, namely home health care. The papers discuss strategies to enhance transitions in care and to improve health status within transitional care settings. The symposium will begin with a study designed to test 2 specific discharge planning tools with the aim of improving transitions between acute and post acute settings. The next paper focuses on the use of technology to enhance access to home health care thus generating positive transitions in health status for home health care recipients. The third paper addresses innovative strategies to increase access to mental health services in home health care and thus improve health status. Finally, the fourth paper focuses on understanding barriers to improved health outcomes for vulnerable home health care patient subgroups, specifically racial minorities. Increased emphasis on cost containment and use of less restrictive care alternatives, require ongoing study of health and care transitions.

### IMPROVING TRANSITIONS IN CARE: TOOLS TO ENHANCE DISCHARGE PLANNING

D.E. Holland[1,2], K.H. Bowles[2], *1. Mayo Clinic, Rochester, Minnesota, 2. University of Pennsylvania School of Nursing, Philadelphia, Pennsylvania*

The quality of hospital discharge planning decisions determines whether hospitalized older adults receive the health and social services they need, or are sent home with unmet needs and without services, leading to increased risk of developing costly, poor outcomes. Lack of time and resources available to hospital discharge planners calls for improved methods to efficiently and accurately identify patients in need of post acute care. This paper summarizes research testing two tools that target critical decision points in the discharge planning process. The first tool assists discharge planners in identifying which patients need priority assessment of their discharge needs. The second focuses on which patients should be referred for post acute services. This paper presents the development and testing of these two decision support tools that optimize and standardize the efficiency and effectiveness of discharge planning to enhance the safety, quality and efficiency of the health care delivery system.

### ENHANCING HEALTH TRANSITIONS: IMPROVING ACCESS TO HOME-BASED MENTAL HEALTH SERVICES

J.K. Davitt[1,2], Z. Gellis[1], *1. School of Social Policy & Practice, University of Pennsylvania, Philadelphia, Pennsylvania, 2. New Courtland Center for Transitions and Health, University of Pennsylvania, Philadelphia, Pennsylvania*

Substantial rates of untreated mental illness, e.g. depression/anxiety, have been documented in the homebound elderly. Untreated, these conditions negatively impact recovery/stabilization, thus increasing the risk for poor health outcomes and more costly care needs. This paper presents research focused on identifying Medicare policy barriers to providing mental health treatment in home health care. We outline the existing policy and the critical assumptions that create barriers to treatment, including: metaphysical dualism in health care thinking – assumption that the mind and body are separate and should be treated thus; assumptions regarding skilled vs. nonskilled services in home health care; and assumptions regarding which professions can be recognized to provide mental health treatment in a home health care setting. Policy, practice and research recommendations are made to enhance transitions in health status for home health patients with a mental illness and to expand upon recent policy advances in mental health parity in Medicare.

### TELEHOMECARE: IMPROVING ACCESS TO HOME HEALTH CARE AND ENHANCING HEALTH TRANSITIONS

K.H. Bowles[1], M. O'Connor[1], M.D. Naylor[1], B. Riegel[1], M. Weiner[2], H. Glick[2], *1. School of Nursing, University of Pennsylvania, Philadelphia, Pennsylvania, 2. University of Pennsylvania-School of Medicine, Philadelphia, Pennsylvania*

Many challenges exist in providing skilled home care to elders, including limited staff, travel time, patient acceptance and number of in-home visit limitations imposed by managed care organizations. Telehomecare is an emerging technological tool where wireless devices and video technology are placed in patient homes, transmiting data to the home health agency via the patient's telephone line. Telehomecare increases access to care by allowing home care patients to have more contact with home care providers via use of technology. Results from a National Institute of Nursing Research-funded randomized control trial show that on average, patients received three video visits per length of stay in addition to in-home nursing visits. Elders utilized at least one wireless device 83% of the days the technology was available for use. Telehomecare may improve quality of care through increased monitoring and access to care and may prevent rehospitalizations as patient instability could be identified sooner.

### CHALLENGES TO TRANSITIONS IN CARE: UNDERSTANDING DISPARITIES IN HOME HEALTHCARE

J.K. Davitt[1,2], R. Frasso[1], J. Bourjolly[1], K.H. Bowles[3,2], *1. School of Social Policy & Practice, University of Pennsylvania, Philadelphia, Pennsylvania, 2. New Courtland Center for Transitions and Health, University of Pennsylvania, Philadelphia, Pennsylvania, 3. School of Nursing, University of Pennsylvania, Philadelphia, Pennsylvania*

Home health care plays a pivotal role in transitional care, helping to stabilize, rehab, and enhance health status of older patients. However, recent studies indicate disparate outcomes for minority recipients of home healthcare. There is a critical lack of understanding regarding the role that practice factors play in home health disparities. We conducted focus group interviews with home healthcare staff from a variety of agencies in a diverse metropolitan area. This work explores their perspectives on the complex, often unarticulated, practice factors that may contribute to disparate health outcomes, including: challenges in providing home healthcare; staff diversity; staff-patient cultural, racial/ethnic barriers; institutional racism; agency policies; individual bias/stereotyping; and physical, geographic and logistic barriers to consistent quality. Ultimately, the goal of this research is to alleviate disparities and improve health outcomes for all patients thus enhancing health care transitions and creating a more equitable health care system.

# SESSION 2525 (PAPER)

## COMORBIDITIES AND DEMENTIA

### IMPACT OF DEMENTIA ON DRUG USE PATTERNS AMONG MEDICARE BENEFICIARIES WITH CONGESTIVE HEART FAILURE

S.K. Dutcher, G.B. Rattinger, I.H. Zuckerman, L. Simoni-Wastila, H. Yang, J. Qian, B. Stuart, *Peter Lamy Center on Drug Therapy and Aging, University of Maryland Baltimore, Baltimore, Maryland*

Objective: To evaluate impact of comorbid dementia diagnosis on congestive heart failure (CHF) medication adherence patterns among older Medicare beneficiaries. Methods: Using the MarketScan Medicare Coordination of Benefits database, we conducted a retrospective analysis of Medicare beneficiaries diagnosed with CHF. Beneficiaries were ≥65 years, had a CHF diagnosis in 2006, and were continuously enrolled from 1/1/06-1/31/07. Our two year adherence measures for evidence-based drugs indicated for chronic use in CHF treatment included: 1) any use (prevalence); 2) days of therapy (duration); and 3) medication possession ratio (MPR). We describe the cohort and medication adherence patterns, and apply multivariable regression to assess impact of dementia on any use and duration of CHF treatment, adjusted for sociodemographics, comorbidities, healthcare utilization, and loss to follow-up. Results: Of 117,510 beneficiaries with CHF, 7.5% also had dementia. Dementia patients were older (82.6 vs. 78.1 years), disproportionately female (58.6% vs. 50.9%), and more often had 'unspecified' CHF diagnoses (92.6% vs. 88.3%), compared to patients without dementia. Chronic CHF medication prevalence was lower in patients with dementia compared to patients without dementia (67.7% vs. 81.4%). Duration was significantly shorter for those with both diagnoses (460 vs. 565 days), though MPR did not differ. In regression analyses, dementia was associated with 14% lower prevalence and 11% shorter duration of chronic CHF medication use (both p<0.0001). Conclusion: Findings suggest that dementia status may affect treatment decisions for chronic diseases such as CHF. Further investigation into reasons for disparate treatment patterns and their impact on outcomes is warranted.

### DELIRIUM OUTCOMES IN A RANDOMIZED TRIAL OF BLOOD TRANSFUSION THRESHOLDS AMONG HIP FRACTURE PATIENTS

A.L. Gruber-Baldini[1], E. Marcantonio[2], D. Orwig[1], J. Magaziner[1], M. Terrin[1], J.L. Carson[3], E. Barr[1], R. Hebel[1], *1. Epidemiology & Preventive Medicine, University of Maryland School of Medicine, Baltimore, Maryland, 2. Beth Israel Deaconess Medical Center, Brookline, Massachusetts, 3. UMDNJ-Robert Wood Johnson Medical School, New Brunswick, New Jersey*

Delirium is common after hip fracture and associated with poorer functional outcomes. Postoperative anemia is associated with delirium, but it is unclear if blood transfusion to increase anemic patients' hemoglobin affects delirium. The Transfusion Trigger Trial for Functional Outcomes in Cardiovascular Patients Undergoing Surgical Hip Fracture Repair (FOCUS) Cognitive Ancillary Study is a randomized clinical trial designed to assess a Liberal 10 g/dL blood transfusion strategy (L) versus a Restrictive transfusion (R) for symptoms or if hemoglobin <8 g/dL among hip fracture patients with cardiovascular disease (CVD) or CVD risk factors. Delirium was assessed using the Memorial Delirium Assessment Scale (MDAS, primary outcome) and Confusion Assessment Method Diagnostic Algorithm (CAMDA). Subjects were assessed pre-randomization (before third post-operative day) and up to 3 times post-randomization. Generalized Estimating Equations were used to test for a treatment by group interaction over time (pre- versus post-randomization). Across 11 clinical sites, 139 patients had hemoglobin <=10 g/dL during the acute hospital stay and were randomized, with 67 in group L and 72 in group R. Mean+/SD age was 81.5+/-9.1, 73.4% female, and 90.7% white. MDAS means+/-SD were: pre-randomization group L 6.7+/-5.3, group R 6.4+/-5.2, post-randomization day 1 group L 6.8+/-4.4, group R 6.9+/-4.6 (Time*treatment p=0.501). For CAMDA: pre-randomization 24.6% group L and 23.8% group R delirious, post-randomization 30.2% group L, 40.0% group R delirious (Time*treatment p=0.367). Blood transfusion to maintain higher hemoglobin levels did not significantly affect in-hospital delirium occurrence or severity.

### CO-OCCURRENCE OF WANDERING WITH FEATURES OF THE PHYSICAL ENVIRONMENT

D. Algase[1], E. Beattie[2], C. Antonakos[1], C. Beel-Bates[3], L. Yao[1], *1. Swchool of Nursing, University of Michigan, Ann Arbor, Michigan, 2. Queensland University of Technology, Brisbane, Queensland, Australia, 3. Grand Valley State University, Grand Rapids, Michigan*

Background: According to Lawton's environmental docility hypothesis, environment assumes greater salience to behavior as cognition declines. This notion is further reflected and refined in the need-driven dementia-compromised behavior (NDB) model, which postulates that cognitive impairment constitutes a context within which features of an environment exert influence on behavior. In this study, the NDB model was used to evaluate influences of the physical environment on wandering behavior amonag persons with dementia in long-term care settings. Purpose: Our aim was to evaluate aspects of the physical environment on overall wandering and by type of wanderer (classic, moderate, and subclinical). Design and Methods: Using a descriptive, cross-sectional design, 122 wanderers from 28 LTC facilities were videotaped 10-12 times; data on wandering, light, sound, temperature and humidity levels, location, ambiance, and crowding were obtained. Associations between environmental variables and wandering were evaluated with Chi-square and t-tests; the model was evaluated using logistic regression. Results: 80% of wandering occurred in the resident's own room, dayrooms, hallways, or dining rooms. When observed in four specific locations (other residents' rooms, hallways, shower/baths, or off-unit locations), wanderers were highly likely (60-92% of observations) to wander. The data were a good fit to the model overall (LR X2 (5) = 50.38, p < .0001) and by wandering type. Conclusions: Location, light, sound, proximity of others, and ambiance are associated with wandering overall and may serve to inform environmental designs and care practices. The importance of each environmental variable to the occurrence of wandering varied by wandering type.

### HEARING LOSS AND INCIDENT DEMENTIA

F.R. Lin[1], E. Metter[2], R.J. O'Brien[3], S. Resnick[2], A.B. Zonderman[2], L. Ferrucci[2], *1. Otolaryngology-Head & Neck Surgery, Johns Hopkins, Baltimore, Maryland, 2. National Institute on Aging, Baltimore, Maryland, 3. Johns Hopkins School of Medicine, Baltimore, Maryland*

Background: Earlier studies have suggested that hearing loss, which is prevalent in over 30% of adults > 60 years, may be a risk factor for dementia, but this hypothesis has never been investigated prospectively. Methods: We performed audiometry in 639 participants (age 36 – 90 y) of the Baltimore Longitudinal Study of Aging who were dementia-free in 1990-1994 and prospectively followed them for incident dementia. Hearing loss was defined by a pure-tone average of hearing thresholds at 0.5, 1, 2, and 4 kHz in the better-hearing ear (normal <25 dB, mild loss 25-40 dB, moderate loss 41-70 dB, severe loss >70 dB). Diagnosis of incident dementia was made in a consensus diagnostic conference. Cox proportional hazard models were used to model time to incident dementia according to the severity of hearing loss. Results: During a median follow-up of 11.9 years, 58 cases of incident all-cause dementia were diagnosed. The risk of incident all-cause dementia increased linearly with the severity of baseline hearing loss (HR 1.27 per 10 db loss, 95% CI: 1.06 – 1.50). Compared to normal hearing, the hazard ratio for incident dementia was 1.89 for mild hearing loss (95% CI: 1.00 – 3.58), 3.00 for moderate hearing loss (95% CI: 1.43 – 6.30), and 4.94 for severe hearing loss (95% CI: 1.09 – 22.4). Conclusions: Hearing loss is an independent risk factor for all-cause dementia and Alzheimer's disease. Whether hearing loss is a marker for early stage dementia or is actually a modifiable risk factor for dementia deserves further study.

## SESSION 2530 (SYMPOSIUM)

### INTEGRATING TRANSITIONAL CARE INTO HEALTH SYSTEMS

Chair: *A.B. Stevens, Scott & White Healthcare, Temple, Texas*
Discussant: *N.L. Wilson, Baylor College of Medicine, Houston, Texas*

Researchers estimate that one-fifth of all Medicare beneficiaries are rehospitalized within 30 days of discharge, and that 75% of readmissions are preventable. Poor transition outcomes for older adults yield dangerous results including caregiver burden, medication errors, and mortality. Fortunately, innovative service models and interventions are available to address risks associated with care transitions. Evidence exist that interventions also reduce readmissions for up to 6 months. Models of transitional care, however, require healthcare systems to provide enhanced discharged services or to better coordinate hospital discharges with community agencies that are prepared to deliver transitional care services. This symposium will present models used by two healthcare delivery systems to improve transitional care. Models share numerous characteristics including detailed attention to the process of targeting transitional care to patients at greatest risk of preventable readmissions, integration of health system discharge planners and community-based service organizations and the use of social workers in the delivery of transitional care services. Models are unique in the populations served (rural vs. urban) and the use of telephonic verses home visits methods to deliver transitional care services. Preliminary data suggest that both models are efficacious and are potential candidates for dissemination to other healthcare settings. Yet, the potential impact of these models of transitional care will be limited without reforms to the current Medicare payment system, suggesting the need for policies that will support embedding and sustaining transitional care services.

### IDENTIFYING TARGET GROUPS FOR TRANSITIONAL CARE INTERVENTIONS USING HEALTHCARE RECORD DATA

A. Hochhalter[1,2], K. Broglio[4], L. Sklar[1], K. Brasla[3], *1. Scott & White Healthcare, Temple, Texas, 2. Texas A&M Health Science Center, College Station, Texas, 3. Scott & White Health Plan, Temple, Texas, 4. Texas A&M University, College Station, Texas*

The effectiveness of patient-directed transitional care interventions may depend on appropriate targeting of interventions to patients with the highest need for the services. This paper describes the use of two datasets to identify patient characteristics associated with days to rehospitalization or use of ER services following discharge for groups of hospitalized older patients: (1) Scott & White Memorial Hospital patients aged 65 and older, and (2) members of a Medicare Cost Contract offered by Scott & White Health Plan. Univariate analyses and Hazard Ratio Models identified several patient characteristics associated with time to hospital or ER use following discharge, but few variables were significantly associated with these adverse outcomes in both datasets. While available clinical and medical claims data are useful for identifying target intervention groups, they are insufficient for fully identifying socioeconomic and psychosocial characteristics of persons who may be most likely to benefit from transitional care interventions.

### THE ENHANCED DISCHARGE PLANNING PROGRAM (EDPP) AT RUSH UNIVERSITY MEDICAL CENTER

A. Perry, R. Golden, *Rush University Medical Center, Chicago, Illinois*

Rush University Medical Center's efforts to implement innovative care coordination span over a decade and draw upon the institution's commitment to interdisciplinary education, research, and care of the highest quality. The Enhanced Discharge Planning Program (EDPP), Rush's transitional care program, employs social workers as transition managers, intervening from a biopsychosocial perspective to address the clinical, behavioral health, and social issues impacting patients' transitions from hospital to home. The program identifies a set of biopsychosocial markers to identify older adults at risk for a complex transition from hospital to home. It then applies a templated telephonic intervention delivered by a social worker that includes two elements: 1) care coordination services (connecting the acute hospital discharge plan of care and the patient's longitudinal community plan of care) and 2) psychosocial assessment and intervention. The program has been designed, piloted and implemented. Findings associated with implementation of the program will be discussed.

### A COMMUNITY/HEALTH SYSTEM PARTNERSHIP TO DELIVER THE CARE TRANSITIONS INTERVENTION

E. Smith[1], A. Hochhalter[1], A.B. Stevens[1], R. McGhee[2], *1. Scott & White Healthcare, Temple, Texas, 2. Central Texas Aging and Disability Resource Center, Belton, Texas*

The Central Texas Community Living Program (CLP) is a partnership between the Central Texas Aging and Disability Center (ADRC) and Scott & White Healthcare to serve older adults who are at risk for nursing home placement. Embedded within the CLP is the Coleman Care Transitions Intervention (CTI) aimed at reducing re-hospitalizations. Program specialists were trained in CTI and began enrollment throughout Scott & White Hospital or the surrounding community. To date, 185 persons have been enrolled and 34% of the participants have received the CTI. Readmission rates are lower among program participants as compared to Scott & White's current Medicare population. Furthermore, the 30 day readmission rate among participants was 3.4% and the 90 day readmission rate was 17.3%. The goal of this presentation will focus on the implementation of the CTI within a hospital setting, the integration of the CTI with the CLP program, and hospital utilization outcomes.

### SUSTAINING THE PROMISE OF TRANSITIONAL CARE: THE NEED FOR PROVIDERS AND RESEARCHERS TO INFLUENCE POLICY

R. Golden, A. Perry, *Rush University Medical Center, Chicago, Illinois*

Researchers estimate that one-fifth of all Medicare beneficiaries are rehospitalized within 30 days of discharge, and that 75% of readmissions are preventable. Poor transition outcomes for older adults yield dangerous results including caregiver burden, medication errors, and mortality. Innovative transitional care programs such as the Enhanced Discharge Planning Program (EDPP) and the Care Transitions Intervention (CTI) address this national imperative while creating an evidence base for diverse approaches to supporting older adults across care transitions. These programs have garnered significant attention in the context of healthcare reform as a method for controlling costs and improving quality. Providers must now take an active role influencing policy to ensure transitional care models move from pilots and demonstrations to an integral part of care delivery for older adults. This presentation will discuss the ways strong evidence from transitional care programs can influence policy and create a sustainable future for these promising models.

# SESSION 2535 (PAPER)

## ADULT PROTECTION AND ELDER ABUSE

### BANKS AS MANDATED REPORTERS: TRENDS FOLLOWING ELDER ABUSE LEGISLATION IN CALIFORNIA

A.E. Navarro, K. Wilber, *Davis School of Gerontology, University of Southern California, Los Angeles, California*

Financial abuse, also referred to as financial exploitation, is defined as the taking or misappropriation of an older person's property, possessions, or financial assets. Social changes and technological advances are predicted to add to its prevalence. In response, The California Financial Elder Abuse Reporting Act (SB 1018) was passed requiring employees of banks, savings associations, and credit unions to report suspicious activity. The legislation is slated to sunset in 2013. To inform future policy we examined four years of elder abuse reporting in Los Angeles County, the most heavily populated county in the nation, with 9.9 million residents. A retrospective review of administrative records included both manual and electronic data collection from the Central Intake data systems. From among a total of 19,309 reports in the first year of mandated bank reporting (2007), the total number of reports increased 4.9% (n=906), whereas financial abuse reports increased 14.3% (n=593), and reports by banks experienced a jump of 640.2% (n=813). Within 24 months (January 2007 to December 2008), among 39,355 total APS reports, the percentage increased 8.9% (n=1,643) for total reports, 33.1% (n=1,371) for all financial abuse reports, and a massive 696.1% (n=884) for reports by financial institutions. These rates of increased reporting suggest the legislation successfully improved elder abuse awareness among financial personnel, along with the motivation to take action in exposing probable incidents of financial abuse. Implications from these results include the need for added investigative resources.

### BEYOND COGNITION: TOWARD A RELATIONAL UNDERSTANDING OF DECISION-MAKING CAPACITY

D. O'Connor, M. Hall, *Centre for Research on Personhood in Dementia, University of British Columbia, Vancouver, British Columbia, Canada*

Internationally, growing attention is being placed on refining how issues of decisional capacity are understood and assessed. Too frequently however, these efforts are limited by a focus on cognition that is decontextualized and predicated upon notions of individualized autonomy and independence. The problematics of this approach become particularly clear when applied to understanding how older adults in situations of abuse make decisions about taking action. Drawing upon two different data sets related to understanding decision-making in situations of abuse, the purpose of this paper is to begin to theorize an understanding decision-making capacity that is more relationally –driven. In the first data set, as part of a broader evaluation study, in-depth personal interviews were held with nine victims of abuse in order to understand from their perspective how they understood their situation and needs for support. The second study draws on a retrospective document analysis of ten cases where assessments of incapacity to turn down support services by older adults experiencing abuse were conducted. Combined, these data highlight the importance of understanding both need and responses to adult protective services within a relational context. What could appear to be cognitive dysfunction in decision-making often had a strong relational base that was easily overlooked or misinterpreted. These data provide the foundation for developing a theoretical lens for reconceptualising decision-making capacity in a way that recognizes that cognition does not operate in a vacuum. Potential legal strategies– such as undue influence – are identified as offering particular promise for bi-passing individualized discussions of capacity to get at more relevant, relational constructs.

### UTILIZATION OF ADULT PROTECTIVE SERVICES BY OLDER PERSONS IN RURAL AREAS

D. Mukherjee, *Social Work, Southern Illinois University Carbondale, Carbondale, Illinois*

The recent economic downturn has negatively affected the well-being of older adults everywhere, however, those who lived in rural areas have been affected the most. States hardest hit by the economic meltdown was first to eliminate basic services to older adults in the rural settings, putting enormous financial pressures on family caregivers and gerontological social workers. Wide-scale unemployment resulted in higher incidence of migration of jobless young-to-middle-aged adults from urban to rural areas as they chose to move with their elderly parents. Under these circumstances, it is important to examine how the socioeconomic developments post-2008 economic meltdown impacted the problem of elder mistreatment and the utilization of adult protective services. In rural areas. This study examines the Adult Protective Services (APS) database in southern Illinois since April 2008 to explore the characteristics in elder mistreatment reporting and utilization of services and compares that information to the pre-economic meltdown database (between 2005 and 2008) to analyze if there has been any significant shift in the demographic and clinical characteristics of elder mistreatment reporting and service utilization between these two phases. The findings of the study indicate, and expanding trend of financial abuse in rural areas with the higher percentage of perpetrator's hailing from victims' families. The study provides important baseline information that may help APS workers to change their intervention strategies and will also help strategize for the prospective retirement of baby boom retirement that might pose the identical problem to the APS.

# SESSION 2540 (PAPER)

## CARE INTERVENTIONS IN NURSING HOME SETTINGS

### COGNITIVELY IMPAIRED NURSING HOME RESIDENTS STUCK IN THE REVOLVING DOOR OF THE EMERGENCY ROOM

C. Stephens[1], C. Harrington[1], A. Bostrom[2], *1. University of California, San Francisco, San Francisco, California, 2. University of California, San Francisco, San Francisco, California*

NH residents use the ED more frequently than community-dwelling seniors & nearly two-thirds of NH residents cared for in the ED have CI. Many ED visits are unnecessary/preventable and lead to iatrogenic complications, increased morbidity & mortality, and higher costs. Utilizing a national random sample of NH residents with & without CI, this secondary analysis of 2006 MDS and CMS claims data examined the prevalence of ED use (with & without hospitalization) and how the risk of utilization varied by the presence & severity of CI. Of the 133,363 NH residents, 57.8% had CI, 68.8% were female, 80.5% were 76+ years, 9.4% were AfricanAmerican. Residents with CI had higher average rates of ED visits without (vs. with) hospitalization/year (2.20 vs. 1.66, p<.0001), but overall those with CI had fewer total ED visits/year compared to those without CI (3.66 vs. 4.88, p<.0001). Controlling for sociodemographic & health characteristics, however, ED utilization varied based on CI severity. Those with mild CI (MDS-COGS=1) had 12% higher odds of ED use with hospitalization than residents without CI (AOR 1.12, p<.0001), & risk declined as CI worsened. Risk of ED use without hospitalization was greatest for mild CI (MDS-COGS=1,2) and moderate-severe CI (MDS-COGS=7) (AOR 1.07, 1.10, 1.08; p<.0006, <.0001, .004), suggesting some ED utilization may be avoidable/preventable. Identifying & modifying factors responsible for ED use during an illness episode may result in more appropriate ED use, reduced costs & better health outcomes. Using ED utilization without hospitalization as a NH quality indicator may be warranted.

### CONNECT FOR BETTER FALLS PREVENTION IN NURSING HOMES: AN INTERVENTION

R.A. Anderson[1], K. Corazzini[1], E.S. McConnell[1,2], D.K. Thornlow[1], S. Pinheiro[1], C. Colon-Emeric[1,2], *1. School of Nursing, Duke University, Durham, North Carolina, 2. Durham Veterans Adminstration Medical Center, Durham, North Carolina*

Standard approaches to improving nursing home outcomes (NHs) use quality improvement (QI) programs which focus on individual mastery, didactic modules, audit and feedback, and academic detailing. Social constructivism theory and complexity science suggest, however, that learning is a social process that occurs within the context of relationships and interactions; thus alone, traditional QI will not result in optimal behavior changes. Accordingly, we developed an educational/behavioral intervention (CONNECT) in which staff learn to improve connections within and between workgroups, improve information exchange, and seek diverse perspectives in problem-solving. The study aims to determine whether CONNECT improves staff-interaction measures, fall-related process measures, and reduces fall rates when combined with a standard QI program about fall risk-factor reduction (FALLS). We will report preliminary results of this randomized, controlled, single-blind study of the effect of CONNECT on changes between baseline and the first follow-up staff-interaction measures (communication, participation-in-decision-making, relational coordination, psychological safety, and safety culture). Two NHs received CONNECT+FALLS and 2 NHs received FALLS alone; to date 83 staff-subjects have responded to baseline surveys. Mean scores for communication- openness, accuracy, timeliness, participation-LPNs, participation-aides, relational coordination, psychological safety, and safety culture respectively for the CONNECT+FALLS group were 3.15, 2.91, 3.21, 6.11, 5.00, 4.36, 3.99, 3.09 and for the FALLS group were 3.80, 3.07, 3.96, 6.38, 5.97, 5.49, 5.17, 3.64. Intervention delivery and fidelity will be described and pre and post differences presented. This project will extend knowledge about how NH staff learn, and improve care processes, with implications for culture change initiatives and staff education.

### ELDERLY NURSING HOME RESIDENTS' PERSPECTIVES ON FILIAL PIETY AND INSTITUTIONALIZATION IN SHANGHAI

L. Chen, *Social Welfare, University of California, Los Angeles, Los Angeles, California*

The purpose of this study is to understand elderly Chinese nursing home residents' decision-making process around institutionalization and the evolving notion of filial piety during this process. Contextual, crisis, and cultural factors helped to conceptualize this study. This qualitative study entailed semi-structured, open-ended interviews with 11 elderly Chinese residents in a government-supported institution in Shanghai. Results show that prior to institutionalization, participants faced caregiving crises at home, including sudden health decline, children's limited availability, and financial constraints. Participants proposed suggestions for alternatives to care by their children, including living on their own and moving into an institution. Participants also described their children's reactions, including asking parents to stay with them, hiring a paid caregiver, and institutionalization. Institutionalization became the compromise between generations. Participant responses reveal the contrasts between generations in the redefined notion of filial piety as a result of urbanization: participants already in an institution were more reciprocal in reinterpreting filial piety, whereas their children were more concerned about traditional obligations when making the institutionalization decision. Results may have implications on future research should also consider negotiation and decision-making non-institutionalized Chinese elders and their children, to explore if those elders' perceptions of filial piety are also reciprocal. A combination of crisis theoretical framework and a Confucian framework would help to offer more insights.

### NURSING HOME EFFECTIVENESS FOR CHRONIC ILLNESS CARE: ADVERSE EVENT ANALYSIS

C.E. Bishop, J. Meagher, J. Perloff, G. Khatutsky, *Heller School for Social Policy and Management, Brandeis University, Waltham, Massachusetts*

Avoidable hospitalizations and emergency department (ED) visits are disruptive for chronically ill long-stay nursing home residents and costly for payers. State payment policy has been shown by others to affect resources of nursing homes, possibly supporting or impeding homes' ability to provide chronic illness care. Treating nursing homes as the ambulatory medical care setting for long-stay residents, we estimated models of time to event for adverse events associated with less effective medical care: ambulatory care sensitive (ACS) hospitalizations and ED visits not resulting in hospitalization. Survival analysis allowed appropriate treatment of censoring by death, discharge, and observation time. Multivariate models estimated the impact of nursing home, market, and policy characteristics on risk of adverse event while accounting for individual health and disability for 54,250 long-stay elders aged 65+ living in a nursing home for at least 3 months by 1/1/2000. Variables including ownership, staffing by type, state Medicaid payment rate, state bed hold policy, and hospital beds per elder were tested for significance as predictors of time to ACS hospitalization and to ED visit. Registered nurse and nursing assistant hours per resident day were tested for a protective impact preventing adverse events. The hypotheses that ACS hospitalization and ED visit risks were greater where states paid lower Medicaid rates or paid to hold beds while Medicaid residents are hospitalized were also tested. The results have implications for nursing home staffing and state Medicaid policy.

## SESSION 2545 (PAPER)

## HEALTH PROMOTION PROGRAMS

### IMPLEMENTATION AND EVALUATION OF THE HEALTHY BRAIN INITIATIVES' DEMONSTRATION PROJECT: IMPROVING THE COGNITIVE HEALTH OF AFRICAN AMERICAN OLDER ADULTS

F.T. Fuller, A. Johnson-Turbes, T. Osuji, D. Beauchesne, S. Abood, *Alzheimer's Association - National Office, Chicago, Illinois*

As the U.S. population ages, cognitive decline is a growing public health concern because the risk for cognitive decline increases as people age. A growing body of evidence supports the link between vascular risk factors and increased risk for cognitive impairment. Studies indicate that African Americans are at greater risk for vascular risks such as hypertension and diabetes. This study is an evaluation of the Healthy Brain Initiatives' demonstration project, the nation's first community-level, culturally relevant demonstration project designed to increase knowledge/awareness of the healthy brain, increase intentions to engage in physical activity, and promote prevention and management of vascular risks among African Americans born from 1946 through 1964. Five theoretical models: (1) Planned Approach to Community Health (PATCH), (2) Empowerment Model, (3) Networking Model, (4) Socio-Ecological Model, and (5) Theory of Reasoned Action were used which focused on providing older people with skills to improve their physical and social well being. The evaluation used a quasi-experimental, mixed-method design involving collection and analysis of qualitative and quantitative data in two sites – Atlanta, GA and Los Angeles, CA. The evaluation assessed fidelity regarding the projects' core components - strategic partnership/coalition outcomes, half-day Healthy Brain Champion Workshops, media and Community Events. The findings indicate that the project increased knowledge/awareness of brain health and increased intentions to engage in health protective behaviors to maintain overall and potentially brain health among participants. Additionally, the findings suggest the value of motivating community members to be advocates for cognitive health in their own communities.

### FIT AND STRONG!, AN EVIDENCE-BASED INTERVENTION FOR OLDER ADULTS WITH OSTEOARTHRITIS: FINDINGS FROM THE TRANSLATION AND DISSEMINATION TRIAL

S.L. Hughes[1], R. Seymour[1], P. Desai[1], G. Huber[2], *1. Center for Research on Health and Aging, University of Illinois Chicago, Chicago, Illinois, 2. Northwestern University, Chicago, Illinois*

The successful and timely translation of evidence-based health promotion programs for older adults is a major public health priority. Osteoarthritis (OA) is the most common condition affecting older people today. Lower extremity (LE) joint impairment caused by OA has been shown to be a risk factor for future disability. Fit and Strong!, was developed to address this risk factor. It is an award winning, evidence-based, multiple-component exercise/behavior change program for older adults with OA. The program is currently being diffused in Illinois and North Carolina through partnerships with local Area Agencies on Aging with funding from the Centers for Disease Control and Prevention (R18DP001140). We are using the RE-AIM framework to guide our efforts. To date, we have partnered with 32 providers, trained 101 instructors, and enrolled over 430 participants. Analyses of participant outcomes show significant improvements on exercise participation (p=0.025), LE joint pain (p=0.002), LE joint stiffness (p=0.006), energy/fatigue (p=0.000) and self-efficacy for exercise (p=0.000), and a borderline significant difference on Body Mass Index (p=0.067). Factors that facilitate and impede program adoption, fidelity/ adaptation, and sustainability will be discussed. Practical issues involved in providing Fit and Strong! in the community will be discussed, including space, equipment, recruiting, training and monitoring exercise instructors, and methods for monitoring fidelity of Fit and Strong!. We will also describe our interactive website (www.fitandstrong.org) and the cadre of Master trainers that make it possible for us to more broadly disseminate Fit and Strong! to other communities that seek to adopt it.

### THE EVALUATION OF A PAIN PROTOCOL INTERVENTION IN LONG TERM CARE

S. Kaasalainen[1], K. Brazil[1], J. Ploeg[1], N. Akhtar-Danesh[1], L. Dolovich[2], E. Coker[1], T. Hadjistavropoulos[1], *1. McMaster University, Hamilton, Ontario, Canada, 2. University of Regina, Regina, Saskatchewan, Canada*

OBJECTIVES OF STUDY: The objectives of this project were to evaluate the effectiveness of (a) the implementation of a pain protocol in reducing pain in LTC residents, and (b) dissemination strategies in improving clinical practice behaviours related to pain management (e.g., frequency and documentation of pain assessments, use of pain medication) among health care team members. METHOD: We used a controlled before-after design to evaluate a pain protocol intervention that used a multifaceted approach to its implementation, including a site working group, pain education and skills training, and other quality improvement activities. We collected data (i.e., pain assessments, quality indicators related to pain management) for 200 LTC residents; 100 for the intervention and 100 for the control group across four LTC homes. RESULTS: We found that pain increased significantly more for the control group than the intervention group. The percentage of residents with a non-pharmacological intervention documented for pain increased to 28.6% in the intervention group and decreased to 18.3% in the comparison group. Also, there were statistically significant findings between the intervention and comparison groups representing a positive change in clinical practice behaviour favouring the intervention group for the following indicators: use of a standardized pain assessment tool, the assessment process accommodated for residents with cognitive and/or language problems, and an admission/initial pain assessment was completed. CONCLUSIONS: These study findings indicate that the implementation of a pain protocol intervention improved the way pain was managed and provided pain relief for LTC residents.

## SESSION 2550 (SYMPOSIUM)

### IT'S NOT PLUG AND PLAY: THE CHALLENGE OF MOVING TELEHOMECARE FROM PILOT TO FULL ADOPTION

Chair: *A.P. Glascock, Culture and Communication, Drexel University, Philadelphia, Pennsylvania*
Discussant: *D. Lindeman, Center for Technology and Aging, Oakland, California*

Although Telehomecare, in one form or another, has been in existence for at least a decade, the overall commercial success has been limited at best. There have been numerous pilot, demonstration and feasibility studies in different countries, with various care and business models, but few, if any, have evolved into full-scale adoption in which Telehomecare has become the mainstream care model. The symposium brings together researchers from three countries—the Netherlands, the United Kingdom and the United States—each of whom has direct empirical experience with the effort to move Telehomecare beyond pilot studies. Their presentations focus on the challenges that face care organizations and technology companies as they attempt to ramp-up from small-scale pilot studies to full implementation by discussing, among other issues: 1) the inherent strengths and weaknesses of pilot studies; 2) the differences between installation and adoption; 3) what does success mean to the different stakeholders and how can it be measured; 4) the role played by ROI (return on investment) in the full-scale adoption of Telehomecare; 5) can "better" care be demonstrated in a pilot study, and if it can, does it really matter; 6) what does saving money have to do with the wide-scale adoption of Telehomecare and 7) the appropriate role of government in the introduction of Telehomecare. Attendees will come away from the symposium with a better understanding of the problems and possible solutions relating to Telehomecare adoption.

### TELEHOMECARE INTERRUPTUS: LESSONS LEARNED ABOUT THE CHALLENGES OF ADOPTION FROM TWELVE PILOT STUDIES

D.M. Kutzik, A.P. Glascock, *Drexel Unversity, Philadelphia, PA*

Findings from research in the United States, England and the Netherlands of a specific Telehomecare system—QuietCare®—indicate that the assumption that if a pilot study is successful, full adoption will follow is false. Although the care and business models of the twelve organizations varied, the results were surprisingly similar: as a care tool, QuietCare® was a success, and yet, none of the organizations made it an integral part of an ongoing care model. The reasons for this failure vary somewhat from one entity to another, but four major problems were common to all twelve pilots: 1) the studies were organizationally marginalized; 2) the downside risk of full adoption outweighed potential gain; 3) no sustainable business model to pay for full adoption existed; and 4) the organizational changes required for full adoption were viewed as too disruptive.

### ADOPTING TELEHEALTHCARE AS A MAINSTREAM SERVICE INNOVATION

S. Brownsell, M.S. Hawley, *School of Health and Related Research, University of Sheffield, Sheffield, United Kingdom*

The mainstream adoption of innovation is always challenging, especially in large organisations and systems, but telehomecare seems to have encountered particular problems after a flurry of high profile and 'successful' pilots. Based on over a decade's experience of introducing and evaluating telehomecare initiatives we present three factors involved in achieving mainstream adoption (1) Prerequisites: building blocks to give the best chance of success and determine if an initiative should even proceed. (2) Components of success: what factors constitute success, how can these be defined, and how programme teams can work together to achieve a shared vision. (3) Quantifying success: how we measure, in a robust manner, these components of success in such a way that the evidence generated can be used to inform decision makers and thus promote mainstreaming of telehomecare. These three themes will be expanded and discussed in order to inform strategy for mainstreaming telehomecare.

### TELEHOMECARE IN THE PERSPECTIVE OF AGEING IN PLACE FOR FULL IMPLEMENTATION

H. Kort[1,2], J. van Hoof[1,2], *1. Health Care, Hogeschool Utrecht, University of Applied Siences, Utrecht, Netherlands, 2. Hogeschool Utrecht, University of Apllied Sciences, Utrecht, Utrecht, Netherlands*

Telehomecare is one of the solution for ageing in place (AiP) in addition to: care support for (I)ADL, physical activity or home modification (architecture and technological solutions). Solutions for AiP have been examined by use of the framework of the International Classification of Functioning, disabilities and health (ICF), and the Model of Integrated Building Design (MIBD). This model consist of six value domains: basic, functional, local, ecological, strategic value and economic values, which gives an outline for six described building systems. In the ICF-MBID framework, needs of individual persons determines the basic values as requirements for a building. Integration of needs derive from health conditions, and requirements for building systems set the conditions for home environment design for AiP. To achieve full implementation of telehomecare: multidisciplinary teams, home modification and the available care support should be taken into account. All these factors will be addressed in the presentation.

### FROM PILOT PROJECT TO MAINSTREAM SERVICES: LESSONS FROM THE WORLD'S LARGEST REMOTE CARE PROGRAMME

J. Hendy, J. Barlow, T. Chrysanthaki, *Health Management Group, Business School, Imperial College, London, United Kingdom*

A key agenda for governments worldwide is how best to care for older people, whilst limiting the demand for expensive hospital and nursing home beds. One solution is the development of technologies that support care remotely. Faith in the potential of this technology has led to the UK government to take a world lead in promoting this approach. Funding has been allocated to introduce remote care into 150,000 homes (the Preventative Technologies Grant, PTG) and the largest randomised control trial of remote care services in the world – the Whole System Demonstrators Programme (WSD) – is now underway in three locations. Drawing on findings from two longitudinal research projects on the organisational and economic factors influencing the implementation of remote in both the PTG and WSD, the presentation will explore the lessons for policy makers and health and social care providers.

## SESSION 2555 (PAPER)

## MENTAL HEALTH AND AGING

### THE IMPACT OF SUBSTANCE USE DISORDERS ON MEDICARE AND MEDICAID EXPENDITURES FOR ELDERS WITH BEHAVIORAL HEALTH DISORDERS

W. Lin[1,2], R.E. Clark[1,2], J. Zhang[1], G. Leung[1], *1. Center for Health Policy and Research, University of Massachusetts Medical School, Shrewsbury, Massachusetts, 2. Department of Family Medicine and Community Health, University of Massachusetts Medical School, Worcester, Massachusetts*

The rate of alcohol and drug abuse and the number of people requiring addiction treatment are likely to increase substantially as baby boomers age. However, the influence of substance use disorder (SUD) on elders' healthcare expenditures has not been well documented. Using merged Massachusetts Medicare and Medicaid claims data (CY2005), we investigated the impact of SUD on healthcare expenditures covered by Medicare and Medicaid for community-dwelling elders receiving behavioral health care (N=61,403). Behavioral and physical healthcare expenditures, separately and combined, were examined. We included expenditures on prescription drugs for dual eligibles which were paid for by Medicaid in CY2005. However, we did not have medication expenditures for non-dual eligibles. Regardless of the dual eligibility, a co-occurring SUD was associated with significantly higher median expenditures for behavioral and physical healthcare, separately and combined. For example, median total expenditures for dual eligibles with co-occurring severe mental illness and SUD were two times higher ($40,270 vs. $20,527); physical healthcare expenditures were almost twice as high ($27,744 vs. $15,443); and behavioral healthcare expenditures were three times higher ($4,335 vs. $1,458) than for those without co-occurring SUD. Adjusting for the overall disease burden mitigated the impact of co-occurring SUD on total and physical healthcare expenditures, but the impact remained considerable. Although SUD is generally associated with higher physical comorbidities, factors beyond the overall disease burden may also contribute to the higher healthcare expenditures. Access to medical care, use of community-based and preventive services, and treatment compliance are potential areas for further investigation and improvement.

### URBAN RURAL DIFFERENCES IN DISCHARGING HOSPITALIZED OLDER ADULTS WITH MENTAL HEALTH NEEDS

L.L. Popejoy, C.M. Galambos, K.C. Moylan, *University of Missouri, Columbia, Missouri*

The purpose of this study was to identify challenges of hospital discharge planning as perceived by healthcare professionals (HCPs) including social workers, case managers, nurses, and physicians. Using a cross sectional descriptive design, research participants completed a 31-item questionnaire administered through Survey Monkey. Participants were recruited using a snowball sample technique that yielded 367 usable surveys from across a Midwestern state. Data were analyzed first to identify the frequency of reported problems in finding post acute care for people with mental illness, and second to identify if there was a relationship between urban rural classification and frequency of reported problems in finding care for people with mental illness. Data were analyzed for urban rural differences using Spearman Rank Correlations that were adjusted for multiple tests using the False Discovery Rate. Hospitals reported problems finding skilled nursing care for people with mental illness (mean 2.2), mental retardation developmental disability [MRDD] (mean 2.83), and dementia (mean 3.2). There were problems in finding residential care for those with mental illness (mean 2.4), MRDD (mean 2.62), and dementia (mean 2.7). There were significant urban and rural differences in finding skilled nursing care for people with mental illness ($p=0.14$), MRDD ($p = .022$), and dementia ($p = .00005$) with more problems reported in urban areas. The same trend held for urban and rural differences in finding residential care for people with mental illness ($p= .023$), MRDD ($p = .015$, and dementia (.0036). Research implications for policy and practice will be discussed.

### PROMOTING POSITIVE MENTAL HEALTH: A PEER SUPPORT PROGRAM FOR MEDICAID HCBS/FE WAIVER RECIPIENTS

R.K. Chapin, S.T. Landry, R. Rachlin, J.F. Sergeant, T. Koenig, H. Nelson-Becker, L. Hasche, *School of Social Welfare, University of Kansas, Lawrence, Kansas*

One in five seniors living in the community may be experiencing mental health problems, yet few use formal mental health services. Area Agencies on Aging (AAA) have a unique opportunity to connect older adults to mental health resources. The Peer Support Program is a pilot study developed through a cooperative effort between an AAA, University, and state Department on Aging, that aims to reduce symptoms of depression and anxiety and increase the quality of life for seniors. Methods: The Peer Support Program uses a strengths-based approach to train older adult volunteers. Volunteers are paired with participants for 10 weeks to identify and develop personal goals and provide social support. Pre- and post-evaluations involved the Geriatric Depression Scale (GDS), Beck Anxiety Inventory (BAI), the Ferran and Powers Quality of Life Index (QLI) and items about healthcare utilization. Results: The sample was recruited from three AAA service regions in a Midwestern State, and included over 20 older adult participants and volunteers. The participants were over age 60 and were receiving Medicaid HCBS/FE waiver services. Preliminary paired-sample t-tests indicate decreased mental health distress and improved quality of life. Qualitative findings from post-intervention interviews and a review of bi-weekly logs tracking goal development and attainment further support these findings. Implications: The Peer Support Program demonstrated promising clinical outcomes and an innovative means of using volunteers to respond to mental health concerns. Inclusion of volunteers may help promote the feasible replication of this program into other AAAs.

### MENTAL HEALTH CONSEQUENCES OF GIVING UP THE KEYS: DRIVING CESSATION AMONG OLDER ADULTS

A. Horowitz, B.E. Gibson, K. Boerner, J.P. Reinhardt, *Jewish Home Lifecare, New York, New York*

For many older adults, driving is equated with a sense of autonomy and independence. While emerging evidence suggests that driving cessation is a risk factor for the onset and persistence of depression, little is known about why some older adults are better able than others to make driving transitions with relatively less psychological distress. This paper presents findings from the baseline and 1-year follow-up data of a NIA-funded study of older drivers, ("Driving Transitions and Mental Health in Disabled Elders," R01AG20579). The baseline sample consists of 381 older drivers, age 55+, (mean =75 years), with functional vision problems. Of the 254 baseline participants who completed their 1-year follow-up, 45 (18%) reported being ex-drivers at that time. Findings indicated that ex-drivers had significantly higher CES-D depression scores than current drivers at the 1-year follow-up (10.6 and 7.3 respectively, $p<.05$; potential range 0-60). Regression analyses identified driving cessation as an independent risk factor for increased depression from Baseline to 1-year follow-up after controlling for other known correlates of depression (e.g. health, social support). Among ex-drivers, greater depression at the 1-year follow-up was associated with younger age, higher disability, lower self-rated health, less perceived availability and adequacy of social support, and lower levels of autonomy and mastery. Findings highlight the importance of understanding the psychosocial meaning of driving for older adults and of developing services to both prevent and treat the mental health consequences of driving cessation.

## SESSION 2560 (PAPER)

## RETIREMENT

### TRANSITION FROM WORK TO RETIREMENT: PATTERNS, STATUS, AND PROBABILITIES

F. Tang, L. Yin, Y. Lee, *University of Pittsburgh, Pittsburgh, Pennsylvania*

Retirement patterns have undergone great changes in the U.S. Instead of following the traditional retirement pattern – leaving a full-time career job for complete retirement, many older Americans choose a gradual transition to retirement. However, previous studies are limited to descriptions of static patterns or trends in retirement. Using the data from the Health and Retirement Study, this study examines the dynamic process in retirement transition through three discrete stages of changes: full-time employment, part-time employment, and full retirement. Latent transition analysis was used to analyze the change patterns, statuses, and transition possibilities among 6,523 respondents who reported working in 1998. Three categorical variables were used as indicators of transition: annual working hours (none, less than 1680 hours, or 1680 hours or more), self-reported retirement status (completely retired, partial retired, not retired, or others), and receiving social security (yes or no) in 2000, 2004, and 2008 respectively. The most common latent status at Time 1 (2000) was full-time work status (55.7%); however, the retired became the most prevalent status (62.9%) at Time 3 (2008). There was strong stability in the retired status membership over time, but less satiability in the full-time and part-time status memberships. Focusing on change, the most common transition to a different status was from part-time work to the retired, yet there was still possibility to move from the retired to part-time work or even full-time work status. Findings have implications for changes in workforce practices and public policies to adjust for retirement transition among older workers.

### RETIREMENT TIMING AND SUBJECTIVE WELL-BEING: AN INSTRUMENTAL VARIABLES APPROACH

E. Calvo[1], C. Tamborini[2], N. Sarkisian[3], *1. HAVARD UNIVERSITY, Boston, Massachusetts, 2. US Social Security Administration, Washington, District of Columbia, 3. Boston College, Chestnut Hill, Massachusetts*

This article explores the relationship between retirement timing and subjective well-being at the onset of the retirement transition. Using panel data from the Health and Retirement Study (HRS), and instrumental variable techniques, two-stage Probit regression models estimate the effect of retirement timing on subjective health and feelings, while controlling for a large range of determinants of well-being, including pre-retirement health and feelings, prior job characteristics, and the retirement context. The results provide evidence supporting the hypothesis that the response of subjective well-being to retirement differs according to the timing of the transition. Both very early and very late retirement transitions are more likely to be detrimental for subjective well-being. Interestingly, workers who begin their retirement transition around age 62, Social Security's early eligibility retirement age, experience the greatest relative improvements in subjective well-being. The importance of cultural expectations and institutional cues attached to age transition patterns are underlined as potentially important structural factors shaping subjective well-being changes among workers transitioning to retirement. Policy and theoretical considerations from the findings are discussed.

### TRANSITIONING TO RETIREMENT AND THE EFFECTS OF SOCIAL TIES ON LIFE SATISFACTION

K.A. Zurlo[1], T. Kim[2], *1. Rutgers University, New Brunswick, New Jersey, 2. Adelphi University, Garden City, New York*

Transitioning to retirement is a critical phase in the life course. Although researchers have focused on the importance of life satisfaction as it relates to retirement, little research has been conducted measuring different types of social support as they relate to life satisfaction among retirees. Based on social capital theory, we empirically investigate the relationship between life satisfaction and social ties among retired adults. This research consists of a quantitative analysis using two components of the Health and Retirement Study, the core survey and a Psychosocial Leave-Behind Participant Lifestyle Questionnaire. To manipulate dyadic data structure, we analyzed the data with Hierarchical Linear Modeling. Our results indicated that there is a significant relationship between social support and life satisfaction among retirees. As levels of social support increase, life satisfaction increases. We separately analyzed the effect size for four different types of social support, measured by the relationship type and include: spouse/partner, children, other family members, and friends. We found that three of the four types of social support are significant. They include: spouse, children, and friends, where spousal support has the largest effect size. The implications of this study apply to social work practice, policy, and research. Gerontological social workers are in a key position to assist older adults build stronger social networks through their relationships with their spouse, children and friends. We recommend that practitioners, educators and policy makers work to integrate content on social support into the curriculum for health care providers, geriatric practice protocols, and health policy.