68th Annual Scientific Meeting

### MATERNAL BODY WEIGHT AND INFLAMMATION AMONG OFFSPRING IN LATE MIDDLE AGE

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Higher maternal body mass index (BMI) is associated with offspring adiposity; however the effect of maternal BMI on subsequent inflammatory concentrations among offspring is unexplored. The aim is to estimate the direct and indirect effects of maternal pre-pregnancy BMI on C-Reactive protein (CRP) and Interleukin-6 (IL-6) concentrations of male offspring in late middle age. The study is based on 598 Danish males from the Copenhagen Aging and Midlife Biobank (mean age, 55.2 years) with comprehensive historical data from birth. Path analysis is employed to estimate direct and indirect effects. A 10 % higher maternal pre-pregnancy BMI was associated with 7 % higher offspring CRP (factor 1.07; 95 % C.I. 1.01, 1.12) and 3 % higher IL-6 (factor 1.03; 95 % C.I. 1.01, 1.06). The total effect was entirely mediated through the effect of maternal BMI on offspring's BMI in adulthood but not through offspring size at birth.

# LIFE COURSE SOCIAL STATUS AND MIDLIFE PHYSICAL ACTIVITY - THE INTERACTION WITH PERSONALITY

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Social status and personality are related to health behaviors, including physical activity. We aim to investigate how social status is associated with physical activity in midlife and examine the potential interaction with personality. The study includes 3,233 Danes with comprehensive information collected across the lifespan. Compared to people with high social status across life, those with low status in childhood (odds ratio (OR)=0.81, 95% confidence intervals (CI)=0.64-1.02), midlife (OR=0.80, 95%CI=0.66-0.97), or both (OR=0.67, 95%CI=0.56-0.81) were less likely to report high physical activity level in midlife. Statistically significant main effects and interactions were found between social status and the big five personality traits (p<.05). Highly conscientious people were more often physically active regardless of social position; less neurotic people were more often physically active, especially those of higher social status; and less extraverted people were less physically active, especially those of low social status.

#### **SESSION 445 (SYMPOSIUM)**

### "RELATIVE DIFFICULTIES": INTERGENERATIONAL RELATIONSHIPS ACROSS ADULTHOOD

Chair: L. R. Bangerter, Penn State University, State College, Pennsylvania

The parent-child relationship is one of the most enduring and influential of all family ties. Parents and grown children are particularly sensitive to one another's difficult behaviors, health problems and need for help. As such, the parent-child bond may serve as a source of both support and distress. This symposium will examine the dynamics and implications of parents' and children's problems on each party's well-being and the larger family system. Birditt will explore how the lifestyle problems and health problems of young-adult children influence the daily cortisol rhythms of middle-aged parents. Kim will discuss how increasing levels of disability in an aging parent are associated with changes in support that middle-aged children provide to parents. Heid will present the effect of aging parents' stubbornness on adult-children's depressive symptoms, relationship quality, and support provided. Polenick will examine the effects of helping aging parents on partners' marital satisfaction. Huo will look at how parents' problems may influence the tangible and nontangible support that grandparents provide to their grandchildren. Each presentation captures a unique perspective of parent-child relationships as well as the interplay and consequences of these relationships.

# DAILY INTERACTIONS WITH ADULT CHILDREN: IMPLICATIONS OF CHILDREN'S PROBLEMS FOR PARENT'S CORTISOL

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A burgeoning literature indicates that adult children with problems (e.g., legal trouble, poor health) negatively affect parental well-being. The present study explored two questions: 1) do parents have different types of daily interactions with adult children who have problems?, and 2) do encounters with adult children who have problems have implications for daily cortisol rhythms? A total of 203 middle-aged adults reported for seven days on interactions with adult children and provided saliva (analyzed for cortisol) for four of those days. Multilevel models revealed that parents reported more negative encounters with, and worried more about, children who had problems. Interactions with children who had health problems had same day cortisol effects whereas interactions with children who had lifestyle problems (drinking, job loss) had next day effects on cortisol. The hypothalamic pituitary adrenal axis appears to be an important mechanism by which adult children with problems negatively affect parental well-being.