

## **Stress and Physical Health**

Aiello, Kaplan, Young (alphabetical, but probably will reflect effort)

### **1. What do we mean by stress (stressors, experience, physiological)**

- Focus on stressors related to socioeconomic position (individual and neighborhood) and family issues (divorce, bereavement, conflict, caregiving)
- Importance of distinguishing between acute and chronic stressors, particularly in PSID

### **2. Why study stress(ors) in PSID? (individual difference “vs.” social epi perspectives)**

- Pathway effects (stress associated with socioeconomic position and what it entails)
- “Independent” effects, more likely related to individual differences/heterogeneity

### **3. Use cardiovascular disease (CVD) as a physical health example. Describe importance of CVD and it’s relation to SES and stressors**

### **4. Evidence relating stressors (acute and chronic) to:**

- CVD outcomes (all CVD, MI incidence/survival/mortality)
- CVD (behavioral) risk factors [smoking, obesity, physical activity, diet, depression]
- Biological pathways –related to behavioral factors above and psychoneuroimmune effects- (blood pressure, lipids, hemostatic factors, inflammatory markers (cytokines and acute phase proteins), metabolic factors, heart rate variability, HPA axis (cortisol), endothelial function, persistent infection)

### **5. Measurement/Feasibility issues (for each “biomarker” on the biological pathway)**

- Measurement error
- Variability (random, systematic, seasonal, time of day, fasting)

- Require in home or clinic visit vs. mail-in
- Usefulness of single measure vs need to track over time and have multiple measures
- Single sample with assay or stored samples
- Respondent burden
- What are critical cofactors that you need to collect (meds, diet, baseline health conditions, immune function, etc)

#### **6. Other issues related to stress and health**

- Allostatic load—is it the only paradigm?
- Is PSID the best study for looking at these pathways (where is it likely to be useful, where not?)
- How strong is the evidence for any single marker? Is there a need to take a systems approach (e.g. collection of one marker mandates collection of another to provide physiological context)?