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)?