1. Title:
   Occupational Stress, Race, and Atherosclerosis

2. Writing Group:
   (lead) Muntaner, Nieto, Cooper, Szklo, Tyroler, Schooler

3. Timeline:
   Analysis to be initiated immediately first and second visit data.

4. Rationale:
   In a preliminary study (MS #116) using first visit data we found an association between occupational stress and atherosclerosis even after adjustment for age, income, cholesterol, blood pressure, smoking, and obesity. Black women, in particular seemed more vulnerable to the negative effects of occupational stress than other race-gender groupings. We intend to explore this relationship with longitudinal data using structural equation modeling. This method, which has recently come to be applied epidemiological studies (Breslow, 1988), allows for the study of indirect effects (i.e., mediation), and accounts for the measurement error intrinsic to psychometric constructs (Schooler, 1993).

5. Main Hypothesis:
   The relationship between occupational stress, atherosclerosis and its proximal risk factors (blood pressure, cholesterol, smoking, obesity) is modified by race and social class locations.

6. When wall thickness is the outcome, the whole ARIC sample will be used in the analysis. Case-control data will be used in a complementary analysis in which prevalence of Cardiovascular disorders will be the dependent variable. Only participants with "no-missing" census occupation will be included. Only white or black participants will be included. Those participants reporting "housework" in the current employment status variable will also be excluded. We will try to conduct analyses stratifying by gender, race and social class. Other variables to be included are: age, marital status, cholesterol, blood pressure, body-mass index, and smoking.

   Dr. Schooler is among the leading experts in the application of SEM to sociological, psychological and psychiatric research. Dr. Schooler works at the National Institute of Mental Health, National Institutes of Health, Bethesda, Maryland.

REFERENCE: