ARIC MANUSCRIPT PROPOSAL FORM

Manuscript #116

1. Title:
Occupational Strain and Atherosclerosis

2. Writing Group:
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3. Timeline:
Analysis to be done immediately using available cross-sectional data from the first visit.

4. Rationale:
There is a certain amount of evidence that <u>lack of control</u> over work, that is, the combination of low skill discretion (repetitiveness, low creativity and development) and low decision authority (individual's ability to make decisions about his/her job) is associated with cholesterol levels and with CHD (independently of traditional risk factors, including cholesterol). Methods that allow estimation of psychosocial dimensions of occupation (job control and psychological demands)
from the 3-digit occupational codes used in ARIC have been developed.

5. Main Hypothesis:
Job strain and job control are associated with both prevalent CHD and atherosclerosis independently of the level of traditional risk factors.

6. Data: Both case-control and data using the whole ARIC sample will be used for separate analyses. Only subjects with "no-
missing" occupational codes will be used. That excludes those reporting "housework", although the latter may be used as a
reference category. Prevalent disease and atherosclerosis (including imputed data) will be the main outcomes. Adjustment
variables will include sex, age, smoking, cholesterol and blood pressure levels, family history, physical exercise, and weight.
Cholesterol and blood pressure will be studied as outcomes in separate analyses. Sex and race specific analyses will be
attempted.

(This analysis will complement MP #038, in which a broader use of occupation in Census categories, along with other social
factors, will be attempted.)

P.S. Dr. Carlos Muntaner is a graduate student in the Department of Mental Hygiene, JHU School of Hygiene and Public Health, and will work under the supervision of Dr. Nieto and Dr. Szklo.