#### ARIC MANUSCRIPT PROPOSAL FORM

Manuscript #512

#### 1. Title:

Association of arterial stiffness and the development of hypertension - The ARIC Study **Short Title:** Arterial Stiffness and Hypertension

# 2. Writing Group:

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### 3. Timeline:

Submit Proposal to Publications Committee August, 1997
Complete analysis December, 1997
Submit first draft to Publications Committee March, 1998
Submit to Journal August, 1998

Note: This manuscript will focus on baseline normotensives defined as not using antihypertensive medication, and blood pressure <140/90 mmHg. To reduce the impact of regression towards the mean, a higher cut point will be used to identify incident hypertensives during the follow-up (through Visit 3). Thus, incident hypertension will be defined as using antihypertensive medication or systolic BP greater than or equal to 160 or diastolic BP greater than or equal to 95 mmHg.

### 4. Main Study Questions:

- (1) Is arterial stiffness associated with the development of hypertension in normotensives at the population level?
- (2) Is the association independent of conventional risk factors of hypertension?
- (3) Is the association modified by ethnicity, and smoking status?

# 5. Data (variables, source, inclusion/exclusion):

The following variables are needed for this analysis: Arterial stiffness data (Visit 1 and Visit 2 combined), visit 3 and Visit 4 blood pressure and antihypertensive medication status, Visit 1 and Visit 2 hypertension status, antihypertensive medication and blood pressure at Visit 1 to Visit 2, race, gender, field center, education levels, smoking status, BMI, total cholesterol at Visit 2.