Manuscript #368

1. Title: Prevalence of seizures in blacks and whites

2. Writing Group: Rich, Evans, Toole (Gordon ?, others welcomed)

3. Timeline:
   Analyses to begin at once.

4. Rationale:
   The term, seizure, can be defined as an uncontrollable burst of electrical activity centered within the brain. Seizures can occur in many ways, including uncontrollable tonic and/or clonic jerks and/or a momentary loss of consciousness and/or altered mental state.

   Publications containing estimates of prevalence and identification of risk factors associated with seizures and epilepsy in young subjects have been numerous. In general, the studies have been small in sample size, limited in follow-up of participants, and have ignored important components of the population. To date, few studies have been focused on non-Caucasians or on elderly populations.

   The current manuscript proposal addresses these limitations by using a large, well-defined population (ARIC cohort) and the Stroke/TIA questionnaire (for precipitating events, "seizure" is queried). Analyses will be undertaken to estimate prevalence and the distribution of risk factors (age, sex, ethnicity, prior stroke) for seizures at the baseline ARIC visit. As it is recognized that ethnic differences may be confounded with center, all analyses will include comparison of seizures prevalence in Jackson with that seen in African-Americans in Forsyth County. Other approaches will include "center" as a variable in the statistical models.

5. Hypothesis #1: The frequency of seizures (prevalence) among a population-based sample of African-Americans and Caucasians do not differ by age, sex, and ethnic group.

   Hypothesis #2: The frequency of seizures in those with prior stroke is the same as in those without a prior history of stroke.

6. Data (variables, time window, source, inclusions/exclusions):
   Visit 1 data including demographic variables (age, sex, race, location, exam date), medication use, medical history, and study endpoints (seizures from stroke/TIA questionnaire at visit 1).