1.a. **Full Title:** Does smoking modify the relationship between alcohol consumption and risk of coronary heart disease (CHD)?

1.b. **Abbreviated Title (Length 26 characters):** Smoking, drinking & CHD

2. **Writing Group (list individual with lead responsibility first):**
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   Writing group members: Robert Murray, Ph.D., Candice Silversides, Michael Andrew, Ph.D., D. Abu Khan, Ph.D.

3. **Timeline:**
   Analysis to begin following Publications Committee approval. Manuscript anticipated for initial review by July 2000.

4. **Rationale:**
   There is a well established empirical relationship where moderate consumption of alcohol is found to be protective against CHD. This has now been documented in over 100 studies, and several reviews are available (1,2). More specifically, there is a U- or J-shaped relationship between level of alcohol use and mortality, where moderate drinkers have a lower risk than either heavy drinkers or abstainers. Among older men where CHD is prevalent, the overall effect of alcohol consumption can appear protective (3). These relationships are less clearly identified for women. A similar relationship has been found between alcohol and morbidity, but again less clearly among women (4).

   The underlying mechanisms are only partly understood. In part they have been linked to high-density lipoprotein cholesterol (5). From a more social perspective it has been proposed that the relationship between drinking and mortality may be mediated by social integration (6,7), but evidence of this has not been found (8). It has also been suggested that smoking may play a role in the relationship, and that previous studies have not adjusted for smoking appropriately (9). The modifying role of smoking has not consistently been found, however (4, 10). This modifying role of smoking needs to be further evaluated. This proposal is to test the confounding effect of smoking, and of the interaction of smoking status and drinking amount, in an adjusted Cox regression model of CHD morbidity and mortality.

5. **Main Hypothesis:**
   The primary hypothesis is that there will be an interaction between smoking and the use of alcohol as a significant covariate in the model predicting morbidity and mortality from CHD.
6. Data (variables, time window, source, inclusions/exclusions):
Data to be used will include baseline and Visit 1 data for all participants. Variables will include smoking status, smoking amount, use of alcohol, race, age, gender, BMI, income, and education. Outcome measures will include follow-up evidence of coronary heart disease and cardiovascular disease, and evidence of deaths attributed to these diseases.

References:

7.a. Will the data be used for non-CVD analysis in this manuscript?  __x__ Yes  ____ No

b. If Yes, is the author aware that the file ICTDER01 must be used to exclude persons with a value RES_OTH = “CVD Research” for non-DNA analysis, and for DNA analysis RES_DNA = “CVD Research” would be used?  __x__ Yes  ____ No
   (This file ICTDER01 has been distributed to ARIC PIs, and contains the responses to consent updates related to stored sample use for research.)

8.a. Will the DNA data be used in this manuscript?  ____ Yes  __x__ No

8.b. If yes, is the author aware that either DNA data distributed by the Coordinating Center must be used, or the file ICTDER01 must be used to exclude those with value RES_DNA = “No use/storage DNA”?  ____ Yes  __x__ No, NA