### ARIC MANUSCRIPT PROPOSAL FORM

## Manuscript #107

# 1. Title (length 26):

Herpes-CMV-Atherosclerosis

## 2. Writing Group:

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#### 3. Timeline:

Viral antibody determinations in 100 cases and 100 controls will be done by May, 1991. Preliminary analysis will be done at that time. If successful, 200 more cases and 200 more controls will be selected and viral determinations made. Final analysis will proceed when all viral determinations are complete.

## 4. Rationale:

Viruses have been hypothesized to play a role in atherosclerosis and recent evidence has suggested that members of the herpes family are most worthy of investigation. Animal and human pathology studies have shown evidence of herpes and CMV in atherosclerosis. CMV antibodies are higher in patients undergoing bypass surgery. Opportunistic CMV infections among cardiac transplant patients are associated with graft atherosclerosis.

## 5. Main Hypothesis:

The percent of persons with elevated antibody levels of cytomegalovirus is higher among cases (atherosclerosis by ultrasound) than among normal controls (no atherosclerosis by ultrasound). A similar hypothesis is held for herpes virus type 1 and herpes virus type 2.

### 6. Data:

CMV and herpes antibody levels will be sent to the coordinating center from the viral lab in Houston. Case-control matching identification will be required. Additional information such as age, sex, race, and atherosclerotic risk factors will be required.

Keywords: Infectious agents, case-control, sociodemographic