ARIC Manuscript Proposal # 913

PC Reviewed: 11/13/02	**Status: __A__**	**Priority: __2__**
SC Reviewed: 11/15/02	**Status: __A__**	**Priority: __2__**

1.a. Full Title: Relationships between Clinical Measures of Periodontal Disease (Probing Depth and Bleeding on Probing) and Systemic Exposure (C - reactive protein and Soluble Intercellular Adhesion Molecule (sICAM))

b. Abbreviated Title (Length 26 characters): **P**eriodontitis and CRP & sICAM

2. Writing Group (list individual with lead responsibility first):

Lead: **James Beck**
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Writing group members: Steve Offenbacher

3. Timeline: I had been invited to present a paper on Clinical Signs of Periodontal Disease as an Exposure for Systemic Disease at the International Conference on Periodontal Research. I made the presentation, which focused on relationships among clinical periodontal measures and only used CRP and sICAM data as an example of why periodontal researchers needed to pay more attention to periodontal disease as an exposure. I then learned that a manuscript from the presentation was required and, after peer review would be published in the *Annals of Periodontology*. I have been working on the manuscript and realized that I had not submitted a manuscript proposal. Thus, if the request is approved, a manuscript could be ready very shortly.

4. Rationale: The vast majority of studies on the relationship between periodontal disease and cardiovascular disease have used clinical measures of periodontitis (mostly attachment loss) as the exposure. This was done under the assumption that the clinical signs that bode poorly for the dentition are the most appropriate exposures for systemic measures. This assumption is not likely to be correct as the clinical signs are imperfect reflections of the interaction between the underlying infection and the host response, which is the likely exposure for systemic disease. Thus, clinical signs that are more closely related to the infection and host response may be more likely than attachment loss to reflect an association with systemic markers.

5. Main Hypothesis/Study Questions:
The purposes of this paper are to explore the relationships between selected clinical signs of periodontal disease and to determine associations between these clinical signs and two systemic measures that have been associated with risk for cardiovascular disease, CRP and sICAM.

6. Data (variables, time window, source, inclusions/exclusions):

The data needed include all Visit 4 participants who have both periodontal examinations and hsCRP and sICAM data. We will be using all of the clinical periodontal variables, hsCRP, sICAM, as well as demographic and social control variables and potential confounders of the periodontal – CRP and sICAM associations. We currently have the needed data available.

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 ICTDER02 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 ICTDER02 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 ICTDER02 must be used to exclude those with value RES_DNA = "No use/storage DNA"? ____ Yes ____ No

9. The lead author of this manuscript proposal has reviewed the list of existing ARIC Study manuscript proposals and has found no overlap between this proposal and previously approved manuscript proposals either published or still in active status.
ARIC Investigators have access to the publications lists under the Study Members Area of the web site at: http://bios.unc.edu/units/cscc/ARIC/stdy/studymem.html

___x___ Yes _____ No

10. What are the most related manuscript proposals in ARIC (authors are encouraged to contact lead authors of these proposals for comments on the new proposal or collaboration)?

The only other proposal with some overlap is #492, Relationship between periodontal disease and CRP among adults in ARIC. Gary Slade is the primary author and he agrees that there is no conflict, since the scope and purpose of the analyses with CRP are very different.