1.a. Full Title: Predictors of Root Caries in Older Adults in US.

b. Abbreviated Title (Length 26 characters): Predictors of Root Caries in Older Adults in US.

2. Writing Group: School of Dentistry at Chapel Hill – UNC
Writing group members: Pimenta, LA*; Ritter, AV; Beck, JD

I, the first author, confirm that all the coauthors have given their approval for this manuscript proposal. _LAP_ [please confirm with your initials electronically or in writing]

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3. Timeline: 3/15.08: Analysis completed
5/15/08: Manuscript sent to ARIC Publications Committee
7/1/08: Manuscript submitted to Journal.
4. **Rationale:** With the anticipated increase in the older adult population in the US and assuming a constant rate of gingival recession surfaces (GRS), root caries (RC) prevalence is expected to increase. Although GRS is considered a risk factor (and some would say, a necessity) for RC, attack rates may differ for lingual (tongue side) compared to buccal (lip side) surfaces due to the reduced amount of biofilm, and the saliva’s buffer capacity. If root caries prevalence and attack rate (see below) do differ by type of surface, this will have implications for prevention and provide a further rationale for a grant application to investigate the reasons for these differences.

5. **Main Hypothesis/Study Questions:** Although GRS is considered a risk factor for RC, attack rates (# root lesions per surface with gingival recession) may differ for lingual compared to buccal surfaces.

6. **Design and analysis (study design, inclusion/exclusion, outcome and other variables of interest with specific reference to the time of their collection, summary of data analysis, and any anticipated methodologic limitations or challenges if present).**

This will be a cross-sectional data analysis from the Dental-ARIC study dataset. Data from 6550 subjects aged 52-64 (interviewed and with dental examinations) will be analyzed. Surfaces with root caries, number of filled root surfaces, buccal-surface or lingual-surface with gingival recession, gender, race, smoking status, educational level, income, and whether subjects had a dentist will be evaluated. The association between root caries and type of tooth surfaces with gingival recession will be evaluated using logistic regression, adjusting for covariates.

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 ICTDER03 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 ICTDER03 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?  _X_ Yes  ____ No

8.b. If yes, is the author aware that either DNA data distributed by the Coordinating Center must be used, or the file ICTDER03 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://www.csecc.unc.edu/ARIC/search.php

__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)?

This is the first proposal to use the dental caries data that was collected in ARIC.

11. a. Is this manuscript proposal associated with any ARIC ancillary studies or use any ancillary study data?  __X__ Yes  ___ No

11.b. If yes, is the proposal

__X__  A. primarily the result of an ancillary study (list number* 1996.01__________)

___ B. primarily based on ARIC data with ancillary data playing a minor role (usually control variables; list number(s)* __________  __________

*ancillary studies are listed by number at http://www.csecc.unc.edu/aric/forms/

12. Manuscript preparation is expected to be completed in one to three years. If a manuscript is not submitted for ARIC review at the end of the 3-years from the date of the approval, the manuscript proposal will expire.