ARIC Manuscript Proposal #693

PC Reviewed: 08/25/99          Status: Approved          Priority: 2
SC Reviewed: _______          Status: _______          Priority: _______

1.   Title:

Physical activity in the context of neighborhood environments

2.   Writing Group:

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3.   Timeline:

Submit proposal to Publications Committee   August 1999
Begin collecting primary data in Forsyth County   September 1999
Submit grant to extend scope of data collection to include remaining 3 ARIC sites   Fall 1999 or Spring 2000
Analyses completed on Forsyth County   Summer 2000
Draft of publication on Forsyth County data ready   Summer 2000

4.   Rationale:

Physical activity can improve health and the quality of life, yet the prevalence of inactivity remains high. Physical activity patterns are likely influenced in a variety of ways, including the intrapersonal, interpersonal, environmental, and public policy levels. Our focus for this manuscript proposal is at the environmental level. Research is needed to understand the impact and influence of one’s immediate environment on physical activity. This research should consider a contextual approach which incorporates measures of the neighborhood environment. Further understanding of the influence of environmental opportunities on physical activity can aid our understanding of the context which leads to risk and can help guide future strategies, especially when considering both individual and neighborhood measures of socioeconomic status (SES). These results can also point to specific geographic areas in need of environmental level interventions to improve physical activity locally, while providing a template to be used for other geographically defined communities.
5. **Main Hypotheses:**

(1) Opportunities for leisure activity in the home or work neighborhood are positively associated with neighborhood measures of SES.

(2) Those living in higher SES neighborhoods will report more leisure activity than persons living in lower SES neighborhoods.

(3) Those living or working in neighborhoods rich in leisure activity opportunities will report higher levels of leisure activity than those living in neighborhoods restricted in leisure activity opportunities. This relationship will be independent of individual and group level measures of SES.

5. **ARIC Data:**

Existing data from the ARIC Study will be utilized to provide individual level SES (collected at baseline) and self-reported leisure activity as defined by the modified Baecke questionnaire (1993-95). Other factors of interest which have been collected in ARIC include age, gender, ethnicity, education, income, health status, and body mass index. To examine the relationship between facilities and distance to the participant’s home and work location, this analysis will require home and work addresses of each ARIC participant. Currently Dr. Ana Diez-Roux is conducting geocoding of ARIC home addresses. We will supplement her work to include geocoding of the participant’s work address. Existing census data will be used to define neighborhood levels of socioeconomic status (SES). Information relevant to physical activity opportunities in the community will need to be collected, such as location of parks and exercise facilities.