# ARIC MANUSCRIPT PROPOSAL FORM

# Manuscript #482

 Full Title: What is the optimal standard for judging ventricular repolarization from resting electrocardiography--the QT interval or the JT interval Abbreviated Title (length 26): Value of JT Interval
Writing Group (list individual with lead responsibility first): Lead: Richard S. Crow, MD Address: 1300 South 2nd Street, Minneapolis, MN 55454 Phone: (612) 626-9678 FAX: (612) 624-0315 Email: Crow@epivax.epi.umn.edu

Peter Hannan Pentti Rautaharju Lori Vitelli

3. Time line: First draft February 1998.

## 4. Rationale:

Dependence of QT interval on heart rate is established as an intrinsic property of ventricular myocardium. Ventricular repolarization is considered the primary predictor of elevated mortality risk among individuals with a long heart rate corrected QT. However, the QT includes both ventricular depolarization and repolarization while the JT interval reflects only ventricular repolarization. Presumably, the JT should provide a more valid index of ventricular repolarization. Furthermore, the QT interval has limited value in persons with bundle branch block. The JT interval does not have this limitation.

## 5. Main Hypothesis:

The corrected JT interval is a better predictor of incident CHD, total and cause specific mortality than the corrected QT interval. It provides a better method to evaluate abnormalities of repolarization among individuals with normal or prolonged QRS duration than the QT interval.

## 6. Data:

ECG data, risk factors, incident CHD mortality outcome. Baseline and available followups.