

Department of Biostatistics

Thursday, October 26, 2017

11:00am – 12:30pm

Erma Byrd 201

Visiting Speaker:

Corey Sparks, PhD

Associate Professor, Department of Demography
and

Adjunct Associate Professor, Department of Biostatistics and Epidemiology
The University of Texas at San Antonio

Topic:

Spatio-Temporal Analysis of Mortality Rates in the US,
using Bayesian Methods

Abstract:

Differences in mortality rates between African-Americans and Non-Hispanic Whites have persisted over both space and time. While the overall rate of mortality in both groups has declined during the twentieth century, noted disparities persist. The present analysis uses data from the NCHS Compressed Mortality File from 1980 to 2010 and a Bayesian spatio-temporal modeling approach to understand not only the time-specific associations between common correlates of mortality at the population levels, but also documents the temporal changes in effects of residential segregation on differences in black and white mortality. Methodologically, the Integrated Nested Laplace Approximation is employed for all Bayesian model estimation. This approach offers parameter estimates consistent with the full MCMC approach, while minimizing computational time.