

Department of Statistics

BROWN BAG LECTURE SERIES

11:30-12:30 • TUESDAY, OCT 20TH • ROOM 503, BLOCKER



Guest Speaker:

Samiran Sinha

Assistant Professor

Department of Statistics

Texas A&M University

Seminar: Analysis of cohort studies with multivariate, partially observed disease classification data

Complex diseases like cancer can often be classified into subtypes using various pathological and molecular traits of the disease. In this talk, Dr. Sinha will describe methods for analysis of disease incidence in cohort studies incorporating data on multiple disease traits using a two-stage semi-parametric Cox proportional hazards regression model that allows one to examine the heterogeneity in the effect of the covariates by the levels of the different disease traits.

For inference in the presence of missing disease traits, we propose a generalization of an estimating-equation approach for handling missing cause of failure in competing-risk data. He will talk about the asymptotic unbiasedness of the estimating-equation method under a general missing-at-random assumption and a novel influence-function based sandwich variance estimator. He will also talk about the simulation studies and a real data application involving the Cancer Prevention Study (CPS-II) nutrition cohort.

History: Samiran Sinha completed his doctorate in the University of Florida in 2004. His research is focused on statistical methods for epidemiological studies which deal with studying factors affecting the health and illness of populations, particularly he works on the issue of missing data and measurement error. The developed statistical techniques heavily rely on parametric and semi-parametric approaches for flexible and robust modeling.

THE DEPARTMENT OF STATISTICS BROWN BAG SEMINAR IS A GREAT OPPORTUNITY FOR STUDENTS TO HEAR FROM THEIR PROFESSORS & ALUMNI ABOUT CURRENT RESEARCH GOING ON IN THE DEPARTMENT & INDUSTRY. WE WILL HAVE PIZZA AND DRINKS FOR ALL WHO ATTEND! HOPE TO SEE YOU THERE!