1/25/2024
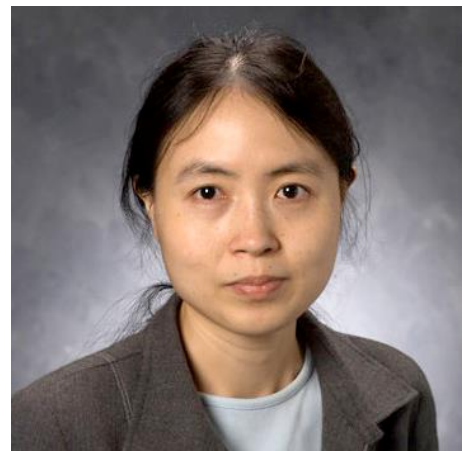## 4:00 PM, Room 204, Caldwell Building

Xiao Song

Professor at Epidemiology & Biostatistics Department at UGA

Evaluating biomarkers for treatment selection from reproducibility

We consider evaluating new or more accurately measured predictive biomarkers for treatment selection based on a previous clinical trial involving standard biomarkers. Instead of rerunning the clinical trial with the new biomarkers, we propose a more efficient approach which requires only either conducting a reproducibility study in which the new biomarkers and standard biomarkers are both measured on a set of patient samples, or adopting replicated measures of the error-contaminated standard biomarkers in the original study. This approach is easier to conduct and much less expensive than studies that require new samples from patients randomized to the intervention. In addition, it makes it possible to perform the estimation of the clinical performance quickly, since there will be no requirement to wait for events to occur as would be the case with

About the Speaker

Dr. Song is a Professor at Dept. of Epidemiology & Biostatistics at UGA. Dr. Song received her PhD in Statistics at North Carolina State University in 2002. Dr. Song's research interest has been focus on development of statistical methods to deal with covariate measurement error and missing data, and to identify biomarkers for prognosis, diagnosis and treatment selection.