When: **Friday 13:50 – 14:50**
Where: **ETB 1020**

Speaker: **Yang Ni**

Assistant Professor
Department of Statistics
Texas A&M University

Title: **Applications of Network Models in Biostatistics and Bioinformatics**
Date: **10-12-2018**

Abstract: In this talk, I am going to talk about several applied methodologies in the areas of integrative genomics, precision medicine and public health. Particularly, for genomics, data integration across different platforms and cancers is adopted to improve statistical power and to identify otherwise non-identifiable network models. For applications in precision medicine, I developed several methods that take tumor heterogeneity into account. These include a novel network-based clustering algorithm, a personalized network modeling approach and a personalized prognostic marker detection. And finally, I will also discuss my recent work on cancer surveillance and electronic health records, which have potential impact on public health. If time permits, I will also talk about my current and future research interests.

Bio: Yang Ni is currently Assistant Professor in Department of Statistics, Texas A&M University since 2018. He received a PhD in Statistics from Rice University in 2015, supervised by Francesco Stingo and Veerabhadran Baladandayuthapani. He completed his postdoctoral training supervised by Peter Müller from the University of Texas at Austin in 2018. He received an honorable mention for the Leonard J. Savage Award for outstanding dissertation in Bayesian Applied Methodology from the International Society for Bayesian Analysis (ISBA) in 2016 and several Distinguished Student Paper Awards including the Laplace Award of the Section on Bayesian Statistical Science (SBSS) of the American Statistical Association (ASA) in 2014.

Yang's research interests lie in the development of novel Bayesian methodologies that find good motivations in biomedical sciences. Methodologically, he works in the areas of graphical models, Bayesian nonparametrics, big data computation, random networks, variable selection, clustering, feature allocation and classification. In terms of scientific areas, he is primarily interested in cancer genomics, genetic networks, brain connectomics, clinical trial design, tumor heterogeneity, precision medicine, biomarker detection and electronic health records.

Yang Ni is a member of the American Statistical Association, the International Society for Bayesian Analysis, the International Indian Statistical Association and International Chinese Statistical Association.