BIOMEDICAL DATA SCIENCE PRESENTS:
BIODS 260C
5/11/23 1:30PM-2:50PM
MSOB X303 (ZOOM LINK BELOW)

Lexin Li, Ph.D.
Professor of Biostatistics at the Department of Biostatistics and Epidemiology, and Helen Wills Neuroscience Institute, of the University of California, Berkeley

Title: Statistical Neuroimaging Analysis: An Overview

Abstract:

Understanding the inner workings of human brains, as well as their connections with neurological disorders, is one of the most intriguing scientific questions. Studies in neuroscience are greatly facilitated by a variety of neuroimaging technologies, including anatomical magnetic resonance imaging (MRI), functional magnetic resonance imaging (fMRI), electroencephalography (EEG), diffusion tensor imaging, positron emission tomography (PET), among many others. The size and complexity of medical imaging data, however, pose numerous challenges, and call for constant development of new statistical methods. In this talk, I give an overview of a range of neuroimaging topics our group has been investigating, including imaging tensor analysis, brain connectivity network analysis, multimodality analysis, and imaging causal analysis. I also illustrate with a number of specific case studies.

Bio:

Lexin Li, Ph.D., is a Professor of Biostatistics at the Department of Biostatistics and Epidemiology, and Helen Wills Neuroscience Institute, of the University of California, Berkeley. His research interests include neuroimaging analysis, network data analysis, high dimensional regressions, dimension reduction, machine learning, and biomedical applications. He is a Fellow of the American Statistical Association (ASA), a Fellow of the Institute of Mathematical Statistics (IMS), and an Elected Member of the International Statistical Institute (ISI).

Zoom link: https://stanford.zoom.us/j/92124459914?
pwd=cFpJYXVLOExUVjMzZkNsYXA0b0RxUT09&from=addon
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