

MSCS DEPT COLLOQUIUM:

SEX DIFFERENCES IN GENOMICS: ANALYTICAL CONSIDERATIONS AND APPLICATIONS TO MENTAL HEALTH

MONDAY, OCTOBER 13, 2025 | 3:30PM

Stacey J. Winham is an Associate Professor of Biostatistics in the Division of Computational Biology at Mayo Clinic, and currently serves as the Program Director of the Clinical and Translational Sciences PhD Program in the Mayo Clinic Graduate School of Biomedical Sciences. She received her B.A. in Mathematics with a Concentration in Statistics from St. Olaf College, and was a member of the inaugural class of the Center for Interdisciplinary Research. She received her PhD in Statistics from North Carolina State University. She is a statistical geneticist interested in the genetic etiology of common, complex diseases, particularly related to women's health and sex differences and the role of the X chromosome. She develops statistical methods to identify genetic risk factors for diseases in high-dimensional data and applies those analysis methods to studies of psychiatric genetics, breast cancer and ovarian cancer.

Our Speaker:
Stacey Winham '06

ASSOCIATE PROFESSOR OF
BIostatISTICS, DIVISION
OF COMPUTATIONAL
BIOLOGY, MAYO CLINIC



Differences between males and females are common across many biological traits, including disease prevalence and clinical presentation, and these sex differences are due to both genomic and non-genomic factors. This talk will explore common genomic study designs and analysis methods, and how and why these designs and analyses should be 'sex-aware' to improve precision medicine. We will illustrate concepts using examples focused on psychiatric and behavioral traits, and highlight work conducted by St. Olaf students.

JOIN US AT 3:30PM ON MONDAY, OCT 13

RNS 210