

**Indiana University-Purdue University
Indianapolis**
Department of Mathematical Sciences

STATISTICS SEMINAR

12:15pm—1:15pm, Tuesday, February 27, 2024
Zoom Meeting: Meeting ID: 845 0989 4694

Speaker: **Jiayue Wang**
Department of Mathematical Sciences, IUPUI

Title: **Asymptotic properties of Optimal Bivariate Sequential
test**

Abstract:

We study the asymptotic properties of post-test estimators following the optimal bivariate sequential test we propose. These asymptotic (normality) results are used to simplify the power calculation as well as determination of the Average Sample Number (ASN) of the optimal test. In addition, we discuss the asymptotic properties of the estimator for the relative risk of the two side effects in this sequential framework, and derive the appropriate confidence interval for it. Finally, two detailed examples are provided.