

RUTGERS UNIVERSITY DEPARTMENT OF STATISTICS AND BIOSTATISTICS

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**Seminar**

**Speaker:** Derek Gordon  
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**Title:** Assessment, management, and integration of misclassification errors in statistical tests of genetic association

**Date:** Wednesday, October 10

**Time:** 3:20 PM

**Place:** 552 Hill Center

**Abstract**

Misclassification error can substantially inflate the type I and type II error rates for statistical tests of genetic association. Here, we present methods to assess power loss or inflation in type I for association tests where the unit of measure is single locus genotypes or multi-locus haplotypes. We also present methods that integrate misclassification errors into the analysis of genetic data. We document what parameters most significantly alter the type I and type II errors, and we provide study design recommendations to minimize the effects of misclassification error.

**Refreshments:** 2:50 PM, 502 Hill Center