

MASTER'S SEMINAR ANNOUNCEMENT
Department of Statistics

**Two-Marker Likelihood Based Transmission/Disequilibrium
Test for Association Studies**

Tuesday, November 18, 2003, 2:00 pm
Eckhart Hall, Room 110, 5734 S. University Avenue

Wen-Hsin Feng
Department of Statistics, University of Chicago

ABSTRACT

The goal of linkage disequilibrium studies is to detect the linkage between marker and disease loci in presence of allelic association. However, population stratification and admixture may lead to the association in absence of linkage. The TDT (transmission/disequilibrium test), a family-based linkage-disequilibrium test, is not affected by these problems. In this paper, a simple extension of the TDT will be introduced to several markers based on a likelihood ratio test. The test will be applied to three biallelic SNPs genotyped for an IBD (inflammatory bowel disease) project.