

DEPARTMENT OF STATISTICS COLLOQUIUM SERIES

Texas A&M University

SANAT K. SARKAR

Department of Statistics
Temple University, Philadelphia, PA

**CONTROLLING DIFFERENT ERROR RATES IN MULTIPLE
TESTING: SOME RECENT DEVELOPMENTS**

ABSTRACT:

Multiple hypothesis testing is now playing a pivotal role in analyzing data from modern scientific investigations, such as DNA microarray, functional magnetic resonance imaging (fMRI), and many other biomedical studies. To keep pace with the growing needs to answer scientifically relevant questions arising in those studies, a tremendous upsurge of research has taken place in the area of multiple testing in the last decade or so, resulting in newer theories and methodologies. A major portion of this research has been devoted to developing methods that control error rates more meaningful as well as powerful than traditional ones in the context of these investigations. A number of such error rates measuring false discoveries, including the false discovery rate (FDR), and procedures controlling them have received considerable attention. In this talk, I will present some important developments related to these error rates with finite number of hypotheses.

DATE: Thursday, November 12, 2009

TIME: 11:10 a.m. – 12:10 p.m.

PLACE: Room 150, Blocker

Refreshments will be served in the Statistics Conference Room at 10:30 am for those attending the seminar.