

Jun Liu, Ph.D.

Professor, Department of Statistics
Harvard University

CIBM Distinguished Lecturer

***From Sequence Information to
Gene Expression***

Abstract:

Understanding how genes are regulated in various circumstances (e.g., heat shock, starvation, etc.) is a central problem in molecular biology. The adoption of large-scale biological data generation techniques such as mRNA microarrays has enabled researchers to tackle the gene regulation problem in a global way. Using the baker's yeast as a model system, we explore the combined use of gene upstream sequence signals to explain the observed mRNA variations and to model the clustering effect based on multiple microarray experiments. We will briefly discuss our methods for finding sequence signals, and our use of variable selection techniques to screen out uninteresting ones.

**Tuesday, October 18th, 2005
4:00 p.m.**

Genetics/Biotechnology Center Auditorium
425 Henry Mall