

STATISTICS COLLOQUIUM

MONDAY, NOVEMBER 24, 2008

Talk: 4:00 PM — *Science Center 309*

Reception: 5:15 PM — *Science Center, 7th Floor*

“Genomic Analysis of Transcription Factors and Cis
Regulatory Elements: Regulatory Codes in DNA”

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ABSTRACT

We have examined the DNA binding specificities of hundreds of known and predicted transcription factors from a wide range of organisms, using universal protein binding microarrays, a novel technology that we developed. We have found previously undiscovered richness in the spectrum of the DNA binding preferences of transcription factors. We are examining such DNA binding data in conjunction with other high-throughput data sets, including gene expression profiling data, to predict cis regulatory modules (e.g., transcriptional enhancers), and to infer cis regulatory codes.