5th Annual Institute for Genomics & Bioinformatics (IGB)
Biomedical Informatics Training (BIT) Program Symposium

CALIT2 Auditorium, Room 1100
Monday, May 14 2007

9:00-9:10 AM  Opening Remarks. Pierre Baldi and G. Wesley Hatfield
9:10-9:15  Symposium Format. Samuel Danziger

Morning Session I


9:45-10:00  The Role of Genetic Instability in Multistage Carcinogenesis: An Optimal Control Problem. F.Y.M. Wan, A.V. Sadowsky, N.L. Komarova

10:00-10:15  Can We Solve Protein Structures at Lower Magnetic Fields? **Kevin J. Donovan**, Michael Sweredoski, Bao Dao Nguyen, Pierre Baldi, A.J. Shaka

10:15-10:30  Design of Self Assembling 3D DNA Nano-Structures. **Christopher D. Sassman**, Kirsty A. Salmon, Richard H. Lathrop, G. Wesley Hatfield

10:30-10:50  Coffee break

Morning Session II


11:45-12:00 PM  Optimizing NMR Experiments for High-Throughput Structural Genomics. **Michael Sweredoski**, Kevin Donovan, A.J. Shaka, Pierre Baldi

12:00-12:15  Systems Biology Modeling of Mitochondria OXPHO Pathway and ROS Generation. **Ivan Y Chang**, Pierre Baldi, Doug Wallace

12:15-1:15  Lunch Break

Afternoon Session I

1:15-1:30  Building 3D Chemical Structures from 2D Information. **Ryan W. Benz**, Pierre Baldi

1:30-1:45  Algorithms and Data Structures for Chemical Database Searches. **S. Joshua Swamidass**

1:45-2:00  Organic Reaction Expert Systems. **Jonathan Chen**

2:00-2:15  Host Population Epidemiology of Evolving Pathogen Strains. **Kaja Abbas**

2:15-2:30  Modeling the Methionine Dependent Phenotype of Cancer Cells. **Keith Booher**, Eric Mjolsness, Peter Kaiser

2:30-2:45  Using Mathematical Models to Identify Novel JNK Substrates. **Thomas Whisenant**, David Ho, Ryan Benz, Frank Antilla, Pierre Baldi, Lee Bardwell

2:45-3:00  Coffee Break

Afternoon Session II

3:00-3:15  Identification of Novel Transcriptional Regulators in *Chlamydia*. **Johnny Akers**, Bob Chan, Richard Lathrop, Dennis Kibler, Ming Tan

3:15-3:30  Genome-wide Identification of FXR Binding Site in mice by Using ChIP-on-chip Microarray. **Hansook Kim Chong**, Tae Il Jeon, Padhraic Smyth, Tim Osbourne

3:30-3:45  Recent Expansion, Exon Shuffling, and Population Genetics of *Helitron* Transposable Elements in *Arabidopsis thaliana*: **Jesse D Hollister**, Brandon Gaut

3:45-4:00  Population Genetics of Abiotic Stress Genes in Wild Populations of *Arabidopsis lyrata*: **Leah J DeRose-Wilson**, Brandon Gaut

4:00-4:10  Closing Remarks: G Wesley Hatfield, Pierre Baldi