

**The First Workshop on Intelligent Systems for Bioinformatics, 4 Dec 2006  
Program**

Session chair: Timothy L. Bailey

9:00 – 10:00      Keynote: Terry Speed, The Walter & Eliza Hall Institute of Medical Research and The University of California at Berkeley  
Some hidden Markov models I have known

BREAK

Session chair: Geoffrey J. McLachlan

10:30 – 10:55      Ahsan, N., Bain, M., Potter, J., Gaëta, B., Temple, M. and Dawes, I.  
Learning Causal Networks from Microarray Data

10:55 – 11:20      Maetschke, S.R., Towsey, M.W. and Hogan, J.M.  
Bacterial Promoter Modeling and Prediction for E. Coli and B. Subtilis with Beagle

11:20 – 11:45      Chakka, N. and Gready, J.E.  
Pathway to Functional Studies: Pipeline Linking Phylogenetic Footprinting and Transcription-Factor Binding Analysis

11:45 – 12:10      Bagirov, A.M. and Mardaneh, K.  
Modified Global K-Means Algorithm for Clustering in Gene Expression Data Sets

LUNCH

Session chair: Tuan D. Pham

13:00 – 13:25\*      Ng, S.K., McLachlan, G.J., Bean, R.W. and Ng, S.-W.  
Clustering Replicated Microarray Data via Mixtures of Random Effects Models for Various Covariance Structures

13:25 – 13:50\*      Hu, H., Li, J., Wang, H., Daggard, G. and Shi, M.  
A Maximally Diversified Multiple Decision Tree Algorithm for Microarray Data Classification

13:50 – 14:15\*      Davis, L., Hawkins, J., Maetschke, S. and Bodén, M.  
Comparing SVM Sequence Kernels: A Subcellular Localization Theme

14:15 – 14:40\*      Maetschke, S., Bodén, M. and Gallagher, M.  
Higher Order HMMs for Localization Prediction of Transmembrane Proteins

BREAK

Session chair: Adil M. Bagirov

15:30 – 15:55      Pham, T.D., Wang, H., Zhou, X., Beck, D., Brandl, M., Hoehn, G., Azok, J., Brennan, M.-L., Hazen, S.L., Li, K. and Wong, S.T.C.  
Linear Predictive Coding and its Decision Logic for Early Prediction of Major Adverse Cardiac Events using Mass Spectrometry Data

15:55 – 16:20      Hawkins, J. and Bodén, M.  
Multi-stage Redundancy Reduction: Effective Utilisation of Small Protein Datasets

16:20 – 16:45      Hamilton, N., Pantelic, R., Hanson, K., Fink, J.L., Karunaratne, S. and Teasdale, R.D.  
Automated Sub-Cellular Phenotype Classification: An Introduction and Recent Results

16:45 – 17:10      Yu, D., Pham, T.D., Yan, H. and Crane, D.I.  
Quantification of Neural Images using Grey Difference

\* subject to an extended lunch-break