

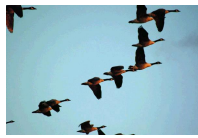
NiSIS/JCB Workshop

Top-down Approaches in Systems Biology – Applications

5th May 2006, Jena/Germany

Technologie- und Innovationspark TIP Jena, 3rd Floor,
Beutenberg-Campus, Wildenbruchstr. 15, D-07745 Jena

Organized by the Leibniz Institute for Natural Product Research and Infection Biology - Hans Knoell Institute and BioControl Jena GmbH with Support from the European Co-ordination Action NiSIS 'Nature-inspired Smart Information Systems' and the Jena Centre for Bioinformatics JCB



Nature-inspired Smart Information Systems

NiSIS
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JENA CENTRE FOR BIOINFORMATICS



Programme

- 08.30 - 09.00** *Registration*
- 09.00 - 09.15** **Welcome, Introduction and Programme Overview**
M. Pfaff (BioControl Jena GmbH, Jena, Germany)
D.A. Linkens (University of Sheffield, England)
- 09.15 - 09.45** **Data Warehouse for the Integrative Analysis of Transcriptome, Proteome and Metabolome Data**
N.C. Hauser (Fraunhofer Institute for Interfacial Engineering and Biotechnology, Stuttgart, Germany)
- 09.45 - 10.15** **Cluster Analysis of Metabolite, Gene Expression and other Profile Data**
J. Selbig (Max Planck Institute for Molecular Plant Physiology, Potsdam-Golm and University of Potsdam, Germany)
- 10.15 - 10.45** *Break*
- 10.45 - 11.15** **Optimized Alignment and Visualisation of Results Obtained from Classifier Ensembles**
M. Hoffmann, U. Moeller (Leibniz Institute for Natural Product Research and Infection Biology – Hans Knoell Institute, Jena, Germany)
- 11.15 - 11.45** **Stability Analysis of Gene Expression Time Course Clustering Used to Optimize Input Data for Gene Regulatory Network Reconstruction**
U. Moeller, D. Radke, R. Guthke (Leibniz Institute for Natural Product Research and Infection Biology – Hans Knoell Institute, Jena, Germany)
- 11.45 - 12.15** **Reconstruction of Gene Regulatory Networks of *Aspergillus fumigatus***
R. Guthke, O. Kniemeyer, D. Albrecht, A.A. Brakhage, U. Moeller (Leibniz Institute for Natural Product Research and Infection Biology – Hans Knoell Institute, Jena, Germany)
- 12.15 - 13.45** *Lunch Break*
- 13.45 - 14.15** **Reconstruction of Gene Regulatory Networks of the Central Metabolism of Primary Hepatocytes**
S. Zellmer, W. Schmidt-Heck, R. Guthke, R. Gebhardt (University of Leipzig, Germany; Leibniz Institute for Natural Product Research and Infection Biology – Hans Knoell Institute, Jena, Germany)
- 14.15 - 14.45** **Integrated Time Series Metabolomic and Transcriptomic Analyses of a Systematically Perturbed Plant System under Combined Elevated CO₂ and NaCl Stress**
B. Dutta, H. Kanani, J. Quackenbush, M.I. Klapa (University of Maryland, USA; The Institute for Genomic Research, TIGR, Rockville, USA; Foundation of Research and Technology Hellas, FORTH-ICEHT, Patra, Greece)
- 14.45 - 15.15** *Break*
- 15.15 - 15.45** **Analysis of Unreplicated Time-Course Microarray Data**
A. Callegaro, A. Luchini, C. Di Bello, S. Bicciato (University of Padova, Italy)
- 15.45 - 16.15** **Unravelling the Osteoblast Differentiation Pathway through Integrative Network Analysis**
E.P. van Someren, K.J. Dechering, M.J.T. Reinders (Delft University of Technology, The Netherlands)
- 16.15 - 16.30** **Closing Remarks**
M. Pfaff (BioControl Jena GmbH, Jena, Germany)
D.A. Linkens (University of Sheffield, England)