3. WORKSHOP

COMPUTATIONAL BIOLOGY IN SAXONY: PROBLEMS AND PERSPECTIVES

December 02, 2004

Dresden University of Technology

OBJECTIVE

The geographical vicinity of established and new research groups in Saxony in the field of computational biology offers a superb chance to exploit synergetic effects. The workshop aims at mutual information about ongoing activities and the identification of key topics for future common research projects. In particular, the Center for High Performance Computing (ZHR, Technische Universität Dresden) as organizer of the workshop offers its expertise and support for the solution of sophisticated problems in computational biology.

ORGANIZERS

Prof. Dr. Wolfgang E. Nagel
Dr. Andreas Deutsch
Zentrum für Hochleistungsrechnen
Technische Universität Dresden

WORKSHOP VENUE

TU Dresden
Zellescher Weg 12
01069 Dresden
Willers-Bau, Room C 207

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REPLY CARD

3. WORKSHOP COMPUTATIONAL BIOLOGY IN SAXONY

Name .....

First Name .....

Institution/Address .....

.....

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Phone ..... Fax .....

E-mail .....

○ I take part in the workshop

○ I do not take part in the workshop, but I would like to be informed about further workshops

THURSDAY, DECEMBER 02, 2004

09:00 **Welcome**
Andreas Deutsch, ZHR, TU Dresden

09:15 **Structural and game-theoretical analysis of metabolic networks**
Stefan Schuster, Bioinformatics, Uni Jena

10:00 **Genome annotation and protein folds**
Mayte Pisabarro, BIOTEC, TU Dresden

10:30 **Coffee**

11:00 **APArT: an automated protein annotation tool based on weak sequence similarities**
Bianca Habermann, MPI-CBG, Dresden

11:30 **The small world of structural protein interactions and beyond**
Michael Schröder, BIOTEC, TU Dresden

12:00 **Lunch**

13:00 **Data-intensive computing: perspectives for computational biology**
Wolfgang E. Nagel, TU Dresden

13:30 **Modelling mechanical oscillations in mitosis**
Joe Howard, MPI-CBG, Dresden

14:00 **Depolymerization of microtubules by motor proteins**
Gernot Klein, Frank Jülicher, MPI-PKS, Dresden

14:30 **Kinetic models for chemosensitive movement**
Angela Stevens, MPI-MIS, Leipzig

15:00 **Coffee**

15:30 **Interacting particle systems modelling cell-cell adhesion and persistence**
Anja Voss-Böhme
Mathematical Institute, TU Dresden

16:00 **A new model for myxobacterial pattern formation based on cell shape**
Jörn Starruß, Thomas Bley
Bioprocess Engineering, TU Dresden

16:30 **Multiple intracellular particles tracking: individual endosome behavior and pool statistic**
Yannis Kalaidzidis, Marino Zerial
MPI-CBG, Dresden

17:00 **Morphogen gradient formation by transcytosis**
Tobias Bollenbach, Karsten Kruse
MPI-PKS, Dresden

17:30 **Wrap up**

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