

PSCIs Computational Biology Workshop, 21-22 Oct, 2004

Place: Hörsalen, Wenner-Gren Center, Sveavägen 166, Stockholm

Thursday, October 21, 2004

- 13.00-13.15 Welcome remarks (Jeanette Hellgren Kotaleski and Harald Hermansson, PSCI, KTH)
- 13.15-14.00 Spatial representation in biochemical signalling networks (Ravi Iyengar, Mount Sinai, USA, keynote speaker)
- 14.00-14.25 Probabilistic and combinatorial analysis of gene families from multiple species (Jens Lagergren, SBC and Dept Numerical Analysis and Computer Science, KTH)
- 14.25-14.55 Coffe
- 14.55-15.35 Pyrosequencing – Experiments and Modeling (Pål Nyren, Dept of Biotechnology, Anna Svantesson, NADA, KTH)
- 15.35-16.00 Comparison of transcription factor binding site models using correlation with gene expression (Erik Aurell, Dept Theoretical/biological Physics, KTH)
- 16.00-16.35 Experimentally based membrane protein topology prediction on a proteome-wide scale (Erik Granseth, Mikaela Rapp, SBC and Dept Biochemistry and Biophysics, SU)
- 16.35-17.00 Quantum Chemical Calculations on Redox-Active Enzymes (Per Siegbahn, Dept Physics, SU)
- 17.00-17.25 Protein structure and function predictions (Arne Elofsson, SBC and Dept Biochemistry and Biophysics, SU)
- 17.30-20.30 Buffet and poster session

Friday, October 22, 2004

- 9.00-9.45 The Silicon Cell; discovering the ultimate Systems Biology (Hans Westerhoff, BioCentrum, Amsterdam, Netherlands, keynote speaker)
- 9.45-10.25 Modeling glucose-insulin coupling (Stephen James, Biovitrum, and Pål Westermark, NADA, KTH)
- 10.25-11.00 Coffe
- 11.00-11.25 Temporal computation by biochemical networks – classical conditioning and reinforcement learning (Jeanette Hellgren Kotaleski, NADA, KTH)
- 11.25-11.50 Data modeling of biomolecular events as a basis for Systems Biology (Per Kraulis, Biovitrum)
- 12.15-13.30 Lunch (on your own)
- 13.30-13.55 Computational tools for drug discovery (Ulf Norinder, AstraZeneca)
- 13.55-14.20 Multiple testing and stochastic processes as tools for localizing genes (Ola Hössjer, Dept Mathematical Statistics, SU)
- 14.20-14.55 Brain-inspired computing and neurobotics (Anders Lansner, NADA, KTH)
- 14.55-15.25 Coffe
- 15.25-15.55 After the convergence: info/bio/nano/cogno-technology, medicine and society (Anders Sandberg, NADA, KTH)
- 15.55-16.00 Concluding remarks