



# LICSB 2009

Imperial College London

Center of Bioinformatics & Institute of Mathematical Sciences  
& Center for Integrative Systems Biology at Imperial College London



April 1<sup>st</sup> 2009

# Programme

**Wednesday 1<sup>st</sup> April**

**11:00-11:40** *High resolution multi-platform copy number variation genotyping and imputation using a haplotype hidden Markov model*

**Lachlan Coin**

**11:40-12:00** *The Identification of Informative Genes from Multiple Datasets with Increasing Complexity*

**Yahya Anvar**

**12:00-12:20** *Detecting Evolutionary Inter-Gene Heterogeneity in *Borrelia burgdorferi**

**Elisa Loza Reyes**

**Lunch**

**14:00-14:20** *Prediction of the role of mutations in gap junction genes from a large scale computational model of the cochlea of the inner ear*

**Pavel Mistrik**

**14:20-14:40** *Gaussian process regression bootstrapping*

**Paul Kirk**

**14:40-15:00** *Estimation of Multiple Transcription Factor Activities using ODEs and Gaussian Processes*

**Michalis Titsias**

**15:00-15:20** *Definition of Valid Proteomic Biomarkers: Bayesian Solutions to a Currently Unmet Challenge*

**Keith Harris**

**Tea/Coffee**

**15:50-16:30** *Time-varying genetic network inference using informative priors*

**Sophie Lebre**

**16:30-16:50** *Moment closure and block updating for parameter inference in stochastic biological models*

**Peter Milner**

**16:50-17:10** *Moment closure and block updating for parameter inference in stochastic biological models*

**Tina Toni**

**17:10-17:30** *Exploring experimental designs for network inference using perturbations and a Bayesian sequential learning strategy*

**Christopher Penfold**

# Programme

**Thursday 2<sup>nd</sup> April**

**9:00-9:40** *Hybrid inference for stochastic kinetic models*

**Andrew Golightly**

**9:40-10:00** *Bayesian Hypotheses Testing in Raman Spectroscopy*

Vladislav Vyshemirsky

**1000-1020** *Inference in a probabilistic model of dynamic DNA*

Catherine Higham

Tea/Coffee

**1050-1110** *Beyond Molecular Biology – Applying Gene Regulation Network Inference Methods in Ecology*

Frank Dondelinger

**1110-1150** *Temporal Development and Collapse of an Arctic Plant-Pollinator Network*

**Carsten Wiuf**

