

DTC Student Productivity & Activities

First Cohort

Oral Presentations at Systems Biology DTC Meeting University of Warwick, 19./20. May, 2008

Shichina Kannambath

Spatially Resolved Molecular Systems Analysis

Sabrina Khaliq

Development of Microfluidic based Approaches to study Cell Activation Events

Ettore Murabito

Flux Balance Analysis of Mammalian Glycolytic Pathway in Tumors

Robert Platt

Evolutionary Dynamics of Regulatory Networks

Samrina Rehman

Systems Biology of Dupuytren's Disease

Alex Shaw

A Systems Biology Analysis of the Mammalian Cell S phase

Short Talk

Robert Platt, The network analysis of in silico evolved oscillators.
Berlin Summer Meeting 2008: Computational and Experimental Biology.
June 12-14, 2008, Berlin, Germany.

<https://www.berlinsummermeeting.org/default.asp?m=4>

Paper

Samrina Rehman, F. Salway, J.K. Stanley, W.E.R. Ollier, P. Day, A. Bayat, Molecular Phenotypic Descriptors of Dupuytren's Disease Defined Using Informatics Analysis of the Transcriptome. *J. Hand Surg.* **33A**, 359-372 (2008).

A. Bevilacqua, S.J. Wilkinson, R. Dimelow, **Ettore Murabito**, **Samrina Rehman**, M. Nardelli, K. van Eunen, S. Rossell, F.J. Bruggeman, N. Blüthgen, D. de Vos, J. Bouwman, B.M. Bakker and H.V. Westerhoff, Vertical systems biology; from DNA to flux and back. Chapter 4, in: A. Hetherington & C. Grierson (eds.), *Practical Systems Biology*, (2008), pp. 65-91. New York, Abington: Taylor & Francis.

Alexander Shaw, **Robert Platt**, **Jennifer Withers**, D. Jackson, N. Bluthgen, K. Smallbone, A Model of DNA Replication in Mammalian Cells. (2008, in preparation).

Submitted Abstract

Samrina Rehman, I.T. Shadi, Y. Xu, Magnus Rattray, Philip J Day, R. Goodacre, A. Bayat, Metabolic Fingerprint and Footprint analysis of Passaged Dupuytren's Disease Cultured Fibroblasts. Submitted to: First Interdisciplinary Bioscience Research Conference, 2-3 October 2008, Manchester, UK.

Posters at Conferences

FEBS-SysBio2007 – From Molecules to Life, March 10-16, 2007, Gosau, Austria.

<http://www.univie.ac.at/sysbio2007/>

L-P09 Research prospects in Systems Biology, **Shichina Kannambath**

L-P21 Research Intentions for Systems Biology, **Alexander Shaw**

P-P17 Control of noisy networks, **Robert Platt**, Frank Bruggeman, Herbert Sauro & Hans V. Westerhoff

L-P14 An automated approach to describe biological networks in terms of functional modules, **Ettore Murabito**

L-P17 Computability in Biology: Metabolic Networks, **Samrina Rehman**

L-P26 Research intentions for Systems Biology, **Jennifer Withers**

L-P10 Robustness of metabolic pathways leading to drug target identification. A systems biology approach, **Sabrina S Khaliq**

Robert Platt, The Network Analysis of in silico Evolved Oscillators.
ESF-UB Conference in Biomedicine, SYSTEMS BIOLOGY, 12-17. April 2008
Sant Feliu de Guixols, Spain.
<http://www.esf.org/index.php?id=4482>

Shichina Kannambath. Berlin Summer Meeting 2008: Computational and
Experimental Biology. June 12-14, 2008, Berlin, Germany.
<https://www.berlinsummermeeting.org/default.asp?m=4>

Conference Attendance

All DTC students attended:

Genomes to Systems, 17-19 March, 2008, Manchester, UK.
<http://www.genomestosystems.org/>

Jennifer Whithers, Robert Platt:

BioSysBio 2007, Bioinformatics, Systems Biology, Synthetic Biology.
11-13 January, 2007, Manchester, UK.
<http://www.biomedcentral.com/content/pdf/1752-0509-1-S1-info.pdf>

Jennifer Whithers:

MASAMB Mathematical and Statistical Aspects of Molecular Biology.
27./28. March, Glasgow, UK.
<http://www.dcs.gla.ac.uk/masamb/>

Jennifer Whithers:

Summer School: Systems Biology Dynamics - from Genes to Organisms.
20-30 May, 2008, Montreal, Canada.
<http://www.cnd.mcgill.ca/summer08/>

Shichina Kannambath, Sabrina Khaliq:

FEBS Advanced Lecture Course: New Developments in Quantitative Molecular
Bioscience,
10-17 September, 2008, Spetses, Greece (registrations accepted).
<http://www.mib.ac.uk/qmb-spetses2008/>

Distinctions

Jennifer Withers: Overseas Research Scholarship award.

Shichina Kannambath: Dorothy Hodgkin Postgraduate Award (DHPA).

Ettore Murabito: CASE studentship, AstraZeneca.

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Second Cohort

Posters presented at 2nd Systems Biology DTC Meeting University of Warwick, 19./20. May, 2008

Stephen Checkley & Nicholas Shipillis

Simulation of the glycerol biosynthesis pathway in *S. cerevisiae*

Marc Goodfellow & Sam Farrell

Modelling Signalling Pathway Evolution

Louise Maddison

New Adventures in iND750 and Biomass

Mark Quinton-Tulloch & Yusur Al-Nuaimi

Effect of successive passage n gene expression in keloid tissue culture

Michael Rosefield

Minimization of FBA solution space

Ben Small & Olusegun Oshota

Regulation of pyruvate decarboxylase isoenzymes in *S. cerevisiae*

Nathalie Stanford

Constraint-based kinetic modelling

David Toner & Victoria Jackson

Cell-cell communication: synthetic biology of lux quorum-sensing system

Abstract submitted

Marc Goodfellow, Mark Quinton-Tulloch,

Variation as a Signal in Microarray Analysis.

Submitted to: First Interdisciplinary Bioscience Research Conference,
2-3 October 2008, Manchester, UK.

Conference Attendance

All students attended:

Genomes to Systems, 17-19 March, 2008, Manchester, UK.

<http://www.genomestosystems.org/>