

# Synthetic Biology and Control Workshop 2014

10<sup>th</sup> – 12<sup>th</sup> September 2014  
Worcester College, University of Oxford

## Workshop Schedule Wednesday 10<sup>th</sup> September 2014

Time	Description	Venue
9:30 – 10:45	Registration and Tea/Coffee	Linbury Foyer
10:45 – 11:00	<b>Professor Antonis Papachristodoulou</b> University of Oxford, UK <i>Welcome and introduction</i>	Linbury Lecture Theatre
11:00 – 11:45	<b>Professor Richard Murray</b> California Institute of Technology, USA <i>Analysis, design and prototyping of biomolecular feedback systems</i>	
11:45 – 12:30	<b>Professor Natalio Krasnogor</b> University of Newcastle, UK <i>Computation and polymer synthesis for designer quorum sensing behaviour</i>	
12:30 – 13:45	Lunch	Dining Hall
13:45 – 14:30	<b>Professor Kwang-Hyun Cho</b> KAIST, Korea <i>A hidden molecular circuit that critically regulates uncontrolled cell proliferation</i>	Linbury Lecture Theatre
14:30 – 15:15	<b>Professor Lionel Clarke</b> UK Synthetic Biology Research Council <i>Synthetic Biology – Industrial translation</i>	
15:15 – 16:30	Posters and Coffee	Morley Fletcher Room
16:30 – 17:15	<b>Professor Mustafa Khammash</b> ETHZ, Switzerland <i>Feedback control of living cells: theory and practice</i>	Linbury Lecture Theatre
19:00	Dinner	Dining Hall

## Thursday 11<sup>th</sup> September 2014

Time	Description	Venue
8:30 – 9:00	Tea/Coffee	Linbury Foyer
9:00 – 9:45	<b>Professor Domitilla del Vecchio</b> MIT, USA <i>From context-dependence to modularity in biological circuits</i>	Linbury Lecture Theatre
9:45 – 10:30	<b>Professor Declan Bates</b> University of Warwick, UK <i>Analysis and design of homeostatic cellular control systems</i>	
10:30 – 11:00	Tea/Coffee Break	Linbury Foyer
11:00 – 11:45	<b>Professor Rodolphe Sepulchre</b> University of Cambridge, UK <i>Sensitivity analysis of biological behaviours</i>	Linbury Lecture Theatre
11:45 – 12:30	<b>Professor Ron Weiss</b> MIT, USA	
12:30 – 13:45	Lunch	Dining Hall
13:45 – 14:30	<b>Professor Jörg Stelling</b> ETHZ, Switzerland <i>Automation for design and manufacturing of synthetic gene circuits</i>	Linbury Lecture Theatre
14:30 – 16:00	Posters and Coffee	Morley Fletcher Room
16:00 – 16:25	<b>Dr Edward Hancock</b> University of Oxford, UK <i>A simple yet mechanistically accurate model of gene regulation for analysis and design</i>	Linbury Lecture Theatre
16:25 – 16:50	<b>Dr Jordan Ang</b> Imperial College London, UK <i>Using populations of engineered cells to regulate extracellular chemical concentration</i>	
16:50 – 17:15	<b>Mr Peyman Gifani</b> University of Cambridge, UK <i>A novel genetic circuit design framework using dynamical systems theory</i>	
19:00 – 19:30	Pre-Dinner Drinks	Cloisters
19:30	Dinner	Dining Hall

## Friday 12<sup>th</sup> September 2014

Time	Description	Venue
8:30 – 9:00	Tea/Coffee	Linbury Foyer
9:00 – 9:45	<b>Professor Alfonso Jaramillo</b> University of Warwick, UK <i>Engineering RNA-based regulation in bacteria</i>	Linbury Lecture Theatre
9:45 – 10:30	<b>Dr Neil Dalchau</b> Microsoft Research, UK <i>Programmable chemical controllers made from DNA</i>	
10:30 – 11:00	Tea/Coffee Break	Linbury Foyer
11:00 – 11:45	<b>Professor Peter Swain</b> University of Edinburgh, UK <i>Predicting host-contextual effects using a mechanistic cell model</i>	Linbury Lecture Theatre
11:45 – 12:30	<b>Professor Jeff Hasty</b> UCSD, USA <i>Engineered gene circuits: from oscillators to synchronized clocks and biopixels</i>	
12:30 – 12:45	Meeting summary and close	
12:45 – 2:00	Lunch	Dining Hall