BSCB/BSDB Joint Spring Meeting - Programme 2016

Sunday 10 April 2016

13.00 – 15.00	Joint Officers' Meeting - National Grid Room, Arts Centre
15.00 – 18.00	BSCB Committee Meeting - Ensemble Room, Arts Centre BSDB Committee Meeting - National Grid Room, Arts Centre
14.00 – 18.00	Registration - Student Union Building
16.00 – 18.00	Roundtable Career Workshop – Studio, Arts Centre Discussions about life in academia, industry and scientific communication
18.00 – 19.30	**Dinner – Rootes Restaurant, Rootes Building**
19.30 – 20.30	**BSDB Plenary Lecture** - Main Lecture Theatre **Chair: Anna Philpott** **PL01 Marc Kirschner - Harvard Medical School, Boston, USA** RNA and Protein Regulation in Xenopus Development
20.30 – 21.30	**BSCB Plenary Lecture** - Main Lecture Theatre **Chair: Buzz Baum** **PL02 Ruth Lehmann - HHMI and Skirball Institute, NYU School of Medicine, New York, USA** Mechanisms and function of mitochondrial inheritance in germ line stem cells
21.30 onwards	**Student and Post Doc Social/Drinks Reception:** Panorama Suite, Arts Centre

Monday 11 April 2016

07.30 – 20.00	Registration – Arts Centre	
07.30 - 09.00	**Breakfast** - Rootes Restaurant, Rootes Building	
07.30 - 08.30	Meet the Speakers Breakfast - Rootes Restaurant, Rootes Building	
Session 1:	**Cell and Tissue Architecture** - Main Lecture Theatre **Chair: Enrico Coen**	**Evolution** - Woods Scawen Lecture Theatre **Chair: Abigail Tucker**
09.00 – 09.30	**S01 Val Wilson - University of Edinburgh, Edinburgh** Distinct progenitor types that construct the head-to-tail axis	**S06 Mukund Thattai - National Centre for Biological Sciences, Bangalore, India** Molecular archaeology of host-mitochondrial integration
09.30 – 10.00	**S02 Mikael Simons - TU Munich/DNZE Munich, Munich** Cell biology of myelin biogenesis	**S07 Mark Field - University of Dundee, Dundee** Evolution of the nuclear envelope
10.00 – 10.30	**S03 Marino Zerial - Max Planck Institute of Molecular Cell Biology and Genetics, Germany** Multi-scale analysis of cell and tissue organisation	**S08 Marie-Anne Felix - Institute of Biology of the Ecole Normale Superieure, Paris** Variation in a developmental system with six precursor cells
10.30 – 11.00	**Refreshment Break and Exhibition Viewing Time** - Mead Gallery, Arts Centre	
11.00 – 11.30	**S04 Olivier Hamant - RDP/LIC - ENS Lyon, France** Mechanical conflicts in growth heterogeneity	**S09 David Baum - University of Wisconsin, Madison, USA** The case for an inside-out evolutionary origin of eukaryotic cells
11.30 - 11.45	**O1 Y S Sanchez-Corrales - MRC-Laboratory of Molecular Biology, Cambridge** Cell behaviours during 3D tube formation	**O3 J F Hagen - Oxford** The genetic and developmental basis of genital evolution between *Drosophila* species
11.45 - 12.00	**O2 J B A Green - King's College London, London** Morphogenesis of invaginating placodes: epithelial stratification and suprabasal intercalation-driven invagination are signalling pathway-separable processes	**O4 J A Gillis - University of Cambridge, Cambridge** A shared role for sonic hedgehog signalling in patterning chondrichthyan gill arch appendages and tetrapod limbs
12.00 – 12.30	**S05 Grant Jensen - California Institute of Technology, Pasadena, USA**	**S10 Marty Cohn - University of Florida, Gainesville, USA** Cell type evolution and the origin of cartilidge

	Structure and function of the bacterial type IV pilus: new insights from electron cryotomography	
12.30 – 13.00	**Lunch** - Mead Gallery, Arts Centre	
13.00 – 14.30	**Posters/Exhibition Viewing Time** - Mead Gallery, Arts Centre - Odd Poster Numbers	
Session 2:	**Hijacking of Cellular and Developmental Processes** – Main Lecture Theatre **Chair: Tariq Enver**	**Polarity** – Woods Scawen Lecture Theatre **Chair: Daniel St Johnston**
14.30 - 15.00	**S11 Yi Feng - University of Edinburgh, Edinburgh** Live imaging reveals NFkB signaling to be a key regulator for a Trophic Inflammatory Response during tumour initiation	**S16 Takashi Hiiragi - EMBL, Heidelberg** Symmetry breaking in mouse development
15.00 – 15.15	**O5 S Zhang - Imperial College London, London** Importance of Sox2 interacting partners on regulating Sox2 functions in hESCs	**O7 A Ramat - University of Dundee, Dundee** Asymmetric mRNA localisation in *Drosophila* neural stem cells
15.15 – 15.45	**S12 Steve Jackson - University of Cambridge, Cambridge** Cell-based screens to identify new therapeutic strategies for rare diseases	**S17 Jiri Friml - Institute of Science and Technology, Austria** Auxin transport and signalling for polarity and patterning
15.45 – 16.15	**Refreshment Break and Exhibition Viewing Time** - Mead Gallery, Arts Centre	
16.15 – 16.45	**S13 Nick Talbot - University of Exeter, Exeter** Investigating the biology of plant infection by the rice blast fungus *Magnaporthe oryzae*	**S18 Orion Weiner - University of California, San Francisco, USA** Membrane Tension Acts Through PLD2 and mTORC2 to Limit Actin Network Assembly During Neutrophil Migration
16.45 – 17.00	**O6 A Sarhen - University of Birmingham, Birmingham** Quantitative Phosphoproteomics Reveals A Key Role for LAR Protein Tyrosine Phosphatase in CDK1 Regulated Cell Adhesion	**O8 F Mardakheh - Institute of Cancer Research, London** Why do cells localise mRNA to cell protrusions? A global precpective on local translation
17.00 – 17.30	**S14 Yitzhak Pilpel - Weizmann Institute, Isreal** The translation and the miRNA machinery in proliferation and cancer	**S19 Nate Goehring - Francis Crick Institute and LMCB, London** Organisation and regulation of the PAR polarity network in C. elegans zygotes
17.30 – 18.00	**S15 Saskia Hogenhout - John Innes Centre, Norwich** How bacterial pathogens hijack cellular processes to turn plants into 'Zombies'	**S20 Ray Keller - University of Virginia, Department of Biology** The Games Cells Play: How embryos put their players on the field
18.15 – 19.15	**Hooke Medal Talk** - Main Lecture Theatre **Chair: Jordan Raff** **S21 Thomas Surrey - The Crick Institute, London** Microtubule cytoskeleton dynamics: mechanistic insight from reverse engineering	
19.15 – 20.15	**Dinner –** Rootes Restaurant, Rootes Building	
20.15 – 21.15	**Waddington Medal Talk** - Main Lecture Theatre	
21.15 – 22.45	**Drinks Reception and Poster Viewing** - Even Poster Numbers	

Tuesday 12 April 2016

08.00 – 18.00	Registration – Arts Centre	
07.30 - 09.00	**Breakfast -** Rootes Restaurant, Rootes Building	
07.30 - 08.30	Meet the Speakers breakfast - Rootes Restaurant, Rootes Building	
Session 3:	**Growth and Cell Division** – Main Lecture Theatre **Chair: Nancy Papalopulu**	**Interaction of cells with their environment** - Woods Scawen Lecture Theatre **Chair: Caroline Hill**
09.00 – 09.30	**S22 Snezhana Oliferenko - King's College London, London** Mitotic control of the nuclear membrane	**S27 Kim Jensen - University of Copenhagen, Copenhagen** At the origin of intestinal stem cells
09.30 – 10.00	**S23 Heike Laman - University of Cambridge, Cambridge** Absence of Fbxo7 expression reveals variations in cell cycle regulation at different times during T cell differentiation	**S28 Simona Parrinello - Imperial College, London** EphrinB2 drives perivascular invasion and proliferation of glioblastoma stem-like cells

10.00 – 10.30	**S24 Anja Geitmann - McGill University, Canada** The cellular pathfinder - Navigating mechanical obstacles at micron-scale	**S29 Fiona Doetsch – University of Basel, Switzerland** Niche regulation of adult neural stem cells
10.30 – 11.00	**Refreshment Break and Exhibition Viewing Time**	
11.00 – 11.30	**S25 Francois Guillemot - Francis Crick Institute, London** Signals and factors regulating adult brain stem cells	**S30 Rüdiger Simon - Heinrich-Heine University, Düsseldorf** Dynamics of stem cell signalling pathways in meristems
11.30 – 11.45	**O9 Molly Godfrey - Francis Crick Institute, London** $PP2A^{Cdc55}$ phosphatase opposes Cdk phosphorylation and cell cycle progression during interphase	**O11 C Francavilla - University of Manchester, Manchester** Multi-layered proteomics unveils molecular switches of biased ligand-dependent trafficking of Receptor Tyrosine Kinases
11.45 – 12.00	**O10 Shane Herbert - University of Manchester, Manchester** Asymmetric division coordinates collective cell migration in angiogenesis	**O12 C Bucherl - The Sainsbury Laboratory, Norwich** Plant immune and growth cell-surface receptors share common signalling components but localise to distinct plasma membrane nanodomains
12.00 – 12.30	**S26 Silvia Santos - MRC-Imperial College, London** Temporal control of cell division: switches, refractory periods and feedback control	**S31 Fanny Jaulin - Gustave Roussy Institute, France** Collective Epithelial-Based Metastatic Cascade
12.30 – 13.30	**Lunch** – Mead Gallery, Arts Centre	
13.30 - 14.30	**Poster/Exhibition Viewing Time** - Mead Gallery, Arts Centre	
14.30 – 15.15	**BSDB AGM**	**BSCB AGM**
15.15 – 15.30	**Refreshment Break and Exhibition Viewing Time**	
15.30 – 17.30	**Graduate Symposium** - Main Lecture Theatre **Chair: Nancy Papalopulu**	
15.30 - 15.45	**O13 L Schnettger - Francis Crick Institute, London** Rab20 is an IFN-gamma inducible GTPase required for the control of *M. tuberculosis* by macrophages	
15.45 - 16.00	**O14 C L Dix - MRC Laboratory for Molecular Cell Biology, UCL, London** Mitotic rounding and symmetric division in polarised migratory cells	
16.00 - 16.15	**O15 A D Pool - Queen Marys, London** DDR1 Localisation to adherens junctions prevents efficient clustering of supernumerary centrosomes	
16.15 - 16.30	**O16 D J M Bergen - University of Bristol, Bristol** *In vivo* characterisation of the Golgi matrix protein giantin: linking extracellular matrix secretion and cilia function	
16.30 - 16.45	**O17 M K Eldred - University of Cambridge, Cambridge** Investigating Cellular and Molecular Mechanisms of Neuronal Layering During Retinal Development in Zebrafish	
16.45 - 17.00	**O18 C L Bromley - King's College London, London** Investigating biomechanical forces and cell-cell junction remodelling in zebrafish brain morphogenesis	
17.00 - 17.05	**FT01 J A Watson - University of Edinburgh, Edinburgh** The Role of Planar Cell Polarity in Neuromesodermal Progenitor Maintenance and Fate Choice	
17.05 - 17.10	**FT02 A Nestor-Bergmann - University of Manchester, Manchester** Cell Division and the Mechanical Tissue Environment	
17.10 - 17.15	**FT03 V Yartseva - Yale University, New Haven, USA** High-throughput sequence stability assay identifies stabilizing and destabilizing RNA motifs involved in maternal mRNA clearance	
17.15 - 17.20	**FT04 C L B Paese - Oxford Brookes University, Oxford** Characterisation of the interactions among the Wnt, Delta-Notch and Hedgehog signalling pathways during segment addition in the spider *Parasteatoda tepidariorum*	
17.20 - 17.25	**FT05 E Clark - University of Cambridge, Cambridge** Odd-paired controls frequency doubling in *Drosophila* segmentation by altering the pair-rule gene regulatory network	
17.25 - 17.30	**FT06 A M Savage - University of Sheffield, Sheffield** Calcium signalling mediated by *tmem33* is essential for endothelial tip cell function during angiogenesis *in vivo*	

17.30 – 18.30	**Women in Science Medal Talk** - Main Lecture Theatre **Chair: Uri Alon** **S32 Lidia Vasilieva - Department of Biochemistry, University of Oxford, Oxford** Towards understanding mechanisms of gene expression
18.30 – 19.30	**Cheryl Tickle Award** **S33 Abigail Tucker - King's College, London**
20.00 onwards	**Conference Dinner** – Panorama Suite, Rootes Building

Wednesday 13 April 2016

08.00 – 12.00	Registration – Arts Centre	
07.30 - 09.00	**Breakfast** - Rootes Restaurant, Rootes Building	
Session 4:	**Information Processing** – Main Lecture Theatre **Chair: Austin Smith**	**Ageing and Regeneration** - Woods Scawen Lecture Theatre **Chair: Will Wood**
09.30 – 10.00	**S34 Wendy Bickmore - University of Edinburgh, Edinburgh** The Remote Control of Gene Expression - can Chromosome Folding Explain Enhancer Function?	**S38 Clare Blackburn - University of Edinburgh, Edinburgh** Generating and regenerating the thymus
10.00 – 10.30	**S35 Stefano de Renzis - European Molecular Biology Laboratory, Germany** Synthetic reconstitution of morphogenetic processes in naïve embryonic tissues	**S39 Tom Rando - Stanford University, California, USA** Molecular Regulation of Stem Cell Quiescence
10.30 – 11.00	**S36 Michaela Frye, University of Cambrige, Cambridge** ***Kindly Sponsored By Worldwide Cancer Research*** Stem cell function and sensitivity to cytotoxic stress is controlled by protein translation rates	**S40 Yves Barral - ETH Zurich, Switzerland** Role of lateral diffusion barriers in the partition of age determinants during asymmetric cell division
11.00 – 11.30	**S37 Chris Hawes - Oxford Brookes University, Oxford** Three dimensional cartographic analysis of large volume serial block face scanning electron microscope data sets	**S41 Allison Bardin – Institut Curie, France** Spontaneous mutations in adult stem cells during aging
11.30 – 12.00	**Refreshment Break** - Mead Gallery, Arts Centre	
12.00 – 13.00	**Beddington Medal Talk** - Main Lecture Theatre **Chair: Phil Ingham** **S42 Elena Scarpa, University of Cambridge, Cambridge** Cadherin switch during EMT in neural crest cells leads to contact inhibition of locomotion via repolarisation of forces	
13.00 – 14.00	**Plenary Lecture** - Main Lecture Theatre **PL03 Uri Alon - The Weizmann Institute of Science, Israel** Evolutionary tradeoffs and the geometry of gene expression space	
14.00 onwards	**Take away lunch & delegates depart**	