

BSCB/BSDB Joint Spring Meeting - Programme 2016

Sunday 10 April 2016

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| 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 <i>Xenopus</i> 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

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| 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 Supérieure, 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 <i>Drosophila</i> 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 cartilage |

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| | 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 <i>Drosophila</i> 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 <i>Magnaporthe oryzae</i> | 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 perspective on local translation |
| 17.00 – 17.30 | S14 Yitzhak Pilpel - Weizmann Institute, Israel 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 <i>C. elegans</i> 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

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| 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 |

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| 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 <i>M. tuberculosis</i> 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 <i>In vivo</i> 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 <i>Parasteatoda tepidariorum</i> | |
| 17.20 - 17.25 | FT05 E Clark - University of Cambridge, Cambridge Odd-paired controls frequency doubling in <i>Drosophila</i> 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 <i>tmem33</i> is essential for endothelial tip cell function during angiogenesis <i>in vivo</i> | |

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| 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

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|-------------------|--|---|
| 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 Cambridge, Cambridge <i>Kindly Sponsored By Worldwide Cancer Research</i> 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 | |