

**BSCB/BSDB Joint Spring Meeting - Draft Programme 2015**

**Sunday 12<sup>th</sup> April, 2015**

14.00 – 16.30	BSCB Committee Meeting – Ensemble Room, Arts Centre BSDB Committee Meetings – National Grid Room, Arts Centre
14.00 – 18.00	Registration – Room TBC
15.00 – 16.30	Careers Workshop – Room TBC
16.30 – 18.00	<b>Graduate Symposium – Main Lecture Theatre</b> <b>Chair: Anne Grapin - Botton</b>
16.30 – 16.45	<b>O1 JM Sanchez - Imperial College London, London</b> A metabolic switch regulates the different apoptotic thresholds of the naïve and primed pluripotent states
16.45 – 17.00	<b>O2 L Lemaire - University of Copenhagen, Copenhagen, Denmark / Ecole Polytechnique, Lausanne, Switzerland</b> Bicaudal C1 promotes pancreatic NEUROG3 <sup>+</sup> endocrine progenitor differentiation and ductal morphogenesis
17.00 – 17.15	<b>O3 A Dimitracopoulos - UCL, London, UK / LMCB, MRC, London, UK</b> The role of mitotic rounding in spindle assembly and positioning
17.20 – 17.25	<b>FT01 K Czajkowska - University of Warsaw, Warsaw, Poland</b> Maternal age effect on mammalian oocytes: alterations in fertilization-induced Ca <sup>2+</sup> oscillations, cytoplasmic movements and mitochondrial activity
17.25 – 17.30	<b>FT02 T McHugh – University of Warwick, Coventry</b> Single Molecule Mechanics of Kif15
17.30 – 17.35	<b>FT03 CSL Bailey – University of Dundee, Dundee</b> Taking it up a Notch: Identifying novel signalling dynamics in the vertebrate segmentation clock
17.35 – 17.40	<b>FT04 B Kroeger – University of Oxford, Oxford</b> Understanding the regulation of exosome biogenesis and secretion in <i>Drosophila</i> secondary cells using super resolution and time-lapse microscopy
17.40 – 17.45	<b>FT05 Y Wang - University of Warwick, Coventry / National University of Singapore, Singapore</b> Ligand Stability Shapes the Nodal Morphogen Gradient
17.45 – 17.50	<b>FT06 P Baillie-Johnson – University of Cambridge, Cambridge</b> Generation of a Candidate Neuro-Mesodermal Precursor Population in Three-Dimensional Aggregate Culture of Mouse Embryonic Stem Cells
18.00 – 19.30	<b>Dinner – Rootes Restaurant, Rootes Building</b>
19.30 – 20.30	<b>BSDB Plenary Lecture – Main Lecture Theatre</b> <b>PL01 Brigid Hogan - Duke University, Durham, USA</b> Stem cells of the lung: pathways and plasticity in development, maintenance and repair
20.30 – 21.30	<b>BSCB Garland Plenary Lecture – Main Lecture Theatre</b> <b>PL02 Jennifer Lippincott-Schwartz - National Institute of Health, Bethesda, USA</b> Cell adaptation to starvation
21.30 onwards	<b>Student and Post Doc Social/Drinks Reception: Panorama 3, Arts Centre</b>

**Monday 13<sup>th</sup> April, 2015**

07.30 – 20.00	Registration – Foyer, Arts Centre	
07.30 – 09.30	<b>Breakfast – Rootes Restaurant, Rootes Building</b>	
08.00 – 09.00	Joint Officers Meeting – Ensemble Room, Arts Centre	
<b>Session 1:</b>	<b>Morphogenesis and Cell Migration – Main Lecture Theatre</b> <b>Chair: Paul Martin</b>	<b>Organogenesis – Woods-Scawen Lecture Theatre</b> <b>Chair: Brigid Hogan</b>
09.00 – 09.30	<b>S01 Erik Sahai - Cancer Research UK, London</b> Modelling cancer cell invasion in complex environments	<b>S06 Liam Dolan - University of Oxford, Oxford</b> Development and evolution of land plant rooting systems
09.30 – 10.00	<b>S02 Anne Straube – Warwick Medical School, Coventry</b> Microtubules control the morphological changes during muscle cell differentiation	<b>S07 Anthony Graham - King's College London, London</b> Pharyngeal remodelling and tetrapod evolution
10.00 – 10.30	<b>S03 Carl-Philipp Heisenberg - IST Austria, Austria</b> Surface cell expansion drives radial cell intercalations in zebrafish gastrulation	<b>S08 Christiana Ruhrberg - University College London, London</b> Neuropilin regulation of vascular morphogenesis

Refreshment Break and Exhibition Viewing Time – Mead Gallery, Arts Centre		
10.30 – 11.00	<b>S04 Clare Waterman – NHLBI/NIH, Bethesda, USA</b> Functional specificity of integrin-based adhesions in cell function is defined by actin nucleators.	<b>S09 Anne Grapin-Botton - University of Copenhagen, Copenhagen, Denmark / Ecole Polytechnique, Lausanne, Switzerland</b> Individual cell contributions to pancreas organogenesis: stochasticity, heterogeneity and self-organization
11.30 – 11.45	<b>O4 LI Wagstaff – University of Cambridge, Cambridge</b> Mechanically-mediated cell competition eliminates cells via induction of lethal p53 levels	<b>O6 T Grocott - University of East Anglia, Norwich</b> TGF-beta and BMP induce proximal and distal states, respectively, in the Optic Vesicle Gene Network
11.45 – 12.00	<b>O5 K Roeper – MRC-Laboratory of Molecular Biology, Cambridge</b> A dynamic microtubule cytoskeleton directs medial actomyosin function during tube formation	<b>O7 K Yashiro - Queen Mary University of London, London</b> Single-cell Expression Profiling Reveals The Unique Character of <i>Tbx5</i> -expressing Cardiac Precursors of The First Heart Field in The Early Mouse Embryo
12.00 – 12.30	<b>S05 Roberto Mayor – University College London, London</b> Cellular mechanism of collective migration	<b>S10 Frank Costantini - Columbia University, New York, USA</b> Control of branching morphogenesis during kidney development
12.30 – 13.30	<b>Lunch - Mead Gallery, Arts Centre</b>	
13.30 – 14.30	<b>Posters/Exhibition Viewing Time - Mead Gallery, Arts Centre</b>	
<b>Session 2:</b>	<b>Epigenetics – Main Lecture Theatre</b> <b>Chair: TBC</b>	<b>Protein Homeostasis – Woods-Scawen Lecture Theatre</b> <b>Chair: Jordan Raff</b>
14.30 – 15.00	<b>S11 Caroline Dean - The John Innes Centre, Norwich</b> Chromatin and antisense transcript dynamics underlying seasonal timing	<b>S15 Tamotsu Yoshimori - Osaka University, Osaka, Japan</b> Autophagy: Its Membrane Dynamics and Role in Suppression of Diseases
15.00 – 15.15	<b>O8 BH Jennings - UCL, London / Oxford Brookes University, Oxford</b> Insights from genome-wide profiling of Groucho co-repressor recruitment	<b>O10 SJ Randle – University of Cambridge, Cambridge</b> Fbxo7/PARK15 stabilizes p27 protein expression to ensure cell cycle arrest during erythropoiesis
15.15 – 15.45	<b>S12 Gert Veenstra - Radboud University, The Netherlands</b> Embryonic transcription is orchestrated by maternal regulatory space	<b>S16 Clare Futter – University College London, London</b> Segregation of degradative and signaling cargoes within the endocytic pathway
15.45 – 16.15	<b>Refreshment break and Exhibition Viewing Time – Mead Gallery, Arts Centre</b>	
16.15 – 16.30	<b>O9 J Gutierrez-Marcos – University of Warwick, Coventry</b> Epigenetic adaptation to environmental stress in plants	<b>O11 JI Pueyo – University of Cambridge, Cambridge</b> Hemo-smORF, a new regulator of endocytic trafficking and phagocytosis
16.30 – 17.00	<b>S13 Edith Heard - Institut Curie, France</b> Dynamic changes in X-chromosome inactivation status during mouse development	<b>S17 Ineke Braakman - TBC</b>
17.00 – 17.30	<b>S14 Susan Gasser - Friedrich Miescher Institute, Switzerland</b> Heterochromatin in worm development and genome stability	<b>S18 Susmita Kaushik - Albert Einstein College of Medicine, Bronx, USA</b> Selective autophagy: fighting aging one protein at a time
17.30 – 18.30	<b>Hooke Medal Talk – Invited Speaker – Main Lecture Theatre</b> <b>S19 Kairbaan Hodivala-Dilke – Barts Cancer Institute, QMUL, London</b> From the Garden to the Lab	
18.30 – 20.00	<b>Dinner – Rootes Restaurant, Rootes Building</b>	
20.00 – 21.00		<b>Waddington Medal Talk – Invited Speaker – Main Lecture Theatre</b>
21.00 – 22.30	Drinks Reception and poster viewing	

### Tuesday 14<sup>th</sup> April, 2015

08.00 – 18.00	Registration – Foyer, Arts Centre	
07.30 – 09.30	<b>Breakfast – Rootes Restaurant, Rootes Building</b>	
<b>Session 3:</b>	<b>Regeneration and Reprogramming – Main Lecture Theatre</b> <b>Chair: Alfonso Martinez - Arias</b>	<b>DNA Replication – Woods-Scawen Lecture Theatre</b> <b>Chair: Ron Laskey</b>
09.00 – 09.30	<b>S20 Peter Reddien - Cambridge, Massachusetts, USA</b> The cellular and molecular basis for planarian regeneration	<b>S25 Philip Zegerman - University of Cambridge, Cambridge</b> DNA replication control during the Mid-Blastula Transition in <i>Xenopus laevis</i>
09.30 – 10.00	<b>S21 Jose Silva</b>	<b>S26 Terry Orr-Weaver - Whitehead Institute, Cambridge, USA / Massachusetts Institute of Technology, Cambridge, USA</b>

10.00 – 10.30	<b>S22 Fiona Watt – King's College London, London</b> The epidermal stem cell niche	Regulation of DNA Replication Fork Progression <b>S27 Elke Ober - University of Copenhagen, Copenhagen, Denmark / MRC-National Institute for Medical Research, London</b> Progenitor cell expansion and differentiation in liver organogenesis
10.30 – 11.00	<b>Refreshment break and Exhibition Viewing Time – Mead Gallery, Arts Centre</b>	
11.00 – 11.30	<b>S23 Kiyokazu Agata - Kyoto University, Japan</b> Elucidation of A-P patterning signals in vertebrates from planarian regeneration research	<b>S28 Peter Lansdorp - University of Groningen, Groningen / BC Cancer Research Centre, Vancouver / University of British Columbia, Vancouver</b> Guanine quadruplex structures, heterochromatin and DNA replication
11.30 – 11.45	<b>O12 Dr GF Mok - University of East Anglia, Norwich</b> myomiR-dependent switching of BAF60 variant incorporation into Brg1 chromatin remodeling complexes during embryo myogenesis	<b>O14 Mr TD Carroll – University of Dundee, Dundee</b> Controlling proliferation in adult intestinal crypts by selective loading of Mcm2-7 proteins
11.45 – 12.00	<b>O13 Mr AP Thiery - University of Sheffield, Sheffield</b> An ancient and conserved stem cell niche directs regeneration of the novel beaked dentition in Pufferfish	<b>O15 Dr NA Copeland – Lancaster University, Lancaster / University of York, York</b> CDK mediated phosphorylation of Ciz1 regulates initiation of DNA replication and replisome assembly in mammalian cells
12.00 – 12.30	<b>S24 Enrique Amaya</b>	<b>S29 Julian Blow - University of Dundee, Dundee</b> Interdependence of chromosome condensation and decondensation with DNA replication in <i>C. elegans</i> embryos
12.30 – 13.30	<b>Lunch – Mead Gallery, Arts Centre</b>	
13.30 – 14.30	<b>Poster/Exhibition Viewing Time – Mead Gallery, Arts Centre</b>	
<b>Session 4:</b>	<b>Cellular Responses – Main Lecture Theatre</b> <b>Chair: TBC</b>	<b>Metabolism – Woods-Scawen Lecture Theatre</b> <b>Chair: Alex Gould</b>
14.30 – 15.00	<b>S30 Andrea Brand - The Gurdon Institute, University of Cambridge, Cambridge</b> Nutritional control of neural stem cell quiescence and reactivation	<b>S35 Irene Miguel-Aliaga - Imperial College, London</b> Intestinal sex and contraception
15.00 – 15.15	<b>O16 Dr TE Saunders – National University of Singapore, Singapore</b> Spatio-temporal analysis of different mechanisms for interpreting morphogen gradients	<b>O18 Dr MI Stefana - The Francis Crick Institute, London</b> The power of food: how diet during development programmes adult lifespan in <i>Drosophila</i>
15.15 – 15.45	<b>S31 Andrew Johnson - University of Nottingham, Nottingham</b> The Germ Line is Master of Its Own Destiny	<b>S36 Eyal Gottlieb - Cancer Research UK, Beatson Institute, Glasgow</b> Pyruvate Carboxylase dependency of SDH-deficient cancer cells
15.45 – 16.15	<b>Refreshment Break and Exhibition Viewing Time – Mead Gallery, Arts Centre</b>	
16.15 – 16.30	<b>O17 Dr M Gouti - The Francis Crick Institute, London</b> Directed differentiation of ESCs to spinal cord neurons via a neuromesodermal progenitor state	<b>O19 Dr RA Bone – University of Copenhagen, Copenhagen, Denmark</b> Investigating the Metabolic States of Differentially Lineage-Primed Embryonic Stem Cells
16.30 – 17.00	<b>S32 Hilary Ashe - University of Manchester, Manchester</b> Interpretation of BMP signalling in <i>Drosophila</i>	<b>S37 Tristan Rodriguez - Imperial College London, London</b> Mechanisms regulating cellular fitness during embryonic development
17.00 – 17.30	<b>S33 Wieland Huttner - Max Planck Institute of Molecular Cell Biology and Genetics, MPG, Dresden, Germany</b> Neural stem and progenitor cells and neocortex expansion in development and evolution	<b>S38 Norbert Perrimon - Harvard Medical School, Boston, USA</b> Organ-to-organ communication in <i>Drosophila</i>
17.30 – 18.00	<b>S34 Corinne Houart - MRC Centre for Dev Neuro, KCL, London, UK</b> Non-nuclear RNA processing protein function(s) in neuronal differentiation and neurodegeneration	<b>S39 Luca Scorrano - University of Padua, Padua / Venetian Institute of Molecular Medicine, Padua</b> Keeping mitochondria in shape: A matter of life and death
18.00 – 19.30	<b>BSDB AGM</b>	<b>BSCB AGM</b>
20.00 onwards	<b>Conference Dinner – Panorama Suite, Rootes Building</b>	

**Wednesday 15<sup>th</sup> April, 2015**

08.00 – 12.00	Registration – Foyer, Arts Centre
07.30 – 09.30	<b>Breakfast – Rootes Restaurant, Rootes Building</b>
	<b>Physical Biology and Mechanical Forces – Main Lecture Theatre</b> <b>Chair: Mohan Balasubramanian</b>
09.00 – 09.30	<b>WICB Medal Talk – Main Lecture Theatre</b>

	<b>S40 Victoria Cowling - University of Dundee, Dundee</b> Regulation of mRNA capping in embryonic stem cell pluripotency and differentiation	
09.30 – 10.00	<b>S41 Matthieu Piel - Institut Curie/CNRS, Paris, France</b> Cell migratio under confinement: pushing off the walls and squeezing the nucleus	
10.00 – 10.30	<b>Beddington Medal Talk – Invited Speaker – Main Lecture Theatre</b>	
10.30 – 11.00	<b>Refreshment Break – Mead Gallery, Arts Centre</b>	
11.00 – 11.30	<b>S42 Kristian Franze - University of Cambridge, Cambridge</b> Neuronal growth <i>in vivo</i> is regulated by mechanical signals	
11.30 – 12.00	<b>S43 Joe Howard - Yale University, New Haven</b> The forces that center the mitotic spindle in the <i>C elegans</i> embryo	
12.00 – 12.30	<b>S44 Siobhan Braybrook - University of Cambridge, Cambridge</b> How does your garden grow? Understanding plant cell growth from a physical perspective	
12.00 – 14.30	<b>Lunch &amp; delegates depart</b>	