




| Sunday 18 th June 2017 | | Location |
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| 12.00-14.30 | Registration & Speaker Preview Open | Foyer |
| 14.30-15.00 | Opening Ceremony (with guests of honour in attendance) D'Arcy Thompson Symposium (Plenary) <i>Session Chair: Janet Rossant, Canada</i> | UCC Hall |
| 15.00-15.30 | On The Growth and Form of The Vertebrate Neural Tube <i>James Briscoe, UK</i> | UCC Hall |
| 15.30-16.00 | Visualization of Transcriptional Regulation via Long-distance Enhancer-Promoter Interactions <i>Thomas Gregor, USA</i> | |
| 16.00-16.30 | Left-Right Symmetry Breaking in the Mouse Embryo <i>Hiroshi Hamada, Japan</i> | |
| 16.30-17.00 | Tea/coffee | Foyer |
| 17.00-18.30 | D'Arcy Thompson Symposium (Plenary) continued | UCC Hall |
| 17.00-17.30 | On the Growth and Form of The Zebrafish Myotome <i>Tim Saunders, Singapore</i> | UCC Hall |
| 17.30-18.00 | Mechanodevo: How Growth and Form Derived Mechanical Forces Channel Plant Morphogenesis <i>Olivier Hamant, France</i> | |
| 18.00-18.30 | Cell and Tissue Mechanics in Zebrafish Gastrulation <i>Carl-Philipp Heisenberg, Austria</i> | |
| 18.40-19.30 | NOBEL LECTURE: Christiane Nueslein-Volhard, Germany How Fish Colour their Skin: A Paradigm for Development and Evolution of Adult Patterns <i>Session Chair: Janet Rossant, Canada</i> | UCC Hall |
| 19.30-21.00 | Welcome Reception | Foyer and Level 1 |

| Monday 19 th June 2017 | | Location |
|-----------------------------------|--|----------|
| 08.00-21.00 | Registration & Speaker Preview Open | Foyer |
| 09.00-09.50 | NOBEL LECTURE: Eric Betzig, USA Imaging Cellular Structure and Dynamics from Molecules to Organisms <i>Session Chair: Paul Matsudaira, Singapore</i> | UCC Hall |

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| 10.00-12.30 | Parallel Session 1 | | |
| | Session 1.1: Ageing Room: UCC Theatre <i>Session Chair: Gary Schoenwolf, USA</i> | Session 1.2: Human Disease and Development Room: UCC Hall <i>Session Chair: Mai Har Sham, Hong Kong</i> | |
| 10.00-10.30 | Fat, Fertility and Aging Worms <i>Arjumand Ghazi, USA</i> | R(e)SPONDIN(g)-2 WNT Signalling for Lung and Limb Development without the Need for LGR4/5/6 <i>Bruno Reversade, Singapore</i> | |
| 10.30-10.45 | O-1: Integrins Act as Mechanosensors to Regulate Cell Survival and Tissue Homeostasis During Morphogenesis <i>M Dolores Martin Bermudo, Spain</i> | O-2: Regulatory Mutations in Shh Cause Craniofacial Malformations <i>Zoe Crane Smith, UK</i> | |
| 10.45-11.00 | O-3: Mutated NS1-BP causes Segmental Premature Ageing of Skin and Neural Lineages <i>Carine Bonnard, Singapore</i> | O-4: Gestational Stress causes Heart Defects by Inducing the Unfolded Protein Response <i>Sally Dunwoodie, Australia</i> | |
| 11.00-11.30 | Tea and coffee break | | Foyer and Level 1 |
| 11.30-12.30 | Parallel Session 1 continued | | |
| 11.30-12.00 | Premature Ageing Mutations at The Nuclear Periphery <i>Colin Stewart, Singapore</i> | Studying Primate Cerebral Cortex Evolution in Stem Cell Systems <i>Rick Livesey, UK</i> | |
| 12.00-12.30 | Strategies to Enhance The Regenerative Function of Aging Stem Cells <i>Amy Wagers, USA</i> | Genetics of Neurodevelopmental Disorders: Connecting The Dots in The Brain <i>Enrico Petretto, Singapore</i> | |
| 12.30-14.30 | Lunch and Poster Session 1 | | Foyer and Level 1 |

| 14.30-17.30 | | Parallel Session 2 | | |
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| | <p>Session 2.1: Cell Biology Room: UCC Theatre <i>Session Chair: Rik Korswagen, The Netherlands</i></p> | <p>Session 2.2: Tissue Homeostasis and Regeneration Room: UCC Hall <i>Session Chair: Shahragim Tajbakhsh, France</i></p> <p>Session sponsored by ISD with an introduction by Colin Stewart, Editor in Chief, Differentiation</p>  | | |
| 14.30-15.00 | <p>Think Global, Act Local: Integrating Polarities Across Developing Organs <i>Dominique Bergmann, USA</i></p> | <p>Constructing The Human Kidney <i>Andy McMahon, USA</i></p> | | |
| 15.00-15.30 | <p>A Novel Membrane Invagination Controls Oriented Cell Division in Ascidian Embryo <i>Naoto Ueno, Japan</i></p> | <p>Sex, Reproduction and Intestinal Plasticity <i>Irene Miguel-Aliaga, UK</i></p> | | |
| 15.30-15.45 | <p>O-5: Structural and Functional Recovery of Sensory Cilia in <i>C. elegans</i> IFT Mutants upon Aging <i>Ashish Maurya, USA</i></p> | <p>O-6: The Role of Glial Cells During Spinal Cord Regeneration in <i>Xenopus Laevis</i> <i>Gabriela Edwards Faret, Chile</i></p> | | |
| 15.45-16.15 | Tea/coffee | | | Foyer |
| 16.15-16.45 | <p>Assembly and Transport of <i>Oskar</i> mRNPs in the <i>Drosophila</i> Germline <i>Anne Ephrussi, Germany</i></p> | <p>Cell Competition in Mammalian Development and Tissue Homeostasis <i>Miguel Torres, Spain</i></p> | | |
| 16.45-17.00 | <p>O-7: An Effective Feedback Loop between Cell-Cell Contact Duration and Morphogen Signaling Determines Cell Fate Specification During Zebrafish Gastrulation <i>Vanessa Barone, Austria</i></p> | <p>O-8: Zebrafish Heart Regeneration Depends on Alleviation of Cardiomyocyte Genomic Stress by BMP Signaling <i>Gilbert Weidinger, Germany</i></p> | | |
| 17.00-17.30 | <p>Mechanisms Regulating Neuronal Delamination <i>Kate Storey, UK</i></p> | <p>Regulation of Cardiomyocyte Behavior by Neuregulin Signaling <i>Didier Stainier, Germany</i></p> | | |
| 17.30-18.30 | Community Session | | | Room: Theatre |
| 18.30-21.00 | Poster Session 2 | | | Level 1 |

| Tuesday 20 th June 2017 | | Location |
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| 08.00-21.00 | Registration & Speaker Preview Open | Foyer |
| 09.00-09.50 | NOBEL LECTURE: Sir John Gurdon, UK Somatic Cell Nuclear Transfer: Memory of The Past Versus Hope for The Future <i>Session Chair: Jim Smith, UK</i> | UCC Hall |
| 10.00-12.30 | Parallel Session 3 | |
| | Session 3.1: Quantitative methods/imaging Room: UCC Hall <i>Session Chair: Kate Lewis, USA</i> | Session 3.2: Early Development Room: UCC Theatre <i>Session Chair: Leonor Saude, Portugal</i> |
| 10.00-10.30 | Live-Cell Imaging of Pollen Tube Guidance for Identification of Key Molecules <i>Tetsuya Higashiyama, Japan</i> | Hulu, A Novel Transmembrane Protein, is Absolutely Required for Organizer and Body Axis Formation in Zebrafish <i>Anming Meng, China</i> |
| 10.30-10.45 | O-9: Light-Sheet Imaging of Early Mouse Development: From Gastrulation to Organogenesis <i>Kate McDole, USA</i> | O-10: Imaging Nascent Mesoderm Migration in Mouse Embryo Highlights Cell-Environment Interdependence <i>Isabelle Migeotte, Belgium</i> |
| 11.00-11.30 | Tea and coffee break | Foyer |
| 11.30-12.30 | Parallel Session 3 continued | |
| 11.30-12.00 | Oscillatory Signals Controlling Mesoderm Patterning - A Quantitative Approach <i>Alexander Aulehla, Germany</i> | Transcriptional Networks Regulating Cell Allocation in The Post-Implantation Mouse Embryo <i>Liz Robertson, UK</i> |
| 12.00-12.15 | Symmetry Breaking and Self-Organisation in Mouse Development <i>Takashi Hiiragi, Germany</i> | O-11: Axial Polarization Cues Impinge on Early Mesoderm Patterning and Specify Vertebrate Head Mesoderm <i>Ramkumar Sambasivan, India</i> |
| 12.15-12.30 | | O-12: Decoding Temporal Interpretation of The Morphogen Bicoid in The Early Drosophila Embryo <i>Anqi Huang, Singapore</i> |
| 12.30-14.30 | Lunch and Poster Session 3 | Foyer and Level 1 |

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| 14.30-16.00 | Parallel Session 4 | | |
| | Session 4.1: Metabolism Room: UCC Theatre <i>Session Chair: Angela Nieto, Spain</i> Session sponsored by the Lee Kong Chian School of Medicine  | Session 4.2: Neurobiology Room: UCC Hall <i>Gerd Technau, Germany</i> | |
| 14.30-15.00 | Molecular Dialogues with The Microbiota: Lessons from The Zebrafish Intestine <i>Karen Guillemin, USA</i> | Wiring Up The Retina <i>Josh Sanes, USA</i> | |
| 15.00-15.30 | Coping with a Stressful Start in Life <i>Alex Gould, UK</i> | The Brain under Surveillance: The Role of Neuronal-Microglial Interactions in The Development, Function and Repair of The CNS <i>Francesca Peri, Germany</i> | |
| 15.30-16.00 | Regulation of zebrafish embryo development by progesterone <i>Bon-Chu Chung, Taiwan</i> | Epidermis-Dendrite Adhesion Promotes Dendrite Growth and Prevents Dendrite Bundling <i>Cheng-Ting Chien, Taiwan</i> | |
| 16.00-16.30 | Tea and coffee break | | Foyer and Level 1 |
| 16.30-17.45 | Parallel Session 4 continued | | |
| 16.30-17.00 | A Conserved Role for Reactive Oxygen Species During Early Embryonic Development and Appendage Regeneration <i>Enrique Amaya, UK</i> | Regulation of Neural Circuit Wiring by The Cadherin/Catenin Cell Adhesion Complex <i>Xiang Yu, China</i> | |
| 17.00-17.15 | O-13: Reactive Oxygen Species regulates cell growth via distinct signaling pathway independent of TOR <i>Ashish Toshniwal, India</i> | O-14: The Influence of Microglia on Neural Progenitor Behavior During Embryonic Development <i>Deborah Kurrasch, Canada</i> | |
| 17.15-17.45 | Metabolic and Hormonal Regulation of Drosophila Neural Stem Cells during Brain Development <i>Catarina Homem, Portugal</i> | Semaphorins and Other Signalling Pathways in The Development of Motor-Neurons and their Target Muscles <i>Vijay Raghavan, India</i> | |
| 18.00-19.00 | The Ross Harrison Medal Lecture: Claudio Stern, United Kingdom Introduction by Philip Ingham <i>Session Chair: Philip Ingham, President, ISDB</i> | | UCC Hall |




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| 19.00-21.30 | Poster Session 4 | Level 1 |
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| Wednesday 21st June 2017 | | Location |
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| 08.00-21.00 | Registration & Speaker Preview Open | Foyer |
| 09.00-09.50 | NOBEL LECTURE: Martin Chalfie, USA Determining Neuronal Fate in <i>C. elegans</i> <i>Session Chair: Trudi Schupbach, USA</i> | UCC Hall |
| 10.00-12.00 | Parallel Session 5 | |
| | Session 5.1: Emerging Models Room: UCC Theatre <i>Session Chair: Noriyuki Satoh, Japan</i> | Session 5.2: Cell Biology 2 Room: UCC Hall <i>Session Chair: Yoshiko Takahashi, Japan</i> |
| 10.00-10.30 | From the Bush to the Bench: A Short-Lived African Fish Reveals Novel Aspects of The Genetic Control of Development and Aging <i>Allesandro Cellerino, Germany</i> | Self-Organized Notch Dynamics Generate Stereotyped Sensory Organ Patterns in Drosophila <i>Francois Schweisguth, France</i> |
| 10.30-10.45 | O-15: Gecko Dentistry: Surgeries Elucidate Requirements for Postnatal Generation of Dental Tissues <i>Theresa Grieco, Canada</i> | O-16: Imaging How Cells Decide their Fate, Shape and Position in The Living Mouse Embryo <i>Nicholas Plachta, Singapore</i> |
| 10.45-11.15 | Tea and coffee break | Foyer |
| 11.15-12.00 | Parallel Session 4 continued | |
| 11.15-11.30 | O-17: Sex Ticklers and Dirty Flies: The Development and Evolution of A Novel Abdominal Appendage in Male Sepsid Flies <i>Gowri Rajaratnam, Singapore</i> | O-18: Understanding Morphogenesis in Drosophila Oogenesis: Role of Insulin Signaling in Border Cell Migration <i>Aditi Sharma, India</i> |
| 11.30-12.00 | Lower plants as Simple Models for Engineering Development <i>Jim Haselhoff, UK</i> | Three Greek Gods and Cilia <i>Sudipto Roy, Singapore</i> |
| 12.00-14.00 | Lunch and Poster Session 5 | Foyer and Level 1 |
| 14.00-17.30 | Plenary Session 6: Evolution <i>Session Chair: Susanne Dietrich, University of Portsmouth</i> | |
| 14.00-14.30 | Fishing for The Secrets of Vertebrate Evolution <i>David Kingsley, USA</i> | UCC Hall |
| 14.30-15.00 | The Evolution and Development of Butterfly Eyespot Patterns | UCC Hall |

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| | <i>Antonia Monteiro, Singapore</i> | |
| 15.00-15.15 | O-19: ApterousA is Required for The Differentiation of Dorsal Wing Patterns in Butterflies <i>Anupama Prakash, Singapore</i> | UCC Hall |
| 15.15-15.45 | An Alternative Fate of Chordate Genomes Exemplified by The Rapidly Evolving Larvaceans <i>Daniel Chourrout, Norway</i> | UCC Hall |
| 15.45-16.15 | Tea and coffee break | Foyer |
| 16.15-17.30 | Plenary Session: Evolution continued | |
| 16.15-16.30 | O-20: Novel co-Option of The Cardiac Transcription Factor Nkx2.5 During Evolution and Development of The Emu Wing <i>Craig Smith, Australia</i> | UCC Hall |
| 16.30-17.00 | Evolution of Color and Motion Vision <i>Claude Desplan, USA</i> | UCC Hall |
| 17.00-17.30 | Acquisition of The Turtle Shell: Changes in Developmental Program Behind The Evolutionary Novelty <i>Shigeru Kuratani, Japan</i> | UCC Hall |
| 19.00-23.00 | Congress Dinner | Gardens by the Bay |

| Thursday 22nd June 2017 | | Location |
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| 08.00-21.00 | Registration & Speaker Preview Open | Foyer |
| 09.00-09.50 | NOBEL LECTURE: Sydney Brenner, Singapore Evolution, Genetics and Development <i>Session Chair: Byrappa Venkatesh, Singapore</i> | UCC Hall |
| 10.00-12.30 | Parallel Session 7 | |
| | Session 7.1: Signal Integration Room: UCC Theatre <i>Session Chair: Danny Huylebroeck, The Netherlands</i> | Session 7.2: Stem Cells Room: UCC Hall <i>Session Chair: Ray Dunn, Singapore</i> |

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| 10.00-10.30 | Underground Signaling Networks <i>Phil Benfey, USA</i> | Directing Stem Cells to Kidney: From Development to Regeneration <i>Melissa Little, Australia</i> Sponsored by Stem Cell Society Singapore  STEM CELL SOCIETY SINGAPORE | |
| 10.30-11.00 | Inter-Organ Communication Network <i>Norbert Perrimon, USA</i> | Elucidation of Lung Development, Stem Cells, and Cancer at Single Cell Resolution <i>Mark Krasnow, USA</i> | |
| 11.00-11.30 | Tea and coffee | | Foyer |
| 11.30-12.30 | Parallel Session 7 continued | | |
| 11.30-11.45 | O-21: Mechanisms of Chondrocyte Adaptation and Survival Under ER Stress <i>Kathryn Cheah, Hong Kong</i> | O-22: An Intrinsic Mechanism Controls Reactivation of Neural Stem Cells <i>Hongyan Wang, Singapore</i> | |
| 11.45-12.00 | O-23: Circadian Clock Protein Period3 Contributes to Sleep Homeostasis Through Histamine and GABA Signaling in Zebrafish <i>Han Wang, China</i> | O-24: Modulation of Epiblast Stem Cell Fates by WNT-Mix11 Activity <i>Pierre Osteel, Australia</i> | |
| 12.00-12.30 | Signal Integration and The Bud Activation Switch <i>Ottoline Leyser, UK</i> | Age-Related Changes to Stem Cells and The Stem Cell Niche <i>Leanne Jones, USA</i> | |
| 12.30-14.00 | Lunch | | Foyer |
| 14.00-15.45 | Parallel Session 8 | | |
| | Session 8.1: Organogenesis Room: UCC Theatre <i>Session Chair: Jeremy Green, UK</i> | Session 8.2: Epigenetics- Gene Regulation Room: UCC Hall <i>Session Chair: Daniel Messerschmidt, Singapore</i> | |
| 14.00-14.30 | Petal Development: A Twist in Fate <i>Vivian Irish, Yale</i> | The Mechanism of Hox Gene Colinearity in Developing Limbs <i>Denis Duboule, Switzerland</i> | |
| 14.30-15.00 | Natural Cardiac Regeneration Strategies | N6-Methyladenosine RNA Modification in Plant Development | |

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| | <p>Ken Poss, USA Sponsored by Duke-NUS Medical School</p>  | <p>Yu Hao, Singapore</p> | |
| 15.00-15.15 | <p>O-25: Making and Breaking Symmetry in the Zebrafish otic Placode <i>Tanya Whitfield, UK</i></p> | <p>O-26: A Feed-Forward Regulatory Loop Linking Notch Signaling and Epigenetic Repression in Development <i>Jian Zhu, China</i></p> | |
| 15.15-15.45 | <p>Transcriptional Targets in Heart Development and Off-Targets in Congenital Heart Disease <i>Richard Harvey, Australia</i></p> | <p>Genome Activation in Xenopus Tropicalis <i>Jim Smith, UK</i></p> | |
| 15.45-16.10 | Tea/coffee | | Foyer and level 1 |
| 16.10-17.00 | <p>NOBEL LECTURE: Eric Wieschaus, USA Patterning Transcription in Early Drosophila Embryos <i>Session Chair: Philip Ingham, President, ISDB</i></p> | | UCC Hall |