

***** Times indicated in the program are speaking times. Additional time in the session is allocated for questions.

Bus arrives

12:00PM - 12:10PM

Lunch

12:50PM - 1:50PM

Semillon 2 & 3

Session 1: Cell and tissue imaging

1:50PM - 3:40PM

Semillon 1

Chairs: Fred Meunier & Elizabeth Hinde

- | | | |
|----------------|--|---------------|
| <i>20 mins</i> | Paul Timpson
Intravital Imaging to Monitor Therapeutic Response in Moving Hypoxic Regions Resistant to PI3K Pathway Targeting in Pancreatic Cancer | <i>abs# 1</i> |
| <i>20 mins</i> | Merja Joensuu
Super-resolving presynaptic endocytic pathway dynamics: from plasma membrane binding to internalization in synaptic vesicles | <i>abs# 2</i> |
| <i>20 mins</i> | Rafael Carazo Salas
Dynamics of human stem cell colony proliferation <i>in vitro</i> | <i>abs# 3</i> |
| <i>15 mins</i> | Thomas Cox
Cancer associated fibroblast mediated remodelling of the extracellular matrix drives pancreatic cancer progression and metastasis | <i>abs# 4</i> |
| <i>15 mins</i> | Samantha Stehbens
Microtubule-Dependent Mechanosensing in Cell Migration and Cancer Invasion | <i>abs# 5</i> |

Afternoon Tea

3:40PM - 4:00PM

Semillon 2 & 3

Session 2: Cell and developmental biology of disease

4:00PM - 5:50PM

Semillon 1

Chairs: Helen Abud & Kieran Harvey

- | | | |
|----------------|--|---------------|
| <i>20 mins</i> | Jacky Goetz
Multi-modal tracking of tumor metastasis | <i>abs# 6</i> |
| <i>20 mins</i> | Barry Thompson
Control of tissue growth and form via the Hippo pathway | <i>abs# 7</i> |

- 20 mins **Sharissa Latham** *abs# 8*
Variants in exons 5 and 6 of *ACTB* cause syndromic thrombocytopenia
- 15 mins **Katie Ayers** *abs# 9*
SART3 genetic variants are a novel cause of gonadal dysgenesis and intellectual disability
- 15 mins **Kristen Barratt** *abs# 10*
Elevated canonical WNT signalling disrupts heart development and may underlie cases of human Heterotaxy

Short Break

5:50PM - 6:00PM

Session 3: Keith Stanley Lecture Plenary 1

6:00PM - 7:00PM

Semillon 1

Chair: Josephine Bowles

- 50 mins **Hiroshi Hamada** *abs# 11*
Cilia-dependent and independent mechanisms for left-right symmetry breaking among vertebrates

Monday Night Dinner

7:00PM - 8:30PM

Pergola

Poster and Trade Display

8:30PM - 10:00PM

Semillon 2 & 3

Session 4: Development

8:30AM - 10:20AM

Semillon 1

Chairs: Kelly Smith & Ruth Arkell

- 20 mins **Amitabha Bandyopadhyay** *abs# 12*
Early events of articular cartilage differentiation
- 20 mins **Louise Cheng** *abs# 13*
No title provided at this stage
- 20 mins **Vicki Metzis** *abs# 14*
Nervous system regionalization involves axial allocation prior to neural differentiation
- 15 mins **Jan Kaslin** *abs# 15*
Make do and make new: how zebrafish rapidly regenerates CNS injury
- 15 mins **Kaska Koltowska** *abs# 16*
Lineage specific requirement for RNA and DNA unwinding during lymphatic endothelial cell proliferation.

Morning Tea

10:20AM - 11:00AM

Semillon 2 & 3

Session 5: Membrane-less organelles and molecular self-assembly

11:00AM - 12:50PM

Semillon 1

Chairs: Danny Hatters & Nathan Pavlos

- 20 mins **Charlie Bond** *abs# 17*
Structural studies of phase-separating gene regulatory proteins and their role in membraneless organelles
- 20 mins **Kate Stacey** *abs# 18*
Inflammasome assembly and function
- 20 mins **Fionna Loughlin** *abs# 19*
Probing the self-association of RNA binding proteins and influence of nucleic acids
- 15 mins **Seth Masters** *abs# 69*
New mechanisms of autoinflammatory and neuroinflammatory disease.
- 15 mins **Vikas Tillu** *abs# 20*
Molecular basis of caveolar membrane coat complex assembly

15 mins **Tony Cesare** *abs# 21*
Nuclear filamentous actin functions in the replication stress response

Lunch (Students: Meet the Experts)

12:50PM - 1:50PM

Semillon 2 & 3

Session 6: Signalling

1:50PM - 3:40PM

Semillon 1

Chairs: James Burchfield & Christina Mitchell

20 mins **Eugenia Piddini** *abs# 22*
Mechanical cell competition: mechanisms and implications for epithelial biology

20 mins **Lan Nguyen** *abs# 23*
Optimizing drug combinations for cancer treatment through integrative network modelling

20 mins **David Croucher** *abs# 24*
Heterogeneity in single-cell apoptotic signalling promotes chemoresistance in neuroblastoma

15 mins **Andrew Brooks** *abs# 25*
Mechanisms of dysregulated cytokine receptor signalling in cancer

15 mins **Michelle Halls** *abs# 26*
Pre-assembled GPCR signalling complexes mediate distinct cellular responses to ultra-low ligand concentrations

Afternoon Tea

3:40PM - 4:00PM

Semillon 2 & 3

Session 7: Cell death and inflammation

4:00PM - 5:50PM

Semillon 1

Chairs: Kate Lawlor & Matt Sweet

20 mins **Si Ming Man** *abs# 27*
Inflammasome signalling in the host defense against infectious disease

20 mins **Kate Lawlor** *abs# 28*
Activation of mitochondrial apoptotic signalling to trigger inflammation

20 mins **James Murphy** *abs# 29*
Viral MLKL homologs subvert necroptotic cell death by sequestering cellular RIPK3

15 mins **Mercedes Monteleone** *abs# 30*
Noncanonical inflammasome signalling elicits gasdermin-D dependent neutrophil extracellular traps

15 mins **Ronan Kapetanovic** *abs# 31*
Mitochondrial dynamics control macrophage inflammatory and antimicrobial responses during bacterial infections

Short Break

5:50PM - 6:00PM

Session 8: EMBO Plenary 2

6:00PM - 7:00PM

Semillon 1

Chair: Alpha Yap

50 mins **Stephan Grill** *abs# 32*
The EMBO Keynote Lecture - Guided Mechanochemical Self-Organization

Speaker sponsored by: 

Tuesday Night Dinner

7:00PM - 8:30PM

1st Tee

Poster and Trade Display

8:30PM - 10:00PM

Semillon 2 & 3

Session 9: Trafficking

8:30AM - 10:40AM Semillon 1

Chairs: Paul Gleeson & Justine Mintern

- 20 mins **Elizabeth Hartland** *abs# 33*
 Bacterial infection and cell intrinsic immunity
- 20 mins **Victor Anggono** *abs# 34*
 Only Regulation of NMDA receptor trafficking by sorting nexin 27
- 20 mins **Jennifer Stow** *abs# 35*
 Regulation of Toll-like Receptor Signalling in Inflammation: Roles for transmembrane adaptors and SRC family kinases.
- 15 mins **Justine Mintern** *abs# 36*
 New Participants and Pathways in Immune Receptor Trafficking.
- 15 mins **Gonzalo Perez-Siles** *abs# 37*
 Functional assays for determining the pathogenicity of *ATP7A* variants using primary fibroblasts and patient derived induced pluripotent stem cells.

Morning Tea

10:40AM - 11:00AM Semillon 2 & 3

Session 10: Tissue morphogenesis

11:00AM - 12:50PM Semillon 1

Chairs: Ian Smyth & Emma Gordon

- 20 mins **Alberto Roselló-Díez** *abs# 38*
 Different insults to long bone growth lead to distinct scaling effects in developing mice
- 20 mins **Natasha Harvey** *abs# 39*
 A GATA2 bound enhancer responsible for regulation of Prox1 and control of lymphatic endothelial cell identity.
- 20 mins **Alexander Combes** *abs# 40*
 Nephron progenitor commitment is a stochastic process influenced by cell migration
- 15 mins **Ben Hogan** *abs# 41*
 The alternative splicing regulator Nova2 constrains vascular Erk signalling to limit specification of the lymphatic lineage
- 15 mins **Genevieve Secker** *abs# 42*
 The role of the Nedd4 ubiquitin ligase during lymphatic development.

Lunch (Students: Meet the Experts)

12:50PM - 1:50PM

Semillon 2 & 3

Annual General Meeting

12:50PM - 1:50PM


Shiraz Room

Session 11: Mitochondria

1:50PM - 3:40PM

Semillon 1

Chairs: Mike Ryan & Aleksandra Filipovska

- 20 mins **Ana García-Sáez** *abs# 43*
Apoptotic foci in mitochondrial permeabilization during apoptosis
- Speaker sponsored by:* 
- 20 mins **Steven Zuryn** *abs# 44*
Genetic mosaicism of the mitochondrial genome.
- 20 mins **Oliver Rackham** *abs# 45*
The importance of fidelity in mitochondrial gene expression for cell and organ function
- 15 mins **Nicole La Gruta** *abs# 46*
Metabolic characteristics of ageing and function in CD8+ T cells
- 15 mins **Josephine Forbes** *abs# 47*
The not so “Mighty”- chondrion: Designing therapies for diabetes complications.

Wine Tasting and Dinner Experience

3:45PM - 9:00PM

This conference acknowledges the sponsorship of:



Session 12: Cell polarity and cell-cell contacts

8:30AM - 10:20AM

Semillon 1

Chairs: Srikanth Budnar & Samantha Stehbens

- 20 mins **Maté Biro** *abs# 48*
Mechanobiology of cytotoxic T- and tumour cell interactions
- 20 mins **Jennifer Zenker** *abs# 49*
Live imaging of non-centrosomal microtubule dynamics controlling early mammalian development
- 20 mins **Hayden Homer** *abs# 50*
The spindle shows its moves: polarising the oocyte for extreme asymmetric division
- 15 mins **Srikanth Budnar** *abs# 51*
Cyclic resetting of RhoA residence kinetics regulates cell contractility
- 15 mins **Teresa Bonello** *abs# 52*
Defining the earliest cues driving apical-basal polarity establishment: the tumor suppressor protein Scribble regulates supermolecular assembly and positioning of cell-cell adherens junctions.

Morning Tea

10:20AM - 11:00AM

Semillon 2 & 3

Session 13: Cellular and molecular structure

11:00AM - 12:50PM

Semillon 1

Chairs: Leann Tilley & Brett Collins

- 20 mins **Sara Sandin** *abs# 53*
Cryo-EM and correlative imaging of DNA-binding proteins
- 20 mins **Wai-Hong Tham** *abs# 54*
A new entry pathway for *Plasmodium vivax* into reticulocytes
- 20 mins **Thomas Hall** *abs# 55*
Modelling skeletal muscle T-tubule formation in zebrafish
- 15 mins **Christian Makhoul** *abs# 57*
Intersectin-1 interacts with the golgin, GCC88, to couple the actin network and Golgi architecture

15 mins **Jesse Goyette** *abs# 61*
The tandem SH2 domains of ZAP70 allow regulation of bond lifetimes that are sensitive to the affinity of TCR-pMHC interactions.

Lunch (Students: Meet the Experts)

12:50PM - 1:50PM

Semillon 2 & 3

Session 14: Post-translational modification and regulation of signal transduction

1:50PM - 3:40PM

Semillon 1

Chairs: Yeesim Khew-Goodall & James Murphy

20 mins **David Komander** *abs# 58*
Understanding ubiquitin signals through deubiquitination

20 mins **Nicole Verrills** *abs# 59*
The essential role of protein phosphatase 2A in tumour suppression and embryonic development

20 mins **Peter Mace** *abs# 60*
Repurposing kinase regulatory mechanics towards ubiquitination

15 mins **Guang Yang** *abs# 62*
RagC phosphorylation autoregulates mTOR complex 1

15 mins **Pieter Eichhorn** *abs# 117*
Loss of USP28-mediated BRAF degradation drives resistance to RAF cancer therapies

Afternoon Tea

3:40PM - 4:00PM

Semillon 2 & 3

Session 15: Autophagy and lysosomal biology

4:00PM - 5:50PM

Semillon 1

Chairs: Michael Lazarou & Pirjo Apaja

20 mins **Sharad Kumar** *abs# 63*
Regulation of autophagy-dependent cell death

20 mins **Meagan McGrath** *abs# 64*
Defective lysosome homeostasis during autophagy causes skeletal muscle disease

20 mins **Hongyuan Robert Yang** *abs# 65*
ORP1L regulates cholesterol exit from late endosomes and lysosomes: a role for phosphatidylinositol biphosphates

15 mins **Julia Pagan** *abs# 66*
Regulation of mitophagy receptors BNIP3 and BNIP3L by SCF ubiquitin ligases

15 mins **Lou Fourriere**

abs# 67

Anterograde trafficking and Golgi sorting of the membrane cargo β -secretase (BACE1) and the production of amyloid peptides in Alzheimer disease

Short Break

5:50PM - 6:00PM

Session 16: Georgina Sweet Plenary 3

6:00PM - 7:00PM

Semillon 1

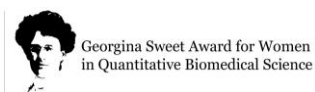
Chair: Jennifer Stow

50 mins **Sharon Tooze**

abs# 68

Molecular mechanisms of autophagosome formation

Speaker sponsored by:



Conference Dinner - Taste of the World

7:00PM - 8:30PM

Pergola

This conference acknowledges the sponsorship of:



FRIDAY | 22nd March 2019



Bus departs

10:00AM - 10:10AM