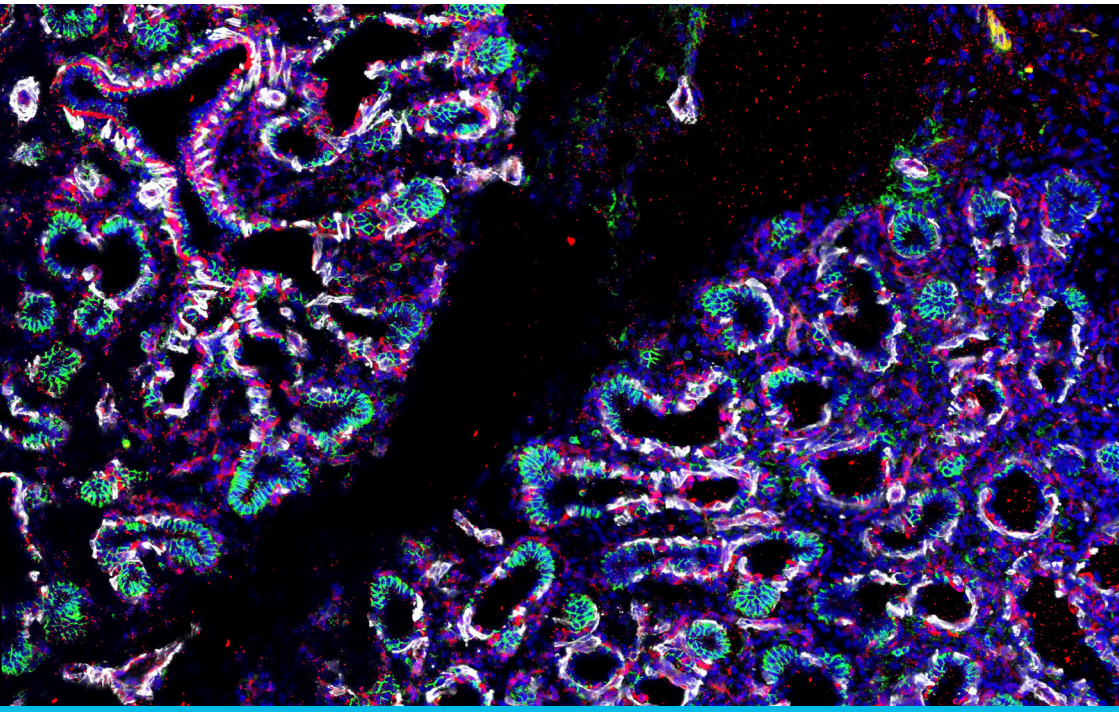
Provisional programme

From Stem Cells to Human Development



Wotton House, Surrey, UK, 16 – 19 September 2024

The Company of Biologists

Development

From Stem Cells to Human Development

Provisional programme

Monday 16 September 2024

12:00 **Registration opens**

14:30 **Welcome: Katherine Brown**, Development, UK

Session 1

14:45 **Kathy Niakan**, The Francis Crick Institute, UK
Signalling pathways regulating early human development and their application to stem cell biology

Marta Shahbazi, MRC Laboratory of Molecular Biology, UK
Developmental plasticity of the early human embryo

Mo Ebrahimkhani, University of Pittsburgh, USA
Modelling post-implantation human development to yolk sac blood emergence

Josh Brickman, University of Copenhagen, Denmark
Plasticity and commitment in naïve extra-embryonic endoderm – an *in vitro* model for human hypoblast specification

Short talks selected from abstracts

18:15 **Drinks reception**

19:30 **Dinner**

Tuesday 17 September 2024

From 07:00 **Breakfast**

Session 2

09:00 **Alain Chédotal**, Institut de la Vision, France
Tridimensional analysis of human embryogenesis

Cantas Alev, Kyoto University, Japan
Reconstituting human axial development *in vitro* with axioloids

Olivier Pourquié, Harvard Medical School, USA
TBC

Muzz Haniffa, Newcastle University, UK
The developing human immune system

Short talks selected from abstracts

12:30 **Lunch, posters and and exhibition**

Session 3

14:00 **Jim Wells**, Cincinnati Children's Hospital Medical Center, USA
Gaining insights into human organogenesis using pluripotent stem cells

Francesca Spagnoli, King's College London, UK
Progenitor niches in the developing pancreas: regulation of cell fate and beyond

Emma Rawlins, University of Cambridge, UK
Chronic hypoxia in normal fetal development promotes differentiation in the developing human lungs

Andrew McMahon, University of Southern California, USA
The human kidney: from developmental programming to organ engineering

Susana Chuva de Sousa Lopes, Leiden University, The Netherlands
The ins and outs of the human fetal gonad and reproductive tract

17:45 **Poster session, exhibition and pre-dinner drinks**

19:15 **Dinner**

Wednesday 18 September 2024

From 07:00 **Breakfast**

Session 4

09:00 **James Briscoe**, The Francis Crick Institute, UK
The dynamics of human spinal cord development

Debra Silver, Duke University, USA
Building our brains: from disease to evolution

Paola Arlotta, Harvard University, USA
Human brain chimeroids as avatars to study inter-international variation in brain development and disease

Jane Sowden, University College London, UK
TBC

Agnete Kirkeby, University of Copenhagen, Denmark
Using stem cells to model and repair the disease brain

Short talks selected from abstracts

12:30 **Lunch, posters and exhibition**

14:00 **Free time**

Session 5

16:00 **Nick Hopwood**, University of Cambridge, UK
History of human developmental biology

Update from the Human Developmental Biology Initiative (HDBI)

Panel discussion

17:30 **Poster session, exhibition and pre-dinner drinks**

19:00 **Dinner**

Thursday 19 September 2024

From 07:00 **Breakfast**

Session 6

09:00 **Margherita Yayoi Turco**, Friedrich Miescher Institute for Biomedical Research, Switzerland
Charting human placental development using trophoblast organoids

Kara McKinley, Harvard University, USA
Regeneration in the uterus

Sasha Mendjan, Institute of Molecular Biotechnology, Austria
Cardioids unravel human heart development and cardiac defects

The EMBO Keynote Lecture: Matthias Lütolf, École Polytechnique Fédérale de Lausanne, Switzerland
Bioengineering human epithelial organoid morphogenesis

Short talks selected from abstracts

12:15 **Lunch/Depart**