

Development Meeting 2020: From Stem Cells to Human Development

Provisional programme

Sunday 6 September

- 12:00** **Registration open**
- 12:30** **Lunch**
- 14:30** **Katherine Brown – Development, UK**
Welcome
- 14:45** **Kevin Eggan – Harvard University, USA**
Villages in a dish: ensemble analyses of phenotypes in hundreds of stem cell lines
- 15:15** **Selected speaker 1**
- 15:30** **Madeline Lancaster – MRC Laboratory of Molecular Biology, UK**
Unique aspects of human neuroepithelial tissue morphogenesis and expansion
- 16:00** **Wieland Huttner – Max Planck Institute of Molecular Cell Biology and Genetics, Germany**
Neural stem cells, human-specific genes, and neocortex expansion in development and human evolution
- 16:30** **Coffee break**
- 17:00** **Giorgia Quadrato – University of Southern California, USA**
Modeling human brain development and disease at single cell resolution with brain organoids
- 17:30** **Selected speaker 2**
- 17:45** **Barbara Treutlein – ETH Zürich, Switzerland**
Cerebral organoid development through the lens of single-cell genomics
- 18:15** **Selected speaker 3**
- 18:30** **Pre-dinner drinks and poster viewing in the Evelyn Suite**
- 19:45** **Dinner**

Monday 7 September

- From 07:00** **Breakfast**
- 09:00** **Meritxell Huch – Max Planck Institute of Molecular Cell Biology and Genetics, Germany**
Liver organoids to better understand human liver disease
- 09:30** **Selected speaker 4**

- 09:45** **Shuibeng Chen - Weill Cornell Medicine, USA**
Human pluripotent stem cells, diabetes and precision medicine
- 10:15** **Selected speaker 5**
- 10:30** **Coffee break**
- 11:00** **Jim Wells – Cincinnati Children’s Research Foundation, USA**
Using human PSC-derived tissues to model gastrointestinal development, disease, and diabetes
- 11:30** **Selected speaker 6**
- 11:45** **Ludovic Vallier – University of Cambridge, UK**
Using stem cells to understand the development of the human liver
- 12:15** **Maike Sander – Columbia University, USA**
Lessons from human stem cell models for pancreatic development and disease
- 12:45** **Lunch**
- 14:00** **Kathy Niakan – The Francis Crick Institute, UK**
Using genome editing and single cell approaches to study early lineage specification in human embryos
- 14:30** **Jianping Fu – University of Michigan, Ann Arbor, USA**
Synthetic human embryo-like structures: a new paradigm for human embryology
- 15:00** **Samira Musah – Duke University, USA**
Dissecting the mechanisms of human kidney development and disease by using iPS cells and organ chip technologies
- 15:30** **Coffee break and group photo**
- 16:15** **Matt Hurles – Wellcome Sanger Institute, UK**
The genetic architecture of developmental disorders
- 16:45** **Pontus Skoglund – The Francis Crick Institute, UK**
Bringing the genomic past into the genomic future
- 17:15** **Selected speaker 7**
- 17:30** **Poster session 1 and pre-dinner drinks in the Evelyn Suite**
- 19:30** **Dinner**

Tuesday 8 September

- From 07:00** **Breakfast**
- 09:00** **Wei Xie – Tsinghua University, China**
Chromatin reprogramming in early mammalian development
- 09:30** **Selected speaker 8**

- 09:45** **Margherita Yayoi Turco – University of Cambridge, UK**
Endometrial and trophoblast organoids to study early human pregnancy
- 10:15** **Selected speaker 9**
- 10:30** **Coffee break**
- 11:00** **Christine Mummery – Leiden University Medical Center, The Netherlands**
Cardiovascular disease modelling and human iPS cells: where are we now?
- 11:30** **Mingxia Gu - Stanford University, USA**
Endocardial contribution to cardiac development and disease
- 12:00** **Selected speaker 10**
- 12:15** **Lunch**
- 13:15** **Free time**
- 15:15** **Coffee break**
- 15:45** **Azim Surani – Wellcome Trust Cancer Research UK Gurdon Institute, UK**
Tracing the specification and development of the human germline
- 16:15** **Selected speaker 11**
- 16:30** **Discussion session**
- 18:00** **Poster session 2 and pre-dinner drinks in the Evelyn Suite**
- 20:00** **Dinner**

Wednesday 9 September

- From 07:00** **Breakfast**
- 09:00** **Hanna Mikkola – University of California, Los Angeles, USA**
Mapping human hematopoietic stem cell development
- 09:30** **Selected speaker 12**
- 09:45** **Karl Koehler – Boston Children's Hospital, USA**
Sensory organoids for modeling development and disease
- 10:15** **Coffee break**
- 10:45** **Frank Jacobs – University of Amsterdam, The Netherlands**
Human-specific NOTCH2NL genes and their role in human brain evolution
- 11:15** **To be announced**
- 11:45** **James Briscoe – The Francis Crick Institute, UK**
About time: the species specific pace of development
- 12:15** **Closing remarks**
- 12:30** **Lunch and depart**