

# 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**      **To be announced**
- 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 – MRC Cambridge Stem Cell 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**