PROGRAMME

All presentations will take place in the Auditorium, Mary Allen Building, Homerton College. During the breaks, refreshments will be served in the Boulind Suite, Mary Allen Building, where you can also visit the sponsors' stands. Lunch on Tuesday 20 July is in the Dining Hall.

If you would like to use the Homerton College internet connection, please use the UniOfCam-Guest network, which will enable you to connect your device using your social media account (Amazon, Facebook, GitHub, LinkedIn or Twitter).

DAY 1 (Monday 18 July)



13:30–15:00 SESSION 1: Integrated stem cell models of embryos (blastoids)

Chair: Dr Marta Shahbazi (University of Cambridge)

Blastoids: modeling mammalian blastocyst development and implantation

Dr Nicolas Rivron Principal investigator, IMBA, Austrian Academy of Sciences

Realising the potential of human naïve pluripotent stem cells Dr Ge Guo Principal investigator, Living Systems Institute, University of Exeter

Design principles of multicellular organisation and patterning in embryonic development

Dr Berna Sozen Assistant Professor, Yale University School of Medicine

15:00–15:30 BREAK

15:30–17:00 SESSION 2: Integrated stem cell models of embryos (blastoids)

Chair: Dr Thorsten Boroviak (University of Cambridge)

Blastoid, an integrated stem cell model of early embryos

Dr Jun Wu Assistant Professor, University of Texas Southwestern Medical Center

Modelling human blastocysts by reprogramming fibroblasts into iBlastoids

Professor Jose Maria Polo Director, Adelaide Centre for Epigenetics, University of Adelaide

Human embryo models to understand how cell lineages are established

Dr Peter Rugg-Gunn Group Leader, Epigenetics Programme, Babraham Institute





17:00–18:30 SESSION 3: Non-integrated stem cell models of embryos

Chair: Dr Peter Rugg-Gunn (Babraham Institute)

Synthetic embryology for constructing human embryo and organ models

Dr Jianping Fu Professor of Mechanical Engineering, Biomedical Engineering, and Cell & Developmental Biology, University of Michigan, Ann Arbor

3D embryo-like gastruloid system to model development and for drug screening

Dr Naomi Moris Group Leader, The Francis Crick Institute

In vitro gametogenesis - bottlenecks and solutions

Dr Geraldine Jowett Schmidt Science Fellow, Gurdon Institute, University of Cambridge

18:45 RECEPTION AND DINNER (INVITED GUESTS ONLY)

DAY 2 (TUESDAY 19 JULY)

09:00–09:30 WELCOME TEA AND COFFEE

09:30–11:15 SESSION 4: Other reproductive organoids

Chair: Dr Mathew van de Pette (University of Cambridge)

Endometrial organoids as a tool for studying endometrial function and pregnancy outcomes

Dr Tereza Cindrova-Davies Lecturer, Queen Mary University of London

Profiling reproductive tissues in vivo and in vitro

Dr Roser Vento-Tormo Group Leader, Wellcome Sanger Institute

Reproductive organoids to study decidual interactions with trophoblast

Professor Ashley Moffett Emeritus Professor of Reproductive Immunology, University of Cambridge

How to build a primate: modelling embryogenesis in a dish

Dr Thorsten Boroviak Principal Investigator, Laboratory for Primate Embryogenesis, University of Cambridge

11:15–11:45 BREAK





11:45–13:15 SESSION 5: Translation

Chair: Dr Roser Vento-Tormo (Wellcome Sanger Institute)

Reproductive organoids for drug discovery

Dr Sydney Lane Scientist, Reproductive Medicine and Maternal Health, Ferring Pharmaceuticals

In vitro germline toxicology?

Dr Mathew van de Pette MRC investigator, MRC Toxicology Unit, University of Cambridge

Assuring consumer and worker safety without animal testing: developmental and reproductive effects

Dr Carl Westmoreland Director, Science & Technology, Safety and Environmental Assurance Centre, Unilever

The importance of minimizing variability within organoids and how to ease the transition from R&D to the clinic

Lauren Styles Commercial Growth Specialist for Cell and Gene Therapy, Bio-Techne

13:15–14:30 LUNCH

14:30–16:15 SESSION 6: Legal and regulatory landscape

Chair: Professor Kathy Niakan (University of Cambridge)

Panel discussion with:

Professor Robin Lovell-Badge Principal Group Leader, Laboratory of Stem Cell Biology and Developmental Genetics, The Francis Crick Institute

Peter Thompson Chief Executive, Human Fertilisation and Embryology Authority

Professor Rosamund Scott Director, Centre of Medical Law and Ethics, King's College London

Professor Kathy Liddell Director, Centre for Law, Medicine & Life Sciences, University of Cambridge

16:15–16:30 CLOSING REMARKS

16:30 END OF PROGRAMME