Day 1: Monday 12th July

13.50 Welcome and introduction by Wolf Reik, Babraham Institute

Session 1: Endometrium and decidua
Chair: Kathy Niakan, CTR

14.00-14.30 Hilary Critchley, University of Edinburgh
The normal cycling endometrium

14.30-15.00 Graham Burton, CTR
Trophoblast-endometrial interactions

15.00-15.30 Roser Vento, Wellcome Sanger Institute
Single cell technology at the placental-uterine interface

15.30-16.00 Coffee break

Session 2: Immunology and evolution
Chair: Francesco Colucci, Department of Obstetrics and Gynaecology

16.00-16.30 Ashley Moffett, Department of Pathology
The immune system and the first few weeks

16.30-17.00 Anthony Carter, University of Southern Denmark
Anatomy of placentation: why are humans so different

17.00-17.30 Peter Parham, Stanford University
Evolution of reproduction and the immune system
Day 2: Tuesday 13th July

Session 3: Early placental development
Chair: Steve Charnock-Jones, Department of Obstetrics and Gynaecology

09.00-9.30 Margherita Turco, Department of Pathology
Models to study early placental development

9.30-10.00 Janet Rossant, University of Toronto
Making the trophectoderm lineage- key events leading up to implantation

10.30-11.00 Myriam Hemberger, University of Calgary
Early placental development in mice and humans

11.00-11.30 Coffee break

Session 4: Pregnancy outcomes and beyond
Chair: Theresa Powell, University of Colorado

11.30-12.00 Kent Thornburg, The Moore Institute, Oregon Health Sciences University
The placenta is the culprit

12.00-12.30 Gordon Smith, Department of Obstetrics and Gynaecology
Identifying novel biomarkers for human placental dysfunction

12.30-13.00 Eric Jauniaux, UCL
Oxygen modulates placental development like sound modulates fetal brain development

13.00-14.00 Lunch break

Session 5: Environment and placenta
Chair: Tereza Cindrova-Davies, CTR

14.00-14.30 Billy Yung, CTR
Placental unfolded protein response and pregnancy complications

14.30-15.00 Erica Watson, CTR
Trans-generational effect

15.00-15.30 Mike Nelson, Washington University School of Medicine, St. Louis
Trophoblast Injury and Repair, or Disrepair, in Human Placental Villi

15.30-16.00 Coffee break
Session 6: New approaches to placental biology
Chair: Miguel Constancia, Department of Obstetrics and Gynaecology

16.00-16.30 Diana Bianchi, National Institute of Child Health and Human Development
Circulating nucleic acids as key markers of feto-maternal-placental health

16.30-17.00 Romina Plitman, University of Tel Aviv
Imaging and Modelling the Human Placenta

17.00-17.30 TBC

17.30 Closing remarks
Since its inception in 2007, the Centre for Trophoblast Research has been at the forefront of placental and pregnancy research. With over 30 principal investigators, Next Generation Fellows and independent research fellows, the Centre has achieved numerous milestones and scientific breakthroughs during its history. This conference celebrates the extraordinary achievements of the Centre and of retiring director Prof. Graham Burton.