CTR ANNUAL MEETING 2021

Placental-endometrial dialogue and pregnancy

12th 13th July

www.trophoblast.cam.ac.uk
Celebrating the achievements of Prof. Graham Burton, CTR Director

Photo credit: M. Turco

Day 1: Monday 12th July

13.50 Welcome and introduction by Wolf Reik, Babraham Institute

Session 1: Early placental development
Chair: Steve Charnock-Jones, Department of Obstetrics and Gynaecology

14.00-14.30 Margherita Turco, Department of Pathology
*Models to study early placental development*

14.30-15.00 Miguel Branco, Blizard Institute
*Species-specific regulation of placental gene expression by transposable elements*

15.00-15.30 Janet Rossant, University of Toronto
*Making the trophectoderm lineage: key events leading up to implantation*

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 Paul Norman, University of Colorado Denver
*Population-specific NK cell receptors and human-specific preeclampsia risk*
**Day 2: Tuesday 13th July**

### Session 3: Endometrium and decidua
**Chair:** Kathy Niakan, CTR

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Presentation Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.00-10.30</td>
<td>Hilary Critchley, University of Edinburgh</td>
<td><em>The normal cycling endometrium</em></td>
</tr>
<tr>
<td>10.30-11.00</td>
<td>Roser Vento, Wellcome Sanger Institute</td>
<td><em>Single cell technology at the placental-uterine interface</em></td>
</tr>
<tr>
<td>11.00-11.30</td>
<td></td>
<td>Coffee break</td>
</tr>
</tbody>
</table>

### Session 4: Placental development and pregnancy outcomes
**Chair:** Miguel Constancia, Department of Obstetrics and Gynaecology

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Presentation Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.30-12.00</td>
<td>Romina Plitman, Weizmann Institute of Science, Israel</td>
<td><em>Imaging and Modelling the Human Placenta</em></td>
</tr>
<tr>
<td>12.00-12.30</td>
<td>Gordon Smith, Department of Obstetrics and Gynaecology</td>
<td><em>Identifying novel biomarkers for human placental dysfunction</em></td>
</tr>
<tr>
<td>12.30-13.00</td>
<td>Eric Jauniaux, UCL</td>
<td><em>Oxygen modulates placental development like sound modulates fetal brain development</em></td>
</tr>
<tr>
<td>13.00-14.00</td>
<td></td>
<td>Lunch break</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Presentation Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.00-14.30</td>
<td>Billy Yung, CTR</td>
<td><em>Placental unfolded protein response and pregnancy complications</em></td>
</tr>
<tr>
<td>14.30-15.00</td>
<td>Erica Watson, CTR</td>
<td><em>Trans-generational effect</em></td>
</tr>
<tr>
<td>15.00-15.30</td>
<td>Mike Nelson, Washington University School of Medicine, St. Louis</td>
<td><em>Trophoblast Injury and Repair, or Disrepair, in Human Placenta</em></td>
</tr>
<tr>
<td>15.30-16.00</td>
<td></td>
<td>Coffee break</td>
</tr>
</tbody>
</table>
Session 6: Placental biology
Chair: Theresa Powell, University of Colorado

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 Myriam Hemberger, University of Calgary
*Early placental development in mice and humans*

17.00-17.30 Kent Thornburg, The Moore Institute, Oregon Health Sciences University
*The placenta is the culprit*

Session 7: Celebratory closing session
Chair: Kathy Niakan

17.30-18.00 Graham Burton, CTR
*Trophoblast-endometrial interactions*

18.00 Closing remarks by Charlie Loke
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.