

iPlacenta final meeting, 13-15 May 2022, Dundee

Friday 13 May – Verdant Works

15:00-15:20 tea, coffee, snacks

15:20-15:40 **Colin Murdoch**, UoD: Introduction

15:40-16:10 **Cathal McCarthy**, UCC: Pre-eclampsia and Poor Neurodevelopmental Outcomes: A Role for IL-6?

16:10-16:40 **Henriette Lanz**, Mimetas: High-throughput Organ-on-a-Chip Platform for Disease Modelling & Therapeutic Screening

16:40-17:10 **Colin Murdoch**, UoD: Deciphering Redox Signalling Pathways in Hypertensive Pregnancy Mouse Model

17:10-17:40 **Daniel Vaiman**, INSERM: Single-cell Versus Single-nucleus Sequencing in the Placenta: New Trajectories and New Insights into the Pathophysiology of Placental Diseases

Saturday 14 May – The Vine

Session 1

9:30-9:50 **Gwenaëlle Rabussier**, MIMETAS: Establishment of a Microphysiological Placenta Barrier on-a-chip Mimicking Healthy and Disease Characteristics

9:50-10:10 **Camilla Soragni**, MIMETAS: Development of Assays to Measure Translational Markers to Characterize Placental Vascular on-a-chip Model

10:10-10:30 **Agathe Lermant**, UoD: Investigating the Role of Redox Signalling in the Placenta Using iPSC-derived Models

10:30-11:00 break

Session 2

11:00-11:20 **Jana Hegenbarth**, MU: Machine Learning-assisted Integration of Transcriptomic Data at Single Cell Resolution Identifies Key Cardiomyocyte Maturation Genes

11:20-11:50 **Julia Scheel**, UROS: Systems Biology Approaches towards Phenotype-Specific Interactomes for Placental Function

11:50-12:10 **Lukas Markwalder**, UoD: Blood perfusion imaging with a 1x1 mm camera: design and validation of a miniaturised laser speckle imaging system

12:10-12:30 **Samprikta Manna**, UCC: Axis of Placental Ageing in Adverse Pregnancy Outcomes: Telomeres and Mitochondria

12:30-14:00 lunch

Session 3

14:00-14:20 **Gabriela Loscalzo**, HULAFE (online): Diagnosis and Prevention of Prenatal Brain Damage in Late Intrauterine Growth Restriction, by Detecting Markers of Abnormal Neuronal Development in Maternal Blood: Micro-RNA Final Results.

14:20-14:40 **Veronica Giorgione**, SGUL (online): Cardiovascular Phenotyping of Pre-eclampsia: Prognostic Value for Postpartum Maternal Cardiovascular Outcomes

14:40-15:00 **Ignacio Valenzuela**, KU Leuven: Characterisation of the FGR Rabbit Model:
Placenta, Brain, Lungs

15:00-15:30 break

Session 4

15:30-16:15 Life after the PhD – job prospects, experiences, tips

16:15-17:00 Outcome, impact, future grants

Sunday 15 May

Breakfast

Departure