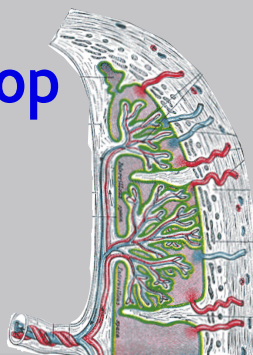


# Placental MRI Workshop

04.07.2017

St. Thomas' Hospital  
King's College London



supported by



New Initiative  
Fund

## Tentative Agenda

Contributions to the agenda are welcome, please contact us with suggested talk titles!

### 09:30-10:00 **Arrival**

Arrival of the participants, coffee and tea

### **Clinical & biological background and applications**

Placental histology/pathology and biological hypotheses

Clinically relevant placental diseases, clinical imaging requirements

### **In-vivo functional placental imaging**

Structural assessment of the placenta

Optimizing contrast for delineation of structural regions

Quantifying placenta microstructure with diffusion MRI

Oxygen-Enhanced and BOLD MRI in the detection of placental dysfunction

Placental Oxygenation and separation of fetal and maternal circulations

Perfusion MRI in the placenta

Separation of fetal and maternal circulations in the placenta using multi-modal MRI

### 12:45-13:30 **Sandwich lunch / networking**

### **Challenges**

Safety (SAR, Acoustic Noise)

Motion correction

Fully automatic segmentation using machine learning

### **Validation techniques**

Ex-vivo MRI - Correlation to Histology, Dual Perfusion

Experience with Placenta Phantoms

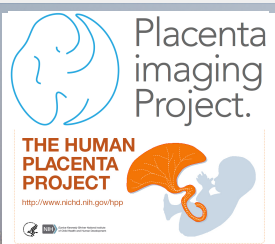
MRI-based methods in utero in mice

Correlation of MRI measurements to US/DUS techniques

We explicitly encourage the participation of PhD students/ early career researchers/ clinical fellows and offer a limited number of student travel bursaries.

**No registration fee.**

Local organizers: Alison Ho, Jana Hutter, Lisa Story, Jo Hajnal, Mary Rutherford



Contact for Information & Registration:  
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