



CTR Placental Biology Course

1st July – 6th July 2012



Course Programme

Attendees are invited to the CTR Annual Trophoblast Meeting (9th-10th July 2012) at no extra charge.

Day 1: Sunday 1 st July, 2012	
14.00 onwards	Arrival and Registration, St John's College
16.30	Welcome Reception, St John's College
17.00 onwards	Delegate Presentations,* St John's College
19.00	Dinner, St John's College
*each delegate to give a 10-minute presentation (allow 6 minutes for the presentation, and 4 minutes for questions. Please limit your presentation to 3 slides.)	

Day 2: Monday 2 nd July, 2012		
Placental Development		
08.20-08.30	Arrival at Department of Physiology, Development and Neuroscience, Physiological Laboratory	
08.30-09.00	Introduction and safety briefing	
09.00-10.00	Human placental development	Graham Burton
10.00-11.00	Mouse placental development	Erica Watson
11.00-11.30	Coffee	
11.30-13.00	Anatomy and Development practical	Graham Burton
13.00-14.00	Lunch	
14.00-15.00	Trophoblast stem cells	Myriam Hemberger
15.00-16.00	Epigenetic mechanisms	Wolf Reik
16.00-16.30	Coffee	
16.30-18.00	Anatomy and Development practical (pregnant mouse/ placenta dissections)	Erica Watson/Kathy Niakan
18.00	Dinner	
19.00 onwards	Preparation for Epigenetics Journal club (working in groups)	Facilitator: Anne Ferguson-Smith

Day 3: Tuesday 3rd July, 2012		
Cell biology and immunology of the placenta		
09.00-10.00	Comparative placentation	Peter Wooding
10.00-11.00	Immune cells and placentation	Francesco Colucci
11.00-11.30	Coffee	
11.30-12.30	Immune genes and placentation	Ashley Moffett
12.30-14.00	Lunch	
14.00-17.30	Cell isolation and sorting practical	Andrew Sharkey
18.00	Dinner	
19.00 onwards	Epigenetics Journal Club Presentations	Anne Ferguson-Smith

Day 4: Wednesday 4th July, 2012		
Placental physiology		
09.00-10.00	Placental flow and transport	Abby Fowden
10.00-11.00	Oxygen metabolism	Andrew Murray
11.00-11.30	Coffee	
11.30-12.30	Regulation of protein synthesis	Graham Burton
12.30-14.00	Lunch	
14.00-15.30	Respirometry practical	Andrew Murray
15.30-16.00	Coffee	
16.00 onwards	PREPARATION FOR THURSDAY WORKSHOP: Compare and contrast environmental stressors on physiology and function of the placenta (literature search, evaluation and analysis)	
18.00	Dinner	

Day 5: Thursday 5th July, 2012		
Grant-writing workshop and technology practical		
09.00-12.30	WORKSHOP x 3 groups, each with one stressor: Diet, glucocorticoid, oxygen AIM - Compare and contrast: impact on development, morphology, physiology, molecular mechanism, fetal outcome. Consider: Issues of controversy, challenges and future directions.	Facilitated by Abby Fowden, Graham Burton and Miguel Constanca
12.30-13.30	Lunch	
13.30-17.30	TECHNOLOGY PRACTICAL	Steve Charnock Jones and Carol Edwards
18.00-19.00	Dinner	
19.30-21.00	Clinical study design	Gordon Smith

Day 6: Friday 6th July, 2012

Animal models and approaches		
09.00-10.00	Mouse genetic models of placental function	Miguel Constanca
10.00-13.00	Stereology practical	Graham Burton
13.00-13.45	Lunch	
13.45-14.15	Travel to Barcroft	
14.30-16.30	Large animal models of materno-fetal interactions	Dino Giusani
16.30-17.00	Return to St John's College	
17.15-18.15	Guest Speaker	John Kingdom, University of Toronto
18.30 onwards	Drinks/canapés/dinner	

FREE WEEKEND**Mon 9th – Tues 10th CTR Annual Meeting**