

Course programme


Day 1: Sunday 1 st July	
14.00 onwards	Arrival at St John's College
16.30	Welcome Drink, St John's College, Fisher Building Foyer
17.00	Delegate Presentations St John's College, Fisher Building, Castlereagh Room
19.00	Dinner, St John's College, The Buttery Dining Room

Day 2: Monday 2 nd July, 2012		
Placental Development		
08.30	Arrival at Department of Physiology, Development and Neuroscience, Physiological Laboratory	
08.30-09.00	Introduction and safety briefing	Bryan Matthews Seminar Room
09.00-10.00	Human placental development	Graham Burton Bryan Matthews Seminar Room
10.00-11.00	Mouse placental development	Erica Watson Bryan Matthews Seminar Room
11.00-11.30	Break	
11.30-13.00	Human Anatomy and Development practical	Graham Burton Histology Classroom
13.00-14.00	Lunch	
14.00-15.00	Epigenetic mechanisms	Wolf Reik Bryan Matthews Seminar Room
15.00-16.00	Trophoblast stem cells	Myriam Hemberger Bryan Matthews Seminar Room
16.00-16.30	Break	
16.30-18.00	Anatomy and Development practical (pregnant mouse/ placenta dissections)	Erica Watson/Kathy Niakan Histology Classroom
18.00	Dinner: St John's College, The Buttery Dining Room	
19.00 onwards	Preparation for Epigenetics Journal club (working in 3 groups)	Facilitator: Anne Ferguson-Smith St John's College, Castlereagh Room

Day 3: Tuesday 3rd July		
Cell biology and immunology of the placenta		
09.00-10.00	Comparative placentation	Peter Wooding Bryan Matthews Seminar Room
10.00-11.00	Immune cells and placentation	Selma Boulouar Bryan Matthews Seminar Room
11.00-11.30	Break	
11.30-12.30	Immune genes and placentation	Andrew Sharkey Bryan Matthews Seminar Room
12.30-14.00	Lunch	
14.00-17.30	Cell isolation and sorting practical	Andrew Sharkey Department of Pathology
18.00	Dinner: St John's College, The Buttery Dining Room	
19.00 onwards	Epigenetics Journal Club Presentations	Anne Ferguson-Smith St John's College, Castlereagh Room

Day 4: Wednesday 4th July		
Placental physiology		
09.00-10.00	Placental transport	Abby Fowden Bryan Matthews Seminar Room
10.00-11.00	Oxygen metabolism	Andrew Murray Bryan Matthews Seminar Room
11.00-11.30	Break	
11.30-12.30	Regulation of protein synthesis	Graham Burton Bryan Matthews Seminar Room
12.30-14.00	Lunch with Next Generation Fellows	
14.00-15.30	Respirometry practical	Andrew Murray Laboratory F7a
15.30-16.00	Break	
16.00 onwards	PREPARATION FOR THURSDAY WORKSHOP: Compare and contrast environmental stressors on physiology and function of the placenta (literature search, evaluation and analysis)	Graham Burton Bryan Matthews Seminar Room PDN Part II Computer Room Level C
18.00	Dinner: St John's College, The Buttery Dining Room	

Day 5: Thursday 5th July, 2012		
Grant-writing workshop and technology practical		
09.00-10.00	Evolution, migrations, bipedalsim, immune system genes and human placentation	Ashley Moffett Bryan Matthews Seminar Room
10.00-10.30	Coffee	
10.30-13.00	GRANT-WRITING WORKSHOP x 3 groups, each to discuss 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. Each group to present an outline grant submission (15 mins max.) based around the following: <ol style="list-style-type: none"> 1. What is the question? 2. What is it important? 3. Background data 4. How will it be approach? 5. What are the potential challenges? 6. What resources are required? 	Facilitated by: Graham Burton: Bryan Matthews Seminar Room Miguel Constanica: Small Meeting Room Abby Fowden Hodgkin Huxley Seminar Room
13.00-13.45	Lunch	
13.45-17.30	TECHNOLOGY PRACTICAL	Steve Charnock Jones / Carol Edwards Bioinformatics Teaching Facility, Department of Genetics
18.00-19.00	Dinner: St John's College, The Buttery Dining Room	
19.30-21.00	Clinical study design	Gordon Smith St John's College, Castlereagh Room

Day 6: Friday 6th July, 2012		
Animal models and approaches		
09.00-10.00	Mouse genetic models of placental function	Miguel Constanica Bryan Matthews Seminar Room
10.00-13.00	Stereology practical Supported by:  <small>TURNING IMAGES INTO KNOWLEDGE</small>	Graham Burton Microscope Room, CTR
13.00-13.30	Lunch	
13.30-16.30	Rodent versus ovine animal models of materno-fetal interactions	Dino Giussani Bryan Matthews Seminar Room and Barcroft
16.30-17.00	Return to St John's College	
17.15-18.15	Guest Speaker	John Kingdom, University of Toronto St John's College, Castlereagh Room
18.30 onwards	End of Course reception, followed by dinner St John's College, Fisher Building Foyer	