

MRC Centre for Neuropsychiatric Genetics and Genomics 9th Annual

Summer School in Brain Disorders Research

Programme

Day 1: Monday 2 July

12:00	Registration and lunch	
13:00	Introduction	Prof Sir Michael Owen
13:10	Why this is the best time for neuroscience in psychiatry	Prof Jeremy Hall
13:55	Introduction to neuroimaging	Dr Xavier Caseras
14:40	Principles of high-throughput sequencing: sample preparation, equipment	Prof Nigel Williams
15:10	High-throughput sequencing tour: lab tours in small groups / coffee	Dr Lesley Bates
16:30	Copy number variations (CNVs) in neurodevelopmental disorders	Prof George Kirov
17:15	Check-in at Senghenydd Hall for those with booked accommodation	

Day 2: Tuesday 3 July

08:00	Breakfast provided in the Hadyn Ellis Building	
09:00	Neuroimaging the impact of drugs of abuse	Prof Anne Lingford-Hughes
10:00	Understanding the neurobiology of addiction to inform treatment	Prof Anne Lingford-Hughes
10:45	Coffee	
11:15	Neurodegeneration: translating genetics into therapies	Prof Lesley Jones
12:00	Developmental disorders, child and adolescent psychiatry	Dr Stephan Collishaw
12:45	Lunch	
13:45	High-throughput sequencing tour: analysis and interpretation of sequencing data	Dr Elliott Rees
14:45	The genetics of movement disorders	Dr Kathryn Peall
15:00	Coffee	
15:30	Big data and GWAS	Dr James Walters

Day 3: Wednesday 4 July

08:00	Breakfast provided in the Hadyn Ellis Building	
09:00	Putting psychiatric genetics to work - using neuroscience to convert statistics into biology	Prof Lawrence Wilkinson
09:45	Towards precision medicine in epilepsy	Dr Rhys Thomas
10:30	Making neurons from stem cell: lab tours in small groups / coffee	Prof Adrian Harwood
12:00	Lunch	
13:00	Epigenetics and the brain	Dr Anthony Isles
13:45	Bipolar disorder, postpartum psychosis and the Bipolar Disorder Research Network (BDRN)	Prof Ian Jones
<i>Students split in two groups: medics and non-medics, and swap workshops</i>		
14:30	Workshop: Research careers in medicine Dr Judith Harrison and Dr Kristina Harrison (MRC London)	/ Neuroimaging tour for non-medical scientists Dr Tom Lancaster
15:45	Workshop: Careers for non-medical scientists Dr Will Davies and Dr Kristina Harrison (MRC London)	/ Neuroimaging tour for medics Dr Tom Lancaster

Day 4: Thursday 5 July

07:45 **Check out of accommodation** - check bags into Hadyn Ellis reception

08:00 Breakfast provided in the Hadyn Ellis Building

09:00 Workshop: Social and ethical aspects of genetic research **Dr Andrew Cuthbert**

10:00 Using stem cells to restore cognitive function in epilepsy **Prof Liam Gray**

10:45 Coffee

11:00 Major breakthroughs in schizophrenia genetics provide insights into pathogenesis **Prof Mick O'Donovan**

11:40 The future of mental health research in Cardiff **Prof Sir Michael Owen**

12:30 Lunch and farewell

For more information and to apply visit:

www.cardiff.ac.uk/mrc-centre-neuropsychiatric-genetics-genomics/study/summer-school

