

Wednesday, November 11

MHRI Cade Science Day

Molecular Psychiatry (Chair: Colin L. Masters, MHRI/CNS)

- 8:55am *Welcome*
Colin L. Masters (MHRI/CNS)
- 9:00am *Exploring antipsychotic drug and epidermal growth factor system interactions*
Suresh Sundram (MHRI)
- 9:30am *Animal models of schizophrenia: genes, environment and their interaction*
Maarten van den Buuse (MHRI)
- 10:00am *The role of epigenetics in the determination of genotype*
Emma Whitelaw (QIMR)
- 10:30am **Morning tea – served in the foyer**
- 11:00am *Muscarinic receptors and schizophrenia*
Elizabeth Scarr (MHRI)
- 11:15am *Understanding the pathophysiology of depression*
Andrew Gibbons (MHRI)
- 11:30am **Keynote Address: Developmental trajectories in cortical circuits: identifying sensitive periods for vulnerability to schizophrenia**
David A. Lewis (University of Pittsburgh)
- 12:30pm **Lunch – served in the foyer**

InterFaculty Cognitive Science Interest Group

Cognitive Science (Chairs: Philip Smith and Edward Hare, University of Melbourne)

- 1:30pm **Keynote Address: Decoding conscious and nonconscious numerical operations in the human brain**
Stanislas Dehaene (INSERM)
- 2:30pm *Neurophysiology of parietal cortical's role in attention and its behavioural implications*
Tichur Vidyasagar (Unimelb)
- 3:00pm *Hough doo peapull lern gnaw wirds? The acquisition of orthographic representations in skilled readers*
Meredith Mckague (Unimelb)
- 3:30pm **Afternoon tea – served in the foyer**
- 4:00pm *Using mental representations of space in numerical tasks when words are unavailable: evidence from indigenous Australia*
Robert Reeve (Unimelb)
- 4:30pm *The pupil as a window into the role of noradrenaline in decision making*
Olivia Carter (Unimelb)

NeuroSciences Victoria Seminar

(Host: Simon Murray, CNS)

- 5:00pm **Pre-seminar drinks – served in the foyer**
- 5:15pm *Plasticity beyond the synapse: non-vesicular communication and myelination in learning and development*
Doug Fields (NIH)
- 6:15pm **Evening drinks continue in the foyer**

Thursday, November 12

FNI Day

Neural Development and Disease (Chair: Seong-Seng Tan, FNI)

- 8:55am *Welcome*
Geoff Donnan (FNI)
- 9:00am **Keynote Address: Patterning genes regulating regional fate**
Shubha Tole (TIFR, India)
- 9:55am *Transcription factor control of neuron migration and maturation during brain development*
Julian Heng (FNI)
- 10:15am *Ndfip1 over- and underexpression: consequences for cortical development*
Vicki Hammond (FNI)
- 10:40am **Morning tea – served in the foyer**
- 11:10am *Synaptic development and function*
Johanna Montgomery (University of Auckland)
- 12:00pm *Structure and function: the GABAA receptor and early onset epilepsies*
Brett Cromer (FNI)
- 12:25pm *Mouse models of neurodevelopmental disorders*
Tony Hannan (FNI)
- 12:50pm **Lunch – served in the foyer**

(Chair: Steve Petrou, FNI/CNS)

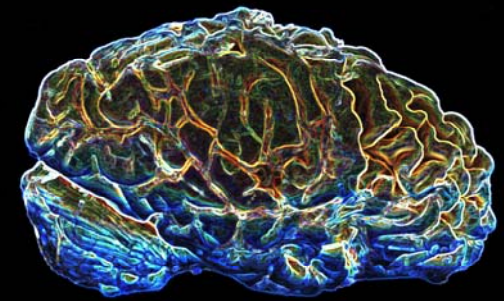
- 1:50pm *Channelopathies*
Sam Berkovic (Austin Health)
- 2:35pm *Dravet's Syndrome*
Chris Reid (FNI)
- 3:00pm *Animal models of disease – stroke*
David Howells (FNI)
- 3:25pm **Afternoon tea – served in the foyer**
- 3:50pm *Does cerebral perfusion dictate cortical utilization?*
Amy Brodtmann (FNI)
- 4:15pm *Stroke*
Geoff Donnan (FNI)
- 5:00pm **Evening drinks – served in the foyer**

InterFaculty Cognitive Science Interest Group and MHRI

Special Public Lecture

- 6:00pm *Reading in the brain*
Stanislas Dehaene (INSERM)

This event will be held in the Carrillo-Gantner Theatre, Sidney Myer Asia Centre, Cnr Swanston Street and Monash Street, The University of Melbourne



Friday, November 13

CNS Day

Computational Neuroscience (Chair: Trevor Kilpatrick, CNS)

- 8:55am *Welcome*
Trevor Kilpatrick (CNS)
- 9:00am *Dab2 - A novel mediator of microglial activation*
Vilija Jokubaitis (FNI)
- 9:30am *BDNF regulates CNS myelination*
Simon Murray (CNS)
- 10:00am *Bone morphogenic protein signaling alters the precursor cell response to demyelination*
Holly Gate (CNS)
- 10:30am **Morning tea – served in the foyer**

(Chair: Simon Murray, CNS)

- 11:00am **Keynote Address: Action potentials in development and synaptic plasticity**
Doug Fields (NIH)
- 12:00pm **Neurosciences and Behavioural Sciences Research Domain Launch**
Trevor Kilpatrick
- 12:15pm **Lunch – served in the foyer**

Neuroimaging (Chair: Gary Egan, CNS/FNI)

- 1:05pm **Keynote Address: Large scale modeling of cortical associative memory function**
Anders Lansner (SBI)
- 1:55pm *Computational approaches for predicting molecular mechanisms of seizure susceptibility*
Steve Petrou (CNS/FNI)
- 2:20pm *High level modeling of information processing in large-scale networks*
Anthony Burkitt (Unimelb)
- 2:45pm **Afternoon tea – served in the foyer**
- 3:15pm *Neuronal signal estimation using functional MR imaging*
Leigh Johnston (Unimelb)
- 3:45pm *Quantitative perfusion MR cerebral blood flow estimation*
Fernando Calamantes (FNI)
- 4:15pm *Approaches to performing fibre tracking in the brain using diffusion weighted MRI*
Alan Connelly (FNI)
- 4:45pm **Concluding comments**
Colin Masters (MHRI), Geoff Donnan (FNI) and Trevor Kilpatrick (CNS)

- 5:00pm **Symposium closing drinks – served in the foyer**