



Brain Sciences
UNSW

Brain Sciences UNSW “what’s hot” Symposium, 6 April 2006

Location: Galleries rooms, The Scientia, UNSW, Kensington.
Reference G19 on attached map.

Catering: Gastronomy Caterers. Premium Conference menu.

Programme

0830 – 0900 h. Registration. Arrival tea/coffee.

0900 – 0930 h. Introduction by Convenor of Brain Sciences UNSW, Professor Philip Mitchell
Opening Address by the Vice-Chancellor, Professor Mark Wainwright.

Chairperson: Professor Phil Waite

0930 – 1030 h. **Beyond the Brain: Spinal Cord and Periphery**

Assoc.Prof. M. Kiernan. Peripheral nerve dysfunction in spinal cord injured patients.

Dr V. Macefield. Sympathetic dysregulation in human spinal cord injury.

Dr P. Carrive. Skin blood flow and psychological stress.

Dr J. Butler. Enhancing cough in spinal cord injury.

1030 – 1100 h. **Ageing and Neurodegeneration**

Prof. P. Sachdev. White matter hyperintensities on brain MRI in old age: where, why, and with what effect.

Dr G. Guillemin. Involvement of the tryptophan metabolism in Alzheimer's disease.

1100 – 1130 h. Morning tea.

Chairperson: Dr Michael Breakspear

1130 – 1230 h. **Computational and Functional Neurosciences**

Dr A. Coster. Noise enhances synchrony in neuronal ensembles.

Assoc.Prof. P. Neilson. Human movement control systems.

Mr L. Hallum. Signal processing for a microelectronic retinal prosthesis.

Dr R. Fitzpatrick. Developing virtual movement by electrical vestibular stimulation.

1230 – 1300 h. **The Brain, Appetite and Obesity**

Prof. M. Morris Brain plasticity in obesity – lessons from rodent models.

Dr A. Sainsbury-Salis. Conditional deletion of hypothalamic Y1 receptors in adult mice increases food grinding with no effects on ingestion or energy homeostasis.

1300 – 1400 h. Lunch

1400 – 1500 h. **Poster Presentations: Postgraduate and Postdoctoral Sections**

Chairperson: Professor Gordon Parker

1500 – 1615 h. **Behaviour and Emotions.**

Prof. M. Dadds. Attention processes in the development of psychopathy.

Dr G. Malhi. Getting into the mood: Novel approaches and recent findings.

Assoc.Prof. M. Teesson. Naltrexone versus Acamprosate in the treatment of alcohol dependence: a multi centre, randomized, double-blind, placebo-controlled trial.

Prof. F. Westbrook. Predicting danger: theoretical considerations.

Dr G. McNally. Predicting danger: neurobiological mechanisms.

1615 – 1630 h. Poster Competition Winners to be announced by Associate Dean (Research), Faculty of Science, Associate Professor Roger Read and Associate Dean (Research), Faculty of Medicine, Professor Terry Campbell.

Closing Address by Convenor of Brain Sciences UNSW, Professor Philip Mitchell.

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POSTER PRESENTATIONS

Postgraduate Section

1. Michael Lee, J. Barton, M.Hsu, S. Gandevia and T. Carroll. *Effects of resistance training on the human wrist on EMG and force responses to transcranial magnetic stimulation.*
2. Robin T. Bye and P.D. Neilson. *Adaptive model theory: A simulation study of speed-accuracy tradeoff in aimed movements.*
3. Kevin Aquino, E.T. Bullmore, P. Das, L.M. Williams and M. Breakspear. *The multiscale properties of evoked cortical activity.*
4. Teri M. Furlong and P. Carrive. *The perifornical region of the hypothalamus is involved in the cardiovascular response of conditioned fear but not that of restraint.*
5. Annie Butler, R.Fitzpatrick and S. Lord. *Risk taking behaviour and falls in older people.*
6. Chai K. Lim, G.A. Smythe, B. Garner, R. Grant, R.Stocker, B.J. Bruce and G.J. Guillemain. *Characterization of the kynurenine pathway in human oligodendrocyte.*
7. Mika Rubinov, S. Knock, S. Michelayonis, A.W.F. Harris, L.M. Williams, C.J. Stam and M. Breakspear. *Local and global properties of nonlinear brain dynamics in schizophrenia.*
8. Angela S. Laird, P. Carrive and P.M.E. Waite. *The effect of treadmill training on cardiovascular dysfunction in spinal cord injured rats.*
9. Fatima A. Nasrallah, J.L. Griffin, G.E. Ball, V.J. Balcar and C. Rae. *Modulation of metabolism by GABAB receptors.*
10. Asim Ghous and P.D. Neilson. *Theories for internal models formed by central nervous system.*
11. Kaka Ting, B.J. Brew and G.J. Guillemain. *Effect of quinolinic acid on gene expression in human astrocytes.*
12. Xiaohua Chen, W. Wen, K.J. Anstey and P.S. Sachdev. *Effects of cerebrovascular risk factors on gray matter volume in adults aged 60 – 64 years. A voxel-based morphometric study.*

13. Rebecca St George and R. Fitzpatrick. *Vestibular and proprioceptive solutions to Einstein's equivalence problem.*
14. Im Quah-Smith, W. Wen, X.H. Chen, K.I. Hughes and P. Sachdev. *The fMRI investigation of central nervous system effects of laser acupuncture on depression acupoints.*
15. Hui Chen and M.J. Morris. *Brain neuropeptide Y (NPY) content is reduced by chronic, but not short term, high fat cafeteria diet in mice.*

Postdoctoral Section

16. Sarah McKay and S. Oleskevich. *The role of spontaneous and sound-driven activity at a giant auditory synapse.*
17. Marianne Weber, G. McNally and R. Richardson. *A role for endogenous opioids in infantile amnesia.*
18. Gila Moalem-Taylor, H. Albutt, P. Grafe and D. Tracey. *Role of neuroinflammation in pathological pain states.*
19. Stuart Knock, K. Aquino, P.A. Robinson, J.R. Terry and M. Breakspear. *Global brain dynamics in absence seizures.*
20. Carol Dobson-Stone, J. Gatt, S. Kuan, E. Todd, K. Pierce, E. Gordon, L. Williams and P. Schofield. *Investigation of brain function gene variants using a standardized, integrated neurological database.*
21. David K. Chelvanayagam, R.M. Vickery, M.T. Kirkcaldie, M.T. Coroneo and J.W. Morley. *Spatial activation profile recorded by a multielectrode array on cat visual cortex.*
22. Michael Green, R. Sinkus and L. Bilston. *Magnetic resonance elastography: brain tissue properties.*
23. Adam J. Guastella, M.R. Dadds, P.E. Lovibond, P. Mitchell and R. Richardson. *The application of D-Cycloserine to facilitate fear extinction in humans.*
24. Kharen Doyle, A. Kazda, Y. Hort, S. McKay and S. Oleskevich. *Differentiation of adult olfactory stem cells into auditory hair cells.*
25. Michael Valenzuela, K. Sidhu, P. Sachdev, H. Zhao, B. Tuch, R. Taylor and G. Hunt. *Neural stem cells and Alzheimer's disease.*
26. W. Qu, A.J. Moorhouse, M. Chandra, K.D. Pierce, T.M. Lewis and P.H. Barry. *The charge of the P-loop glutamate controls cation-anion selectivity in CNG channels.*