

Thurs 28 th July		Chair
8.00-8:50	Registration	
8.50 – 9.00	Welcome: Paul Fitzgerald	
9.00-9.30	Plenary Nicholas Opie, University of Melbourne <i>Minimally Invasive Neural Interface</i>	Paul Fitzgerald
9.30-10.00	Plenary Rob Shepherd, Bionics Institute and University of Melbourne <i>Bionic ears, neurobionics and bioelectronics</i>	Paul Fitzgerald
10.00-10.30	Top Ranked Presentations Robin Cash, Monash University. <i>Influence of BDNF polymorphism on neural circuitry and relationship to plasticity in human motor cortex</i> Jennifer Rodger, University of Western Australia <i>Repetitive transcranial magnetic stimulation in a mouse model of depression</i>	Kate Hoy
10:30 – 11.00	Morning Tea	
11.00-12.30	Free Presentations Session 1 (15 min presentations) Aron Hill, Monash University <i>Effects of Prefrontal Bipolar and High-Definition Transcranial Direct Current Stimulation on Cortical Excitability, Oscillatory EEG Activity and Working Memory in Healthy Adults</i> George Opie, University of Adelaide <i>Modulating plasticity induction with priming theta burst stimulation in young and old adults</i> Oyetunde Gbadeyan, University of Queensland <i>Impact of high-definition tDCS set-up on cognitive control</i> Rohan Puri, University of Tasmania <i>Timing effects of M1 anodal transcranial direct stimulation on explicit sequence learning in older adults: a sham-controlled, double-blinded study</i> Melissa Kirkovski, Deakin University <i>A TMS-EEG investigation of sex differences in adults with high-functioning autism spectrum disorder</i> Mitchell Goldsworthy, University of Adelaide <i>Reduced neuroplasticity in the ageing dorsolateral prefrontal cortex: a possible early marker of memory decline</i>	Paul Sowman

	Dr Nigel Rogasch, Monash University <i>Combining transcranial magnetic stimulation and electroencephalography: pitfalls, progress and promise.</i>											
13.00-14.00	Lunch and posters											
14.00-15.00	<p>Symposium: Understanding and treating persistent pain using non invasive brain stimulation techniques</p> <p>Paul Hodges, University of Queensland <i>Using non-invasive brain stimulation to understand sensorimotor plasticity in pain</i></p> <p>Siobhan Schabrun, Western Sydney University <i>Using non-invasive brain stimulation to treat persistent musculoskeletal pain</i></p> <p>Bernadette Fitzgibbon, Monash University <i>Factors affecting non-invasive brain stimulation treatment for persistent pain</i></p>	Julia Pitcher										
15.00 - 15.30	<p>Data Blitz Session 1 (5 min presentations)</p> <p>Karyn Richardson, Monash University <i>Assessing cortical reactivity in the DLPFC: a paired pulse TMS/EEG study</i></p> <p>Thusharika Dissanayaka, Monash University <i>Blinding integrity and placebo effects of sham transcranial electrical stimulation on corticospinal excitability: A systematic review and meta-analysis</i></p> <p>Stevan Nikolin, University of NSW <i>Effects on verbal learning and memory using high-definition transcranial direct current stimulation (HD-tDCS)</i></p> <p>Natalia Albein-Urios, Deakin University <i>Exploring the role of dorsomedial and ventrolateral prefrontal regions in cognitive flexibility using high-definition transcranial direct current stimulation (HD-tDCS)</i></p> <p>Rebecca Segrave, Monash University <i>The influence of endogenous oestrogen on anodal tDCS and rTMS delivered to the dorsolateral prefrontal cortex.</i></p>	Julia Pitcher										
15.30 – 16.00	Afternoon tea											
16.00 – 17.00	Debate: rTMS is better than tDCS in treating neuropsychiatric disorders	Paul Fitzgerald										
	<table border="0"> <tr> <td style="text-align: center;">Affirmative (rTMS) Team</td> <td style="text-align: center;">Negative (tDCS) Team</td> </tr> <tr> <td>Rocco Cavaleri, Western Sydney University</td> <td>Bernadette Fitzgibbon, Monash Uni</td> </tr> <tr> <td>Mitchell Goldsworthy, Uni of Adelaide</td> <td>Alana McCambridge, UTS</td> </tr> <tr> <td>Manreena Kaur, Monash University</td> <td>Stevan Nikolin , UNSW</td> </tr> <tr> <td>Alex Tang, University of WA</td> <td>Jordan Wehrman.Macquarie University,</td> </tr> </table>	Affirmative (rTMS) Team	Negative (tDCS) Team	Rocco Cavaleri, Western Sydney University	Bernadette Fitzgibbon, Monash Uni	Mitchell Goldsworthy, Uni of Adelaide	Alana McCambridge, UTS	Manreena Kaur, Monash University	Stevan Nikolin , UNSW	Alex Tang, University of WA	Jordan Wehrman.Macquarie University,	
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17.00- 18.00	Discussion: Australasian Brain Stimulation Association											
18.30 -	Dinner											

Friday 29 th July		Chair
9.00-10.00	<p align="center">Invited Symposium: Electrodooping? Stimulating debate about cognitive enhancement</p> <p>Kate Hoy, Monash University <i>The State of the Science in 'Electrodooping': hype vs data</i></p> <p>Cynthia Forlini, The University Of Sydney <i>The ethical and social implications of 'electrodooping'</i></p> <p>Adrian Carter, Monash University <i>Researchers' perspectives on the non-therapeutic use of transcranial direct current stimulation: An international survey</i></p> <p>Anne-Maree Farrell, La Trobe University <i>Regulating the use of non-therapeutic uses of non-invasive brain stimulation devices</i></p>	Peter Enticott
10.00-10.30	<p>Techniques: TMS - fMRI</p> <p>Luca Cocchi, QIMR Berghofer Medical Research Institute. <i>Combining TMS, fMRI and computational modelling</i></p>	Peter Enticott
10.30-11.00	Morning Tea	
11.00 – 12.30	<p align="center">Invited Symposium: TMS biomarkers in neurological disease</p> <p>Dr Marcus Meinzer, University of Queensland <i>Stimulating language recovery after stroke</i></p> <p>Parvathi Menon, Westmead Hospital and University of Sydney <i>Sensitivity and specificity of threshold tracking TMS in the diagnosis of ALS</i></p> <p>Matthew Kiernan, Royal Prince Alfred Hospital & University of Sydney <i>Pathophysiological insights into ALS using transcranial magnetic stimulation</i></p> <p>William Huynh, Prince of Wales Hospital; University of Sydney; University of NSW <i>Neurophysiology of Cortical Plasticity in Stroke</i></p> <p>Con Yiannikas, University of Sydney and Royal North Shore Hospital <i>Transcranial magnetic stimulation techniques in the diagnosis and management of Multiple Sclerosis</i></p> <p>Winston Byblow, The University of Auckland <i>Using biomarkers to predict recovery potential of upper limb function after stroke</i></p>	Steve Vucic and Michael Ridding
12.30 – 13.00	<p>Data Blitz Session 2 (5 min presentations)</p> <p>Andrew Martin, University of Queensland. <i>Impact of high-definition transcranial direct current stimulation over the dorsomedial prefrontal cortex on social cognition</i></p> <p>Hakuei Fujiyama, Murdoch University <i>Application of cathodal tDCS to primary motor cortex enhances the effect of anodal tDCS on skill acquisition in older adults</i></p> <p>Mana Biabanimoghadam, Monash University <i>The effects of tDCS on motor learning: characteristics of the study designs and the difficulties for interpreting published findings</i></p> <p>Anne-Maree Vallence, Murdoch University <i>Long interval intracortical inhibition is asymmetrical in young but not older adults.</i></p> <p>Melanie Emonson, Monash University <i>Brain Stimulation, Aging and Cognition: Neural plasticity and cognitive enhancement in the young, old and MCI brain</i></p>	Siobhan Schabrun

Friday 29 th July		Chair
13.00-14.00	Lunch and posters	
14.00-14.30	<p>Top Ranked Student Presentations Sung Wook, Monash University. <i>Intensity-dependent effect of intermittent theta burst stimulation in prefrontal cortex: A TMS-EEG study</i></p> <p>Alana McCambridge, University of Technology Sydney <i>Revisiting the interhemispheric imbalance model of chronic stroke: Can contralesional anodal tDCS be used to improve upper limb function?</i></p>	Kate Hoy
14.30 – 15.30	<p>Free Presentations Session 2 (15 min presentations) John Cirillo, University of Auckland. <i>Threshold tracking to assess primary motor cortex intracortical inhibition</i></p> <p>Brenton Hordacre, University of Adelaide <i>Variability of motor evoked potentials is associated with neuroplastic response following continuous theta burst stimulation</i></p> <p>Alex Tang, University of Western Australia <i>Intermittent Theta Burst Stimulation Induces Neural Plasticity at The Single Cell Level</i></p> <p>Peter Enticott, Deakin University <i>An expanded, open-label trial of deep rTMS in autism spectrum disorder: Clinical, neurocognitive, and neurobiological effects</i></p>	Shapour Jaberzadeh
15.30-16.00	Afternoon Tea	
16.00 – 17.00	<p>Symposium: Physical activity, cardiovascular exercise, and brain plasticity</p> <p>Ashleigh Smith, University of South Australia <i>Physical activity modifies the motor-cortical input and output characteristics of the lower extremities in young and old adults</i></p> <p>Ronan Mooney, University of Auckland <i>The effect of acute aerobic exercise on primary motor cortex function</i></p> <p>James Coxon, Monash University <i>High-intensity interval exercise promotes motor cortex disinhibition and early motor skill consolidation</i></p> <p>Michelle McDonnell, University of South Australia <i>The effect of aerobic exercise on neuroplasticity within the motor cortex following stroke</i></p> <p>Joshua Hendrikse, Monash University <i>Interaction between physical fitness and brain network plasticity induced by rTMS</i></p>	Winston Byblow
17.00- 15.30	Close	Paul Fitzgerald