

# 5th Australasian Cognitive **Neuroscience Society Conference**

26 - 29 November 2015 | Auckland, New Zealand

## **CONFERENCE HANDBOOK**



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COMPUMEDICS COMPUMEDICS







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### **POSTER SESSION**

FML003: Functional organization of the parahippocampal cortex: Dissociable roles for context representations and the perception of visual scenes

<u>Dr Oliver Baumann</u><sup>1</sup>, Prof Jason B

Mattingley<sup>1</sup>

'The University of Queensland, Australia

FML004: Lateralised processing of emotional images: the existence of a right hemisphere memory bias

Ms Ella Moeck¹, Dr Melanie Takarangi¹, Dr Nicole Thomas¹ ¹Flinders University. Australia

FML006: Surprise not novelty drives the hypercorrection effect.

<u>Dr David Cottrell</u><sup>1</sup>, Ms Mikaela Berzinski<sup>1</sup>, Dr Jason Lodge<sup>2</sup>

'James Cook University, Australia, <sup>2</sup>University of Melbourne, Australia

FML007: Semantic congruency matters for encoding recognition memory, but maybe not for retrieval: an effect consistent across age.

Ms Azlina Amir Kassim<sup>1</sup>, Dr Jessica Price<sup>1</sup> University of Nottingham Malaysia Campus, Malaysia

FML008: The genetics of human memory: Influence of the BDNF Val66Met polymorphism and the COMT Val158Met polymorphism on visual LTP Miss Meg Spriggs<sup>1,2,3</sup>, Prof Jeff Hamm<sup>1,3</sup>,

Prof Ian Kirk<sup>1,2,3</sup>
<sup>1</sup>School of Psychology, University of Auckland, New Zealand, <sup>3</sup>Brain Research New Zealand, New Zealand, <sup>6</sup>Centre for Brain Research, University of Auckland, New Zealand

FML009: The functional role of human right hippocampal theta rhythm in encoding environment layout during spatial navigation

Miss Yi Pu<sup>1,2</sup>, Dr Brian Cornwell<sup>3</sup>, A/Prof Blake Johnson<sup>1,2</sup>

ARC Centre of Excellence in Cognition and its Disorders, Macquarie University, Australia, "Department of Cognitive Sciènce, Macquarie University, Australia, "Brain and Psychological Sciences Research Centre, Swinburne University of Technology, Australia

FML010: An investigation of inhibitory modulation of human visual long-term Potentiation

Ms Rebecca Grass<sup>1</sup>, Ms Rachael Sumner<sup>1</sup>, Mr Jed Wilkins<sup>1</sup>, Dr Frederick Sundram<sup>1</sup>, Dr Suresh Muthukumaraswamy<sup>1</sup>

\*\*Idniversity of Auckland, New Zealand\*\*

FML011: Improved metacognitive accuracy with the perceptual learning of low- but not high-level face properties Mr Benjamin Chen<sup>1</sup>, A/Prof Naotsugu Tsuchiya<sup>2</sup>, Dr Matthew Mundy<sup>3</sup>

<sup>1</sup>Monash University, Australia, <sup>2</sup>Monash University, Australia, <sup>3</sup>Monash University, Australia

#### Methods Development (FME)

FME001: BL: Neural systems modelling using an interactive visual framework Mr Paul Robertson<sup>1</sup>, Dr David Bullivant<sup>1</sup>, A/ Prof Mark Sagar<sup>1</sup>

<sup>1</sup>Laboratory for Animate Technologies, Auckland Bioengineering Institute, University of Auckland, New Zealand

FME002: Backlighting the brain: A closed loop selective EEG reinforcement system to induce deep relaxation.

Prof Nanda (D) Nandagopal<sup>1</sup>, <u>Dr Bernadine</u> <u>Cocks</u><sup>1</sup>, Dr David Crone<sup>2</sup>

<sup>1</sup>University of South Australia, Australia, <sup>2</sup>Defence Science & Technology Group, , Australia

FME003: Connectivity based parcellation of basal ganglia functional zones using diffusion-weighted MRI tractography

<u>Dr Georg Kerbler</u><sup>1</sup>, Dr Alexander Puckett<sup>1</sup>, A/Prof Ross Cunnington<sup>1</sup>

'The University of Queensland, Australia

FME004: Functional imaging of basal ganglia at ultra-high field (7T)

<u>Dr. Alexander Puckett</u><sup>1</sup>, Jake Palmer<sup>2</sup>, Saskia Bollmann<sup>3</sup>, A/Prof Markus Barth<sup>3</sup>, A/ Prof Ross Cunnington<sup>1,2</sup>

'Queensland Brain Institute, The University of Queensland, Australia, 'School of Psychology, The University of Queensland, Australia, 'Centre for Advanced Imaging, The University of Queensland, Brisbane, Australia

FME005: fMRI-adaptation at a whole-brain level: a new method for exploring the functional properties of the brain Ms Marina Butko<sup>1,2</sup>, A/Prof Anina Rich<sup>1,2</sup>, Prof Polina Golland<sup>3</sup>, Prof Mark Williams<sup>1,2</sup> 'Perception in Action Research Centre (PARC), Macquarie University, Australia, 'Department of Cognitive Science and Artificial Intelligence Laboratory (CSAIL), MIT, USA

#### **Motor Processes (FMO)**

FMO001: Spatiotemporal gait analysis during step-over-obstacle in symptomatic Huntington's disease Naznine Anwar<sup>1</sup>, Prof Kim Cornish<sup>1</sup>, Dr Izelle Labuschagne<sup>2</sup>, Prof Nellie Georgiou-

Karistianis<sup>1</sup>

<sup>1</sup>Monash University, Australia, <sup>2</sup>Australian Catholic University, Australia

FMO002: Maturation of grip selection planning is associated with improved action representation in typically developing individuals but not in children with pDCD

Mr Ian Fuelscher<sup>1</sup>, Dr Jacqueline Williams<sup>2</sup>, Dr Kate Wilmut<sup>3</sup>, A/Prof Peter G Enticott<sup>1</sup>, Dr Christian Hyde<sup>1</sup>

<sup>1</sup>Deakin University, Australia, <sup>2</sup>Victoria University, Australia. <sup>3</sup>Oxford Brookes University, United Kingdom FPE002: Differential attenuation of auditory and visual evoked potentials for sensations generated by hand and eye movements

Mr Nathan Mifsud<sup>1</sup>, Dr Tom Beesley<sup>1</sup>, Dr Thomas Whitford<sup>1</sup>

#### Sensation & Perception (FPE)

FPE003: Multisensory body perception for action in eating disorders

<u>Dr Regine Zopf</u>¹, Erika Contini¹, Chris Fowler², Dr Naresh Mondraty², Prof Mark A Williams¹

Perception in Action Research Centre & Department of Cognitive Science, Faculty of Human Sciences, Macquarie University & ARC Centre of Excellence in Cognition and its Disorders, Macquarie University, Australia, "Wesley Eating Disorder Centre, Wesley Hospital, Australia

FPE004: The effects of orientation, size, and eye gaze on susceptibility to the vertical-horizontal illusion

<u>Dr Oriane Landry</u><sup>1</sup>, Lucy Carolan<sup>1</sup>, Hayden Peel<sup>1</sup>, Dr Philippe Chouinard<sup>1</sup>

'La Trobe University, Austraial

FPE005: Colour envisioned: Concepts of colour in the blind and sighted

Mr Armin Saysani<sup>1</sup>, Prof Michael Corballis<sup>1</sup>, A/Prof Paul Corballis<sup>1</sup>

<sup>1</sup>The University of Auckland, New Zealand

FPE006: Steady-state visual evoked potentials reveal a neural correlate of visual filling-in in the human visual system

<u>Lisa Wittenhagen</u><sup>1</sup>, Prof Jason Mattingley<sup>1,2</sup> 'Queensland Brain Institute, The University of Queensland, Australia, 'School of Psychology, The University of Queensland, Australia

FPE007: Perceptual consequences of visual long-term potentiation

Mr Eric.T Rosentreter<sup>1</sup>, Mr Matt Oxner<sup>1</sup>, A/ Prof Paul Corballis<sup>1</sup>

School of Psychology, A, New Zealand

FPE008: Evaluating subcategory representations in visual object recognition using magnetoencephalography

Miss Erika Contini<sup>1,2</sup>, Prof Mark Williams<sup>1,2</sup>, Dr Erin Goddard<sup>1,2</sup>, Mr Tijl Grootswagers<sup>1,2</sup>, Dr Thomas Carlson<sup>1,2</sup>

Perception in Action Research Centre (PARC) and Department of Cognitive Science, Macquarie University, Australia, "ARC Centre of Excellence in Cognition and its Disorders, Macquarie University, Australia

FPE010: Object size perception is influenced by priming but not by adaptation outside of visual awareness: A continuous flash suppression study.

Mr Joshua Sherman<sup>1</sup>, Dr Robin Laycock<sup>1</sup>, Dr Irene Sperandio<sup>2</sup>, Dr Philippe Chouinard<sup>1</sup>

<sup>1</sup>La Trobe University, Australia, <sup>2</sup>University of East Anglia, United Kingdom