

**The Luria Award for Doctoral Research was awarded to Sharpley Hsieh and Melissa Nott for the following presentations****Recognising Emotions in Music in Early Frontotemporal Dementia: Preliminary Findings**

Sharpley Hsieh, Olivier Piguet and John R. Hodges

*Prince of Wales Medical Research Institute; University of New South Wales, Australia*

**I**ntrouction: Frontotemporal dementia (FTD) is a progressive neurodegenerative brain disease characterised clinically by abnormalities in behaviour, cognition and language. Two subgroups, behavioural-variant FTD (bvFTD) and semantic dementia (SD), also show impaired emotion recognition particularly for negative emotions. This deficit has been demonstrated using visual stimuli such as facial expressions. Whether recognition of emotions conveyed through other modalities — for example, music — is also impaired has not been investigated. *Methods:* Patients with bvFTD, SD and Alzheimer's disease (AD), as well as healthy age-matched controls, labeled tunes according to the emotion conveyed (happy, sad, peaceful or scary). In addition, each tune was also rated along two orthogonal emotional dimensions: valence (pleasant/unpleasant) and arousal (stimulating/relaxing). Participants also undertook a facial emotion recognition test and other cognitive tests. Integrity of basic music detection (tone, tempo) was also examined. *Results:* Patient groups were matched for disease severity. Overall, patients did not differ from controls with regard to basic music processing or for the recognition of facial expressions. Ratings of valence and arousal were similar across groups. In contrast, SD patients were selectively impaired at recognising music conveying negative emotions (sad and scary). Patients with bvFTD did not differ from controls. *Conclusion:* Recognition of emotions in music appears to be selectively affected in some FTD subgroups more than others, a disturbance of emotion detection which appears to be modality specific. This finding suggests dissociation in the neural networks necessary for the processing of emotions depending on modality.

**Thinking Strategically: An Innovative Approach to Neurorehabilitation**Melissa Nott<sup>1,2</sup> and Christine Chapparo<sup>2</sup><sup>1</sup> *Westmead Hospital, Brain Injury Rehabilitation Service, Sydney, Australia*<sup>2</sup> *The University of Sydney, Faculty of Health Sciences, Australia*

**B**ackground: Rehabilitation approaches based on cognitive strategy instruction are being increasingly used in adult brain injury rehabilitation. Cognitive strategies are used during occupational performance to enhance perception of a task in the context of the environment, recognition of similarities between the present task and previous experiences, identification of relevant task cues, enhancement of goal formation, and decision making about performance. *Research design:* Single case studies comparing current occupational therapy (OT) intervention with the Perceive, Recall, Plan and Perform (PRPP) System of Intervention. *Intervention approach:* The PRPP System of Intervention is a strategy instruction based approach used by occupational therapists to facilitate every-day functional performance through targeting of specific information processing strategies that are applied during task performance. The PRPP System of Intervention focused on information processing strategies to structure and organise information required for effective task performance, focusing attention, high-

lighting integral task components, facilitating recall of task procedures, identifying and avoiding obstacles to performance, use of internally driven tactics, and goal direction. *Findings:* Participants significantly improved in their application of processing strategies following PRPP Intervention in comparison to current OT Intervention. Several features of the PRPP Intervention approach were hypothesised to underpin the level of success achieved. Cognitive strategies were 'chunked' together to enable instruction of multiple strategies described as 'Stop, Attend, Sense, Think, Do' to better facilitate flow of information processing. The PRPP Intervention focused on 'thinking strategies' rather than 'doing strategies'. 'Bridging' techniques were used by the therapist to facilitate generalisation of cognitive strategies to multiple functional tasks and settings.

### The ASSBI Travelling Award was awarded to Emmah Doig for the following presentation

#### Goal Directed, Outpatient Rehabilitation for Adults With Traumatic Brain Injury: Comparison of Outcomes in Home and Day Hospital Settings

Emmah Doig,<sup>1</sup> Jennifer Fleming, Petrea Cornwell<sup>1,2</sup> and Pim Kuipers<sup>3</sup>

<sup>1</sup> The University of Queensland, School of Health and Rehabilitation Sciences, Australia

<sup>2</sup> Princess Alexandra Hospital, Brisbane, Australia

<sup>3</sup> Centre for Remote Health, A Joint Centre of Flinders University and Charles Darwin University, Australia

**I**ntroduction: Outpatient neurological rehabilitation is delivered in a variety of settings including day hospitals, outpatient clinics and in homes. Whilst there is an increasing trend towards delivery of home-based rehabilitation, according to the findings of a systematic review, there have been no previous controlled studies designed to investigate the influence of therapy context on outcomes for people with TBI receiving outpatient neurological rehabilitation. *Method:* A controlled, repeated measures, crossover design with pre, and post-test measures was used to compare clinical change following a (A) home-based treatment phase and a (B) day hospital-based treatment phase of a goal-based outpatient rehabilitation program for a group of 14 participants with TBI. To counterbalance order effects, participants were randomly allocated to a treatment sequence AB or BA and all outcome assessments were conducted by a researcher not involved in treatment and blinded to the treatment sequence. The rehabilitation experience in both settings was explored using semi-structured interviews with the participants, their significant others and the treating occupational therapists. *Results:* Participants were significantly more satisfied with therapy at home. There was a trend towards better outcomes on all other measures post the home phase however the differences in gains following home and day hospital phases were not statistically significant. The main emerging qualitative theme was that the perceived culture of hospital and boundaries create restrictions whereas the real-life context facilitates client-centred rehabilitation, more collaboration and communication, and a more positive therapeutic alliance. *Discussion:* Findings indicate home-based rehabilitation is at least effective as a day hospital-based program. Qualitative findings indicate a more positive rehabilitation experience at home. Research examining the cost effectiveness of home-based rehabilitation is needed.