

## Centre for Rural and Remote Mental Health

### International Guest Researcher

Working memory deficits in children and adolescents with  
schizophrenia

**Assistant Professor Tonya White**  
**Division of Child & Adolescent Psychiatry, University of Minnesota, America**

**Monday 27<sup>th</sup> October 2008**  
**11.30am – 1.00pm**  
**Centre for Rural and Remote Mental Health**  
**Bloomfield Hospital, Orange**

#### **Seminar outline**

*Deficits in working memory (WM) are considered a core feature of schizophrenia & are observed in chronic schizophrenia, neuroleptic naïve patients, early-onset schizophrenia (EOS), in the prodromal stages, & in healthy relatives of individuals with schizophrenia. Our Youth Psychosis Research Group conducted a series of studies to identify specific WM components in children & adolescents with schizophrenia. Utilizing a combination of behavioural, neurophysiological, & neuroimaging tasks involving both verbal & visuospatial WM tasks, we have converging pilot data that support aberrant encoding processes in EOS. We were particularly interested in WM tasks as they continue to develop from childhood through early adulthood, allowing us to examine developmental differences. Our findings in EOS are supported by an emerging adult literature describing encoding abnormalities in adults with schizophrenia. A better understanding of the specific components disrupted in WM & how they emerge during development will assist in uncovering the underlying neurobiology & help target interventions to improve working memory.*

**Assistant Professor Tonya White** completed her residency in paediatrics, psychiatry, and child & adolescent psychiatry at the University of Utah. Her research interests include the use of neuroimaging tools to study functional brain connectivity in normal development and in paediatric neuropsychiatric disorders, primarily psychotic disorders. Her goals are to apply novel strategies in neuroimaging and genetics to better understand the aetiology of schizophrenia and to identify children at risk.

#### **Registration and enquiries:**

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