



Velocardio-facial Syndrome (22q11deletion)

Current guidelines and research

Hosted by **A/Prof David Dossetor** from the Developmental Psychiatry team of the Dept. of Psychological Medicine & **A/Prof Natalie Silove** from the Child Development Unit and Co-Hosted by **Maria Kamper** from the VCFS Society.

WHEN: Friday 15th November 2013

**VENUE: Research Meeting Room 1, Kerry Packer Building,
The Kids Research Institute
Hawkesbury Road, Westmead**

**COST: Free
CATERING: Provided**

**Please RSVP to: Julianne.Borg@health.nsw.gov.au
(for catering and seating purposes)**

International Guest Speaker:

Professor Tony Simon – UC Davis Center for Neuroscience

Other Guest Speakers Include:

**A/Prof Helen (Honey) Heussler,
Developmental Paediatrician
Mater Health Services, Mater Children's Hospital, Queensland**

**Dr Linda Campbell
Associate Lecturer
School of Psychology, The University of Newcastle**

1:30pm – 2:00pm

Honey Heussler – VCFS an Overview and Update

2:00pm – 3:00pm

Tony Simon: "Integrating cognitive and affective factors to understand mental health in youth with chromosome 22q11.2 deletion syndrome/VCFS"

3:00pm – 3:30pm

Tea Break- Catering Provided

3:30pm – 4:30pm

Linda Campbell: Social Implications for child and family:
Linda Campbell and Honey Heussler: Current National and International Research Perspectives





Professor Tony Simon – UC Davis Center for Neuroscience



Dr. Simon is a paediatric cognitive neuroscientist. His research focuses on the neural basis of cognitive impairments seen in genetic disorders that produce developmental disability and psychopathology. Dr. Simon investigates how dysfunction in specific neurocognitive processing systems, such as spatial and temporal attention and cognition, can generate a range of cognitive and behavioral impairments. His goal is to develop remedial intervention programs that will minimize such disability. Dr. Simon's current projects center on studies of visuospatial and numerical cognition in children with chromosome 22q11.2 deletion syndrome, also known as DiGeorge and VeloCardioFacial syndrome. He is also engaged in similar studies of girls with Turner syndrome and also children and adults with the full range of fragile X (FMR1) gene mutations. Besides cognitive processing analyses, Dr. Simon and his team use cutting edge neuroimaging methods, such as functional magnetic

resonance imaging (fMRI), Voxel Based Morphometrics, and Diffusion Tensor Fiber Tracking in order to study the structure, function and connective patterns in the developing brain.

Integrating cognitive and affective factors to understand mental health in youth with chromosome 22q11.2 deletion syndrome/VCFS. *In this presentation I will describe what we have found about how the interactions between cognitive capabilities of children with 22q11.2DS/VCFS and dynamic demands of school, home or even social interaction might explain the level of symptoms that fit the profile of anxiety, ADHD or even autism spectrum disorders. In order to understanding how basic cognitive and affective, or emotional, processes interact we have started to design experiments where different kinds of emotional information is presented during experiments where children have to control their attention. We find that many children with 22q11.2DS/VCFS show evidence of elevated levels of "threat bias" or extra vigilance to potentially threatening things, such as angry faces. The extent to which they do this seems to correlate with how anxious they are and how well they function in real world environments, known as adaptive functioning. I'll present the idea that the underlying notion of "arousal" changes in response to the degree of challenge and may help to explain what makes children with 22q11.2DS/VCFS anxious, inattentive and even at risk for more serious psychiatric outcomes. This idea helps to think about widely available, evidence-based, clinically-validated interventions and treatments as well as novel ideas for preventive/protective interventions currently under investigation.*

Prof Tony Simon will also be presenting in Brisbane 22nd November, and Melbourne 21st November and to family groups in each of these cities as well.

Professor Simon's trip is funded by the Creswick Foundation with a travel Grant. <http://www.creswick.org.au/index.html> and supported by the Mater Medical Research Institute, Brisbane

