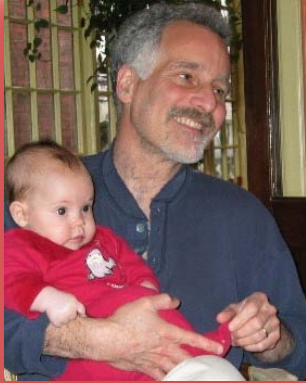




Department of Psychology

2009-2010 Thematic Speaker Series

'Don't Worry – Be Happy'



Dr. Marc D. Lewis

**Professor, Department of Human
Development and Applied Psychology
University of Toronto, Canada**

Cortical Mechanisms of Emotion Regulation in Children with Behavior Problems: Changes Due to Treatment

Thursday, November 12th 4:00 to 5:00 PM
Pamplin 1045

We study the contribution of prefrontal regulatory mechanisms to developmental and individual differences in social behaviour, personality characteristics, and mental health. To understand these relations, we examine children's cortical activities while they are engaged in emotion-eliciting tasks, using high-density EEG methods. Differences in the amplitude, latency, and source localization of scalp electrical activity are then used to predict social behaviour and functioning. In one set of studies, children referred for antisocial behaviour problems (and their parents) are assessed for changes in prefrontally-mediated regulatory activities before and after treatment. Corresponding changes in brain and behaviour suggest that habits of emotion regulation can change, when treatment is effective, and these changes appear to be mediated by functional differences in activation in ventral vs. dorsal prefrontal regions.