PhD Opportunity: How does sleep impact adolescent brain development and mental health?

We are seeking an enthusiastic and academically high performing student for a study seeking to understand how sleep shapes brain development and mental health.

Sleep is crucial to support overall wellbeing and functioning. Adolescence is a critical developmental period marked by striking changes in behaviour, the propensity for sleep, as well as to the structure and function of the brain. The parallels between developmental sleep patterns and brain maturation suggest that sleep and brain development are closely intertwined.

The 'Imaging in the Circadian Light in Adolescence, Sleep, and School' (iCLASS) study is examining how changes in sleep and circadian rhythms in adolescence impacts brain development and later mental health. The study is a collaboration between The Turner Institute for Brain and Mental Health, Monash University and Melbourne Neuropsychiatry Centre, The University of Melbourne and is funded by the Australian Research Council and the National Health and Medical Research Council. In this prospective, longitudinal study, brain development will be assessed with repeated neuroimaging assessments of brain structure and function. We will test whether changes in comprehensive measures of sleep-wake patterns and circadian phase predict brain development and in turn, later mental health.

Applications are invited from individuals with a relevant background in psychology, biomedical science or neuroscience. The student will craft a thesis topic related to the iCLASS study and will be supervised by A/Prof Vanessa Cropley and A/Prof Bei Bei, and/or additional supervisor(s) with relevant expertise. The student will receive training in both sleep neuroscience and neuroimaging.

Candidates are welcome to apply through either The University of Melbourne or Monash University.

For more information and expressions of interest please contact Vanessa Cropley: vcropley@unimelb.edu.au





