

PhD Opportunity: Understanding the role of sleep in shaping 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 optimal functioning of the body, particularly the central nervous system. Adolescence is a critical developmental period marked by changes in behaviour, in concert with substantial changes to both bodily and brain systems. This includes striking changes occurring to the structure of, and 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. However, the precise nature of this relationship is yet to be elucidated.

The 'Imaging in the Circadian Light in Adolescence, Sleep, and School' (iCLASS) study is a funded study 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 psychopathology.

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 Dr Vanessa Cropley and A/Prof Bei Bei, and/or additional supervisor(s) with relevant expertise.

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



MONASH University



CLASS STUDY
Circadian Light in Adolescence, Sleep and School Study



Melbourne
Neuropsychiatry
Centre