

## Institute for Social Science Research - PhD Student Project

**ISSR Impact Area:** Health

**Title:** *Sleep and circadian function after brain injury*

**Supervisor/s:**

[Dr Shannon Edmed](#), [Dr Alicia Allan](#), [Dr Cassandra Pattinson](#), [Professor Simon Smith](#)

**Funding:**

Student Scholarship required, top-up funding may be available to suitable candidate, part-time enrolment considered.

**Project description:**

Poor sleep is often reported after brain injury (including mild traumatic brain injury and concussion). Poor sleep is often associated with worse overall outcomes, and may contribute to worse mood, increased pain, increased fatigue, and decreased social and work participation. The exact nature of sleep disturbance after brain injury isn't yet clear, nor are the consequences of poor sleep for recovery after injury. We are interested in the opportunity to better define the nature, impact, and severity of an injury through a study of sleep and circadian function. We are particularly interested in the possibility that improving sleep, sleep health, and circadian function might improve outcomes after injury and improve overall quality of life. Our group works with a range of populations, uses a wide range of research measures (including overnight sleep studies, actigraphy, hormone analysis, scales and questionnaires, and observations) and a number of methodologies (including naturalistic studies, experimental designs, and formal trials). We can support a range of study types within that framework.

This PhD will build on work undertaken by our team and our on-going collaborations with partners. The study will involve both critical reviews of literatures and the generation and analysis of new data. The information from this project will provide the scientific basis to design effective interventions to improve outcomes after injury. Through this project the PhD student will gain experience in state-of-the-art measurement and analyses techniques.

**The candidate:**

We are seeking a candidate who has an excellent academic record and a particular interest in this topic. A strong background in psychology, neuropsychology, psychophysiology, statistical, or clinical background is essential, as is a commitment to conduct high quality research.

**Achievable Outcomes:**

- A PhD from the UQ in relevant area
- Multiple scientific papers in high impact research journals
- Experience with oral/written presentations at national/international conferences
- Interaction with an interdisciplinary team of researchers in order to optimise research outcomes