



## Postdoctoral Fellowship in the cognitive neuroscience of sleep

### Our goal:

Our goal is to decode the physiological signals of the brain that support cognition and behaviour across different sleep-wake states and their importance for good cognitive health.

### Research interests:

Despite continued research to characterize the features of sleep and its underlying physiological processes, the functions of sleep have remained largely enigmatic. The focus of our research is to investigate one of the dominant hypotheses in the field: that one of the primary functions of sleep is for memory consolidation; the process of forming enduring memory traces.

The University of Ottawa Sleep Research Laboratory employs a unique combination of behavioural, cognitive, electrophysiological, functional and structural neuroimaging and combined EEG-fMRI techniques to explore the functions - and dysfunctions - of sleep. The selected postdoctoral fellow will have the opportunity to work on a research program that will further examine the relationships between sleep and cognitive performances using a multimodal approach (e.g., EEG, behavior, neuroimaging). This program will contribute to a deeper understanding of the role of sleep in memory and cognition.

The fellow will have access to the Brain Imaging Centre at The Royal's Institute for Mental Health Research (IMHR), including a 4-bedroom Sleep Laboratory and 3T Seimens PET-MRI, along with MRI compatible EEG, fully dedicated to research. The Royal IMHR Sleep Laboratory, and the University of Ottawa Sleep Research Laboratory, led by Dr. Fogel, each include 4 bedrooms equipped with 32-channel polysomnography and high-density EEG systems, actigraphy devices and cognitive testing equipment.

### Academic qualifications and requirements:

- PhD in neuroscience, physiology, psychology, biomedical science or a related discipline
- Demonstrated experience in human sleep research and/or cognitive neuroscience
- Additional experience with signal processing (e.g., EEG, neuroimaging) and programming skills (e.g., Matlab) will constitute an important asset
- The University of Ottawa is a bilingual (French & English) institution

### Timeline and application process:

Application deadline: open until the position is filled

Fellowship start date: open 2021 (can start right away)

Submission process: **all documents must be submitted by email to:**

**Dr. Stuart Fogel ([sfogel@uottawa.ca](mailto:sfogel@uottawa.ca))**

**Tel: 613-562-5800 x4295**

**<http://socialsciences.uottawa.ca/sleep-lab/>**

**Application checklist:**

- 1) A one (1) page research statement demonstrating fit with the program described above.
- 2) Current curriculum vitae demonstrating research excellence and a capacity for leadership in the domain.
- 3) The contact information for at least two references from academic supervisors or current employers.

**Value:**

The Postdoctoral Fellowship is valued at a starting salary of \$35,000 per year, commensurate on experience and availability of funds. Teaching opportunities and travel awards are available to supplement total salary.

The University of Ottawa is the largest bilingual (English-French) university in the world. The University of Ottawa is a vibrant research and teaching environment, with state-of-the-art research facilities and many research centers. The University of Ottawa is located in the heart of our nation's capital, recently ranked as offering one of the best quality of life and student experiences in Canada. Visit the uOttawa website for information about postdoctoral studies (<https://www.uottawa.ca/graduate-studies/postdoctoral-fellows>).