Postdoctoral Fellowship: Molecular and cellular mechanisms of cognition in the hippocampus and prefrontal cortex in mouse models

About this opportunity

The Translational Cognitive Neuroscience Lab at Western University (co-directed by Tim Bussey and Lisa Saksida) is looking for a postdoctoral researcher to undertake cutting-edge research in the area of brain mechanisms of cognition and behaviour. Our main behavioural approach involves touchscreen-based testing of mouse models, which allows us to assess many different aspects of high-level cognition in a way that is highly relevant to human patients. Touchscreen testing also facilitates reproducibility through increased standardization and reductions in experimenter and environmental influence. We subscribe to principles of open science, and promote data and knowledge sharing through mousebytes.ca and touchscreencognition.org.

This project is focused on molecular and cellular mechanisms of cognition in the hippocampus and prefrontal cortex, and will involve combining various neurotechnologies including fibre photometry recording and optogenetic manipulations with touchscreen-based cognitive assessment. The project is part of a collaboration between Western's BrainsCAN and McGill's Healthy Brains for Healthy Lives Canada First Research Excellence Fund initiatives and will involve opportunities for interaction across the two sites.

Required qualifications:

- PhD in neuroscience or related field
- Experience with scientific writing

Required skills:

- Experience in conception, design and performance of neuroscience-related experiments, including stereotaxic surgery and intracerebral infusions
- Experience with behavioural assessment in mouse or rat models
- Experience with *in vivo* electrophysiology, fibre photometry, optogenetics, chemogenetics, or other methodologies for measuring or manipulating the brain
- Knowledge of neural mechanisms of learning, memory, and/or other aspects of cognition
- Good writing skills, evidenced in peer-reviewed publications
- Skills in statistical analysis in R, SPSS or other relevant programs
- Advanced mathematical or computational expertise is a plus

Required abilities:

- Ability to work independently and take the initiative in research projects

- Collaborative team player
- Excellent communication skills

Location:

The position will be based primarily in the Robarts Research Institute, although post-COVID there will be opportunities to travel to the Douglas Research Institute in Montreal to facilitate collaboration. Robarts is one of the premier research institutes in Canada with a vibrant research community and many opportunities for collaborations. Cognitive neuroscience in health and disease is a major research focus at Western, which is supported by BrainsCAN, a $66M Canada First Research Excellence Fund grant, through to 2026.

The University of Western Ontario (www.uwo.ca) is a major educational and research center in Ontario with over 25,000 undergraduate and 5,000 graduate students. Cognitive neuroscience in health and disease is a major research focus at Western. London, also known as the Forest City, is an affordable and lively community close to the Great Lakes and two hours from Toronto. The city offers many options for outdoor and cultural activities.

Details:

The initial appointment is for 1 year, with possibility of renewal. Salary will commensurate with experience ($40,000 - $50,000) and includes additional benefits (https://www.uwo.ca/hr/benefits/your_benefits/pda/index.html).

To apply, please submit a cover letter that describes your relevant training and career goals, up-to-date CV, research statement, up to three representative publications, as well as the name and contact information of two references to: Dr. Lisa Saksida (lsaksida@uwo.ca) & Dr. Tim Bussey (tbussey@uwo.ca) with “Postdoc Application” in the subject line.

Review of the applications will begin March 15, 2021 and will continue until the position is filled.

For more information, please see

TCNLab: http://www.tcnlab.uwo.ca @TCNLab
BrainsCAN: https://brainscan.uwo.ca/ @Brains_CAN
Touchscreens: https://touchscreencognition.org/ @TouchScreenCog
MouseBytes: http://www.mousebytes.ca

We thank all applicants for their interest; however, only those individuals selected for an interview will be contacted.

Western is committed to employment equity and diversity in the workplace and welcomes applications from women, members of racialized groups/visible minorities, Aboriginal persons, persons with disabilities, persons of any sexual orientation, and persons of any gender identity or gender expression.