

Post-Doctoral Position Available:

A full-time postdoctoral position is available immediately to work with the Mouse Translational Research Accelerator Platform ([MouseTRAP](#)) team—with principal investigators including Lisa Saksida, Tim Bussey, Marco Prado and Vania Prado—at the Robarts Research Institute, Schulich School of Medicine & Dentistry, at The University of Western Ontario in London, ON.

MouseTRAP is a unique platform that directly addresses the urgent and critical challenge to translate neurocognitive discovery research in mouse models toward improvements in human health. It is centred on a touchscreen-based cognitive testing system for mice that enables flexible presentation of comprehensive test batteries involving visual stimuli at any location on a screen, as is increasingly done in human patient testing. Mice respond directly to the stimuli with their nose and positive reinforcers such as strawberry milkshake are delivered for correct choices. We have developed over 30 touchscreen tests for mice that tap into disease-relevant aspects of high-level cognition including attention, memory, executive function and motivation. MouseTRAP pairs these touchscreen-based cognitive tests with cutting-edge technologies to record or manipulate neuronal, glial or neurochemical activity, which makes it possible to match—millisecond by millisecond—what is happening in the brain with human-relevant cognitive performance. This can be done in healthy mice or in our extensive catalogue of next-generation disease models, making MouseTRAP a *state-of-the-art platform for assessment of robust, reproducible and human-relevant cognitive outcomes in mouse models, for either fundamental discovery research or development of evidence-based therapeutic interventions.*

The postdoctoral fellow will work on projects related to combining specific sensors with relevant touchscreen tests and will receive training on advanced optical imaging and high-throughput, translationally-relevant cognitive testing using touchscreens. The successful candidate will also have excellent opportunities to interact with researchers and core facilities funded by Western's Canada First Research Excellence Fund program in cognitive neuroscience, [BrainsCAN](#).

Robarts is one of the premier research institutes in Canada with a vibrant research community and many opportunities for collaborations. The University of Western Ontario (www.uwo.ca) is a major educational and research center 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.

Qualified applicants should have a PhD degree in Pharmacology, Psychology, Neuroscience, or related disciplines with significant expertise in manipulating and/or recording brain activity in rodents, while integrating complex behavioural tasks. Two-three years of experience in touchscreen behavioural testing, stereotaxic surgery, electrophysiology, fiber photometry, optogenetics, and/or in the development of pipeline analysis will be an asset.

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.

Please send a statement of interest, *Curriculum Vitae*, and the names and contact information of at least two references to:

Dr. Nicole Gervais, Robarts Research Institute, University of Western Ontario, Email: Nicole Gervais ngervai2@uwo.ca