

Post-doctoral Researcher in Clinical Neuroscience
Slaight Centre for Youth in Transition
Campbell Family Mental Health Research Institute
Centre for Addiction and Mental Health

We are looking for a Post-Doctoral Fellow for a 2-year term at the Centre for Addiction and Mental Health (CAMH) under the co-supervision of Dr. Nicholas Neufeld and Dr. Lindsay Oliver.

The fellow will apply advanced computational and statistical approaches to available neuroimaging data which includes precision resting-state fMRI, task-based fMRI, structural MRI, diffusion MRI, as well as wearable device data and clinical/social and non-social cognitive measures. Current research topics include brain-behaviour relationships and neuroimaging and digital biomarkers of mental illness, social cognition, and treatment outcomes. The candidate will also have access to numerous publicly available data sets, as well as a large set of locally available neuroimaging scans on disorders such as schizophrenia, depression, psychotic depression, and bipolar disorder.

The successful candidate will work within a collaborative multi-PI computational neuroimaging research group focused on neuroimaging biomarkers in psychiatric research. Collaboration with trainees is expected. Available resources include a Linux cluster of 22 high-powered workstations and four high-powered computer nodes (e.g., 40 Xeon core processors and 128 GB RAM each) and qsub system, research support staff and system admins, and a well curated pipeline system including current standards such as BIDS naming, standardized preprocessing (e.g., fMRIPrep), thorough data QA/QC, and reproducible computing (e.g., containerization).

As a CAMH Research Trainee, the postdoctoral researcher will be expected to make independent contributions to knowledge under the mentorship of CAMH scientists. In addition to planning, developing, and carrying out their own original research, a CAMH post-doc is expected to build collaborations and make contributions to existing projects. Both independent and collaborative activities are intended to expand experience and professional relationships, refine technical, methodological, and scientific expertise, and develop essential research skills in preparation for independent scientific careers within and beyond academia.

Core skills that a CAMH post-doc is expected to develop during their engagement include:

- Developing research proposals and experimental designs to investigate research questions
- Identifying milestones and objectives
- Planning, operationalizing, and carrying out research projects
- Determining necessary methodology required to collect data and test hypotheses
- Developing and submitting competitive grant proposals
- Collaborating with other researchers and clinicians
- Preparing manuscripts for publication
- Preparing and presenting results at conferences
- Mentoring, training, and/or teaching other trainees

The ideal candidate will have or be completing a PhD in psychology, neuroscience, or a related field, and have research experience in neuroscience, functional MRI, wearable technologies, and/or computational approaches and coding (e.g., R, python, Matlab). Individuals must be no more than 5 years post-PhD to be eligible (however, consideration will be given to candidates with career interruptions related to documented leaves of absence or formal clinical training).

CAMH is a world-leading psychiatric research hospital. Our centre supports diversity and respect in the workplace and provides a high quality and positive learning environment for all trainees. Funds are available for at least two-years at a competitive salary. Start date is dependent on the candidate's availability.

For more information, please email Nicholas.Neufeld@camh.ca and Lindsay.Oliver@camh.ca, including a CV and a brief 1-page statement of research interests. Inquiries welcome.