



The Computational Brain Anatomy Laboratory ([CoBrA Lab](#)) is a research group specializing in MRI processing at the Douglas Hospital in Verdun, headed by Dr. Mallar Chakravarty. Our team is a multi-disciplinary group of neuroscientists, psychologists, computer scientists, engineers, and physicists conducting cutting-edge research using MRI imaging techniques to understand the relationship between brain structure, function, and cognition. We believe that this integrated approach can significantly accelerate discovery and improve our understanding of adaptive and maladaptive brain changes.

We are seeking a full-time postdoctoral associate to work with Dr. Mallar Chakravarty to develop imaging software, pipelines, and data management systems for the Translational Initiative to De-risk NeuroTherapeutics (TRIDENT) platform.

A collaborative team at Western University, the University of Toronto, the Centre for Addiction and Mental Health and McGill University (Montreal Neurological Institute and Douglas Mental Health University Institute), have developed a novel platform that will accelerate preclinical evaluation of therapeutics for neurodegenerative diseases using the TRIDENT platform, funded by a six-year \$24M New Frontiers in Research Fund Transformation award. To achieve this goal, TRIDENT integrates the expertise of diverse Canadian world-leading experts across cellular and animal models of neurodegeneration, clinical neurology, cognition, imaging, open science, and science policy, epistemology, knowledge use and translation, intellectual property, ethics, law, philosophy, and sex and gender-based analysis methodology.

The postdoctoral associate will aid our mission to establish imaging as translational preclinical biomarkers for drug discovery. The successful candidate will work closely with Dr. Mallar Chakravarty and other TRIDENT lead investigators on comprehensive management, planning, and execution of TRIDENT imaging-related projects. The project goal will be to build techniques that combine rich multi-modal data in the mouse including magnetic resonance imaging, immunohistochemistry, and light sheet microscopy data. Contract is for two-years with the possibility of renewal, and salary will be commensurate with experience.

Qualified applicants should have a PhD degree in Computer Science, Engineering, Neuroscience, or related discipline with demonstrated expertise in developing image processing pipelines. Candidates with a strong background in neuroimaging and/or computational neuroscience are preferred. The work is highly interdisciplinary and collaborative. The successful applicant will work closely with members of the TRIDENT initiative, including [Dr. Ali Khan's group at Western University](#).

McGill University is committed to equity in employment and diversity. It welcomes applications from indigenous peoples, visible minorities, ethnic minorities, persons with disabilities, women,

persons of minority sexual orientations and gender identities, and others who may contribute to further diversification.

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

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