



JOB POSTING:

Postdoctoral Research Fellow (temporary full time)

Magnetic resonance spectroscopic imaging methods development

We are searching for a highly motivated and independent PhD graduate to lead the development and application of novel magnetic resonance spectroscopic imaging (MRSI) methods for studying brain chemistry and metabolism. In particular, the successful candidate will develop and validate novel pulse sequences and data processing methods for MRSI of the brain, with a focus on pediatric populations.

This position is partly funded by the [Canadian Pediatric Imaging Platform \(C-PIP\)](#), a multi-site initiative aimed at using imaging to study brain development and to better understand brain health in children. The imaging methods developed by the successful candidate will be implemented in the various C-PIP imaging sites in Toronto, Montréal, and Calgary. As such, the candidate will be expected to travel semi-regularly to these C-PIP member sites to assist with methodological implementation and training.

The candidate will be supervised by Dr Jamie Near and based in Dr Near's lab at the [Sunnybrook Research Institute](#) (SRI) in Toronto, Canada. The candidate will be co-supervised by Dr Ashley Harris (Alberta Children's Hospital, Calgary) and Dr Gregory Lodygensky (St. Justine Hospital, Montreal).

SRI is among the top 10 research hospitals in Canada, with an internationally recognized imaging research program. It houses one 1.5T (GE) and three 3T (GE, Philips, Siemens) research-dedicated human MRI systems, a research MRI-PET system (Siemens), two 7T pre-clinical MRI systems (Bruker). A 7T human MRI system (Siemens) will be installed at SRI in 2024. The successful candidate will have a unique opportunity to collaborate with researchers both within SRI and more broadly across the C-PIP member sites, developing novel MR methods that will be applied towards important research questions.

Toronto is the largest city in Canada, and fourth largest in North America. Located on the north-western shore of Lake Ontario, Toronto features an extensive network of [rivers, deep ravines and urban forests](#), excellent for running, biking, cross country skiing, canoeing and sailing. It is an international centre of business, finance, and the arts, and is a truly multicultural metropolis, with half of Torontonians born outside of Canada. Toronto is consistently rated among the [top 10 most liveable cities in the world](#).

Required Qualifications:

- PhD in imaging methods development
- Solid programming expertise (Matlab, Python and/or C++)
- Understanding of MRI Physics
- Expertise in data modelling and analysis
- Team player

Preferred Qualifications:

- Understanding of MR spectroscopy
- Experience with pulse sequence programming
- Strong publication record
- Good written and verbal communication skills

Interested applicants are invited to please send a cover letter and Curriculum Vitae to **Jamie Near** (jamie.near@utoronto.ca).

In accordance with Canadian employment and immigration guidelines, applicants must be eligible to work in Canada.

SRI is committed to providing accessible employment practices that are in compliance with the Accessibility for Ontarians with Disabilities Act (AODA). If you require accommodation for disability during any stage of the recruitment process, please indicate this in your cover letter.

SRI is strongly committed to inclusion and diversity within its community and welcomes all applicants including but not limited to: visible minorities, all religions and ethnicities, persons with disabilities, LGBTQ persons, and all others who may contribute to the further diversification of ideas.