Postdoctoral fellow or research associates in human brain MRI and intervention

The human brain imaging lab at Sunnybrook Research Institute led by Dr. Fa-Hsuan Lin develops new imaging and interventional methods to better understand the human brain functions and to improve the quality of life for neurological and psychiatric patients. We particularly focus on neuromaging and interventional technical development in magnetic resonance imaging (MRI), spectroscopic imaging, electroencephalography (EEG), magnetoencephalography, focused ultrasound, and transcranial electromagnetic stimulation.

We are hiring postdoctoral fellows or research associates with the expertise in MRI pulse sequence design or radio-frequency (RF) hardware. The successful candidates will work on research projects within Dr. Fa-Hsuan Lin’s group utilising his/her expertise to develop MRI acquisitions for pregnant women and psychiatric disorder patients. In particular, new methods combining MRI, EEG, and transcranial magnetic stimulation.

The primary responsibility of the postdoctoral fellows is to carry out research to support experiments for Dr. Lin and other scientists in the Hurvitz Brain Sciences Program. Duties include but are not limited to:

i) Develop novel MRI sequence and reconstructions for high spatiotemporal resolution imaging of structural and functional MRI or develop radio-frequency hardware, including receivers and transmitters, to be integrated with concurrent EEG and TMS.

ii) Work with clinical and industrial collaborators. Collect and analyze data for collaborative projects

iii) Participate in abstract, poster, paper, and grant writing

iv) Provide direct supervision for assigned junior lab members, including graduate, undergraduate students, and summer students.

ESSENTIAL QUALIFICATIONS:

• Ph.D. in electrical engineering, biomedical engineering, physics, or mathematics
• A track record of international peer-reviewed journal publication about MRI acquisition and reconstruction or MRI hardware development. The experience on pulse sequence programming and RF hardware on Siemens scanners is preferred.
• Excellent communication skills
• Well-developed interpersonal skills: ability to listen and communicate, as needed to foster a team approach to research
• Able to set priorities successfully, and coordinate work flow around grant deadlines and grant applications

Language of work: English
Employment term: Temporary Full-time
Location: Toronto

Qualified applicants should forward their resume along with a cover letter and the names of three references to: fhlin@sri.utoronto.ca
Deadline for application: September 30, 2021

We would like to thank all applicants, but only those selected for an interview will be contacted.

In accordance with Canadian Employment and Immigration guidelines, applicants must be eligible to work in Canada. Sunnybrook Research Institute 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.

Sunnybrook Research Institute 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.

Fully affiliated with the University of Toronto