POST-DOCTORAL FELLOWS

The Physical Sciences Platform at Sunnybrook Research Institute (a fully affiliated with the University of Toronto) is currently looking to fill three post-doctoral fellow positions in Dr. Fa-Hsuan Lin’s lab. Specifically, the lab is seeking candidates with a Ph.D. in an MR-related field. Our research focus is on brain functional, structural, and metabolic MRI and MRS studies. Successful candidates will participate in multimodal brain imaging method development and neuroscience as well as clinical applications. In particular, we are interested in integrating electroencephalography (EEG), stereotactic EEG (sEEG), transcranial magnetic stimulation (TMS), and focused ultrasound with MRI. Recruited postdoctoral candidates will have the opportunity to participate in technical (RF/shim coil, pulse sequence, image reconstruction development), clinical (epilepsy/psychiatric disorder), and/or neuroscientific aspects of the research.

JOB RESPONSIBILITIES:
Primary responsibilities will include, but not limited to the following:

- One of the following focus:
  I. Design experiments related to aging, development, psychiatric disorders, or neurological disorders. Collect and analyze multi-modal neuroimaging data (e.g., MRI, EEG, magnetoencephalography (MEG), TMS, invasive recordings)
  II. Develop MR pulse sequences and image reconstruction methods for human brain imaging to improve the spatial, temporal resolution or providing alternative contrasts
  III. Develop MRI RF receivers, transmitters, or shim coils
- Publish international peer-review journal papers and conference abstracts
- Assist grant application

REQUIRED QUALIFICATIONS:
- Ph.D. in neuroscience, cognitive neuroscience, electrical engineering, biomedical engineering, physics, or mathematics
- For different focus, the following experience is expected
  I. Experience in EEG, MEG, MRI, fMRI, invasive brain recording data acquisition and analysis
  II. Experience in MRI pulse sequence development; preferably on Siemens scanners with real-time feedback controls
  III. Experience MRI hardware (RF, gradient, shim coils) development
- A track record of international peer-review journal publication
- Excellent communication skills

In addition, the individual is expected to:
Work within the larger context of Sunnybrook Health Sciences Centre (SHSC) and observe Hospital and department rules and regulations, policies, procedures, practices, safety procedures and current legislation, in particular the Human Rights Code regarding discrimination and harassment.

Ensure the confidentiality of patient, employee, graduate student and Hospital information at all times.
Work cooperatively and constructively with the other members of SRI/SHSC staff.
Perform the above functions in a manner, which reflects the Hospital philosophy and mission of service, while promoting and maintaining good public relations with patients, visitors and Hospital staff.

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.

Qualified applicants should forward their resume along with a cover letter and the names of three references to: fhin@sri.utoronto.ca. Please state clearly in the cover letter which focus is applying to.

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