POST-DOCTORAL FELLOW IN CARDIAC MRI

Position Title:	Post-Doctoral Fellow
Status:	Full-time
FTE:	1.0
Number of Openings:	1 or 2
Platform:	Physical Sciences
Salary Range:	$65,000 - $75,000 CAD

Job Description

Dr. Adrienne Campbell-Washburn's lab at the Sunnybrook Research Institute, University of Toronto, is seeking a motivated postdoctoral fellow to lead projects in on rapid, real-time, and patient-adaptive cardiac imaging approaches. Post-doctoral fellows will join a dynamic and collaborative environment and candidates should have a strong desire to explore new technologies with the purpose of developing clinically deployable solutions.

As one of Canada's Top 10 Research Hospitals, Sunnybrook Research Institute (SRI) is developing innovations in care for the more than 1.3 million patients the hospital cares for annually. SRI is the research arm of Sunnybrook Health Sciences Centre (SHSC), a teaching hospital fully affiliated with the University of Toronto. It is a world-renowned research institute known for developing innovative diagnostic and therapeutic imaging technologies. SRI employs over 300 scientists and clinician-scientists, along with more than 1,300 research staff. Working with scientists are more than 600 highly skilled biomedical and research personnel, as well as over 450 postdoctoral fellows and other trainees. SRI possesses state-of-the-art imaging facilities and computational resources, including clinical and research-dedicated MRI systems, systems for MRI-guided focused ultrasound treatments, a combined X-ray / MRI suite dedicated to research on image-guided interventions, device development facilities, a research CT scanner, a polarizer for 13C MRI research, and a local HPC system.

Sunnybrook Research Institute is the research enterprise of Sunnybrook Health Sciences Centre, a teaching hospital fully affiliated with the University of Toronto. Research spans three Toronto-based campuses, eight programs and three scientific platforms. Our main aims are to understand and prevent disease, and to develop treatments that enhance and extend life. Our vision is to invent the future of health care. Each year, we conduct about $100 million in research across 500,000 square feet, including in the world's first Centre for Research in Image-Guided Therapeutics.

Summary of Duties:

- Develop new MRI techniques (pulse sequences, advanced reconstruction, AI) for cardiac imaging applications.
- Focus on rapid, real-time, and patient-adaptive imaging approaches.
- Collaborate with imaging scientists and cardiologists to develop and deploy new imaging methods.
- Project leadership from study design to software development to data acquisition to deployment.
- Write scientific manuscripts, conference abstracts, and fellowship applications.
- Develop key skills for academic independence, including grant writing, student supervision, and presentations at conferences.
- Candidates should have a strong desire to explore new technologies with the purpose of developing clinically deployable solutions.

Qualifications:

- PhD in biomedical engineering, medical physics, computer science, or related discipline.
- Experience with MRI methods and/or medical image reconstruction is required. Experience in cardiac imaging and pulse sequence development on Siemens platform is preferred.
- Proficiency with programming languages (e.g., Python/C/C++/MATLAB and Git/Bash) and imaging software (e.g., 3D Slicer).
- Strong research record, including multiple first author papers and presentations.
- Strong interpersonal, time management and organizational skills.
- Strong oral and written communication skills in English and attention to detail.

Apply here: https://sunnybrook.ca/join-our-team/current-opportunities/#careersIFrame
Search for reference number "18369"

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