Ste-Justine Hospital University Center
Scientist, Brain & Infant Development Research Axis

Université de Montréal
Assistant Professor of Radiology
Assistant Professor of Biomedical Engineering

***Principal Investigator*: Dr. Mathieu Dehaes, Ph.D.**

Assistant Professor (see professional page)
Department of Radiology and Institute of Biomedical Engineering
Université de Montréal
Sainte-Justine Hospital University Center (HUC, see details about the research center on the website)

Ph.D. position in Optical Coherence Tomography for brain and eye imaging

A Ph.D. position is open at the Institute of Biomedical Engineering at Université de Montréal and the Research Center of the Sainte-Justine Hospital University Center in Montréal, QC, Canada. The laboratory of Dr. Dehaes is seeking one Ph.D. student to develop cutting edge optical imaging techniques for brain and eye imaging. Topics of study specifically focus on developing a spectral-domain optical coherence tomography (SD-OCT) platform for quantitative blood perfusion imaging in the brain and the back of the eye. Candidates with expertise in biomedical engineering, informatics, mathematics, photonics, and physics are preferred. Experience with optical techniques is encouraged.

These projects provide an excellent opportunity for the Ph.D. student to work within a multidisciplinary research team including scientists and clinicians from ophthalmology and neonatology. The Ph.D. student will be encouraged to prepare and submit Ph.D. scholarship proposals to funding organizations and to lead publications. The Ph.D. student will participate in designing innovative methods related to the processing of brain and eye imaging signals and images. The diversity of subject matter will require a creative mind.

The Ph.D. student will be registered through the Ph.D. Program in Biomedical Engineering at University de Montréal and will have a student appointment at Sainte-Justine HUC and access to laboratories and technological platforms.

Qualifications

- M.Sc. and/or B.Sc. degree(s) in biomedical or electrical engineering, physics or informatics engineering, mathematics, physics or a closely related field
- Experience in research; ability to carry out research experiments and projects
- Candidates with experience in the areas of optical imaging such as optical coherence tomography are strongly encouraged to apply
- Programming experience in computer programming languages (e.g. Python, Matlab, etc.)
- Strong written and oral communication skills in French and English required
- Works independently and participates productively as a team player
- Highly motivated, ability to identify potential problems and develop solutions

Application materials

- Cover letter
- CV including publications and references
- University academic transcripts

The Ph.D. position is available immediately and for a duration of 3 years.

How to apply

Interested candidates should forward their application materials to Mme. Geneviève Blain, M.Sc.
Study Coordinator
Canadian Neonatal Brain Platform
Sainte-Justine Hospital University Center
Email: genevieve.blain@recherche-ste-justine.qc.ca