

Call for applications: postdoctoral fellow in MRI data analysis

The research team of the Preventive Medicine and Physical Activity Center (EPIC centre) of the Montreal Heart Institute (MHI) is seeking a postdoctoral fellow to work with a team of neuropsychologists, kinesiologists and neuroimaging specialists.

The hosting research environment is highly pluridisciplinary and benefits from high-end infrastructures: a dedicated research gym coupled with a cerebrovascular health platform (Doppler, NIRS, EEG) as well as a core imaging lab (MRI and PET).

The successful applicant will take part in a recently funded CIHR project exploring the **impact of physical and cognitive trainings on early biomarkers in individuals with cardiovascular risk factors** (CVRF). A cohort of 300 participants will undergo a multimodal MRI protocol. The fellow will be in charge of the analysis of this multimodal MRI data set by first establishing automated tools for the segmentation of vascular markers and second performing group-level analyses to explore the impacts of the interventions and their association with cognitive outcomes.

The qualifications of a successful candidate should include :

- A PhD degree in biomedical engineering, physics, applied mathematics or other related neuroscientific fields.
- experience with medical image processing including freesurfer, FSL and SPM is required.
- Strong background in signal processing, image processing and quantitative analysis.
- Excellent programming skills with either Matlab or python.
- Demonstrated good writing skills and autonomy.

We are seeking candidates with a **strong background in MRI**, as well as a keen interest in methodology and computational modeling. Cognitive neuroscientists, engineers and other candidates with strong numerical and computational skills are particularly encouraged to apply.

The position is **for one year (renewable)** and is expected to start **in fall 2019**.

To apply, please email Dr Louis Bherer (louis.bherer@umontreal.ca) with your **resume** and **cover letter** of your career plans relevant to neuroimaging training and research.