POST-DOCTORAL FELLOWSHIP  
Sainte-Justine University Hospital Research Center

Project
The Sainte-Justine University Hospital Research Center, in association with the Research center of the Geriatric Institute of Montreal CRIUGM, DIRO, and the University of Montreal are looking for a Post-doctoral fellow who will be part of a series of neuroimaging projects including prenatal fetal imaging, neonatal imaging in both animals and humans preterm.

Job Description
The main responsibility of the Post-doctoral fellow will be to participate in two parallel ongoing funded research projects related to models of neonatal brain injury. These key projects are on animal models using an exciting multimodal approach combining MRI and optics to look at neurovascular coupling and brain plasticity in response to injury. It will involve the design and implementation of novel imaging and analysis methods related to resting state BOLD analysis in partnership with Prof. P. Bellec.

Mainly, the candidate will be responsible for:
- Carrying out of the project within the Center and across other institutions;
- Administrative responsibilities including the students’ supervision and IRB communications.

Requirements and skills
We are looking for a highly motivated candidate who will be devoted to our neuroimaging program.

The applicant should also have:
- PhD (received within the past 4 years) in Biomedical Engineering, Medical Physics or equivalent;
- Background in NMR physics with particular emphasis on in vivo spectroscopy, fMRI experiments, data acquisition and processing;
- Analysis of resting-state fMRI
- Experience in pulse sequence programming (ideally on Varian/Agilent animal scanner and GE clinical scanner);
- Knowledge of other computer languages including C++ and Matlab
- General experience with rodent handling;
- Strong verbal and written English knowledge;
- Record of first author research publications in peer-reviewed journals.

Terms of employment
This is a fixed term contract of up to 24 months. The salary and other conditions of employment will be discussed during the interview. Candidates will be supported in their efforts to land funding and scholarships.

Interested applicants should send a cover letter detailing their research interests, an updated CV and three (3) references to the following address:

Dr Gregory Lodygensky

ga.lodygensky@umontreal.ca