Postdoctoral Fellowship in Spinal Cord MRI and Amyotrophic Lateral Sclerosis

We are looking to recruit a post-doctoral fellow in Dr. Julien Doyon's Motor Learning and Plasticity Laboratory, at McGill University, in collaboration with Dr. Benjamin De Leener, at Polytechnique Montreal. The suitable candidate will join a team of post-doctoral fellows and PhD students who are conducting neuroimaging research in motor learning, both fundamental and clinical.

For the current job opening, we seek to recruit a post-doctoral fellow who will conduct a large neuroimaging study on healthy individuals and patients with Amyotrophic Lateral Sclerosis (ALS). This study is part of a research program aiming to characterize the progression of the disease in terms of functional impairment, survival and cognitive impairment, and to develop novel biomarkers for early diagnosis of the disease, the institution of neuroprotective drugs and planning clinical care. The position is based at the Montreal Neurological Institute (the Neuro), which has a dedicated state-of-the-art neuroimaging research facility (McConnel Brain Imaging Center) and will include collaborations with international research centers (Pitie-Salpetriere Hospital, Brain and Spine Institute, University College of London, Sydney University).

The ideal candidate is expected to take the lead in regard to the methodological aspects of the study, addressing specifically the challenges related to the structural and functional neuroimaging of the spinal cord, and to the analysis of complex data sets. The fellow will be involved in all stages of the research projects, from experimental design to data analysis and manuscript writing.

The following requirements are mandatory:
- PhD degree in neuroscience or a related field (obtained less than 5 years before the date of recruitment);
- Experience with structural and functional neuroimaging methods in human participants;
- Experience with neuroimaging data analysis techniques and software (i.e. SPM, FSL or similar);
- Ability to work independently and to collaborate with other team members;
- Excellent organizational and social skills, especially when dealing with patient participants;
- Established publication record attesting the above-mentioned requirements;
- Good proficiency in English (especially scientific writing and oral communication).

The following requirements are assets:
- Experience with spinal cord imaging;
- Experience with multivariate data analysis approaches as implemented in established neuroimaging data analysis software;
- Good proficiency with MatLab and Python programming (or other programming languages, such as Octave, C++, etc.), as well as the "Spinal cord Toolbox".
- French proficiency;
- Research experience with ALS patients (or other movement-related disorders);
- Availability to start as soon as possible.

Salary will be commensurate with education and experience level and the appointment will be renewable on a yearly basis, contingent on satisfactory performance.

If you are interested in this position, please send your CV, a motivation letter and contact information of two individuals who can provide you with references at the following e-mail addresses: julien.doyon@mcgill.ca / benjamin.de-leener@polymtl.ca. The applications will be reviewed starting on July 1st, 2020 and will continue until the position is filled. Only the selected candidates will be contacted.