Posting RESEARCH ASSISANT	
Position Title:	Research Assistant
Hiring Unit:	Montreal Neurological Institute – McConnell Brain Imaging Centre
Supervisor:	Dr. Alain Dagher
Work Location:	Montreal Neurological Institute
Hours/Week & Schedule:	35 hours / full time
Hourly Wage:	\$27.87/hour (salary commensurate with experience)
Planned Start Date & End Date:	May 1, 2019
Date of Posting: (post for 5 working days minimum)	April 2 nd , 2019
Deadline to Apply:	April 26, 2019
PROJECT DESCRIPTION	

To use large datasets such as the UK Biobank, Human Connectome Project, Parkinson Progression Markers Initiative, etc... to answer questions about the role of genetics, brain anatomy and function in vulnerability to neurological or psychiatric illness. These large-scale datasets include multimodal neuroimaging, genetics, cognitive and health and personality questionnaire information. The candidate will develop new research questions and computer pipelines in association with other lab members and the two Pls.

PRIMARY DUTIES

- Plan and develop projects that depend on processing of large neuroimaging datasets to answer questions about brain endophenotypes of mental illness.
- Develop research protocols in neuroimaging, genetics and psychology under the guidance of the PIs.
- Develop docker-based computer pipelines for automated image processing and quality control.
- Pipelines to include anatomical processing (cortical thickness, deformation-based morphometry, tractography), functional MRI (BOLD imaging at rest and during tasks), genetics analysis (e.g. polygenic risk scores, Mendelian randomization).
- Run the lab's local and cloud-based computing infrastructure.
- Interface with local members of the C-Brain consortium.
- Maintain data and programs on Compute Canada.
- Assist students in analysis of brain imaging data.
- Attend weekly lab meetings.

EDUCATION/EXPERIENCE

M.Sc or equivalent in relevant field

OTHER QUALIFYING SKILLS & ABILITIES

Proficiency in: Linux. git, remote computing, containerization technology. Experience with Python, R or Matlab.

- Knowledge of neuroimaging analysis software and methods an asset.
- Knowledge in modern Data Science methods.
- Good communication and organizational skills.
- Desire to teach others and develop teaching material and technical documentation.
- Willingness to learn new data analysis techniques, neuroscience, brain imaging.

HOW TO APPLY

Please submit your application to: Drs. Alain Dagher and Jean-Baptiste Poline

Submit a cover letter and CV to alain.dagher@mcgill.ca and jbpoline@gmail.com

McGill University is committed to equity in employment and diversity. It welcomes applications from indigenous peoples, visible minorities, ethnic minorities, persons with disabilities, women, persons of minority sexual orientations and gender identities, and others who may contribute to further diversification.