

Post-Doctoral Fellow position (full time)

The neuroplasticity research program led by Dr. Alexander Thiel is looking for an experienced professional to fill the position of a full time Post-Doctoral Fellow for the research project:

Imaging Biomarkers of Neuroplasticity and Neurodegeneration in the Living Human Brain.

The project is funded by the Canadian Institutes for Health Research (CIHR) and is a collaboration between McGill University (Lady Davis Institute and Montreal Neurological Institute) and University of Alberta as well as international partners.

Aim of the project is the characterization and pharmacological modelling of the first radiotracer for *in vivo* PET-imaging of the Trk-B/C receptor in humans, a potential direct imaging biomarker for synaptic plasticity. The position involves participation in performing PET imaging studies and acquisition of pharmacological samples, analyses of PET neuroimaging data as well as development of physiological models for quantification of tracer binding potential with arterial input function and metabolite correction. Neurocognitive data from study participants of different ages will be available to investigate the relationship between receptor expression and cognitive profiles in normal ageing.

Funding is available for 2 years, renewable. The selected candidate is expected to apply for externally funded post-doctoral fellowships.

The successful applicant must have a PhD in Neuroscience, Biomedical engineering, Biomedical sciences, Pharmacology or related fields, have demonstrated a strong ability to write scientific peer-reviewed manuscripts and must be familiar with general PET imaging data acquisition and analysis using standard software packages (e.g. MINC-tools, PMOD, SPM, Freesurfer).

Prior experience with physiological modelling of neuroreceptor data as well as being familiar with a Linux/Unix operating system environment as well as knowledge of script programming (e.g. Python) are an asset.

Please send application letter and CV to Mrs. Sharon Shapiro (sshapiro@jgh.mcgill.ca).

The position is available from December 1st 2021 until filled.