

Post-Doctoral Scholar Position

A post-doctoral scholar position is available immediately under the joint supervision of Drs. Neil Duggal and Robert Bartha at the Robarts Research Institute, Schulich School of Medicine & Dentistry at Western University.

Focus

The successful candidate will be primarily responsible for facilitating research studies and projects involving ultra-high field magnetic resonance imaging in the brain in people with spinal cord compression. This includes assistance with protocol development, data acquisition, data analysis, and other research implementation activities. The candidate will assume responsibility for the preparation and publication of manuscripts as well as aid in the development and submission of research grant applications. The applicant must be fluent in image processing methods such as FreeSurfer or 3D Slicer and must have excellent working knowledge of Matlab. The applicant will be responsible for implementing novel image processing pipelines and merging data acquired using different MR contrasts. Experience with the Spinal Cord Toolbox would be an asset.

Environment

The applicant will be embedded within the Centre for Functional and Metabolic Mapping (CFMM) at the Robarts Research Institute. The CFMM is an internationally renowned neuroimaging research centre that houses some of the most sophisticated MRI instrumentation in the world including Canada's only collection of high-field (3T human) and ultra-high field (7T human and 9.4T animal) MR systems, including a world class team of experts in MRI technical development and application. The Centre's primary focus is to establish the anatomical, metabolic and functional characteristics of normal brain development and healthy aging across the lifespan in both human and animal populations; as well as establishing the neurological basis of developmental, neuropsychiatric and neurodegenerative deficits in clinical populations. The Robarts Research Institute at Western University is internationally renowned for cross-disciplinary research in neuroscience and imaging with strong links to the Western Institute for Neuroscience as well as London area hospitals. Many prior postdoctoral researchers are now independent investigators or part of innovative healthcare industries.

Qualifications

The successful candidate will possess:

- A Ph.D. degree in medical biophysics, physics, computer science, or neuroscience with a strong background in advanced imaging techniques is essential;
- Previous research experience with in-vivo magnetic resonance image acquisition and analysis methods is essential;
- Previous research experience within a team environment;
- Previous experience working and analyzing human datasets;
- A strong understanding of clinical research design, research methodology and data analysis;
- Advanced statistical training and knowledge of statistical software packages;
- Evidence of experience in preparation and publication of manuscripts;
- Excellent oral communication and technical writing skills;
- Excellent computer skills (e.g. Microsoft Office, Reference Manager, EndNote, SPSS, FreeSurfer, MatLab);
- Ability to take guided initiative and to work in an organized fashion within a fast-paced research environment, including flexibility in shifting between independent and collaborative work;
- Demonstrated collegiality, professionalism and interpersonal skills.

Application

Rate of Pay: Commensurate with experience.

Applications will be reviewed as received until the position is filled. Please send a letter of application including a one-page description of research experience and interests, updated curriculum vitae, and names & contact information of three referees to: sarah.detombe@lhsc.on.ca