

POSTDOCTORAL RESEARCH POSITION: FETOPLACENTAL MRI

The McKenzie Lab within the Department of Medical Biophysics at Western University, London, Ontario is inviting applications for a 1-2 year Postdoctoral Research Fellowship to oversee development of image registration strategies related to fetal-placental MRI.

The main objectives of the project are to investigate changes in metabolism, fetal fat, and placental function associated with gestational age, as well as assessing the impact of environmental factors such as maternal health and diet. Upcoming projects include examination of 4D blood flow to the placenta and fetus, as well as the study of brain structure and function associated with fetal development. Our laboratory has access to 1.5T and 3T GE scanners, and a Hypersense ^{13}C dynamic nuclear polarizer. This project has support from both CIHR and the NIH.

We are seeking candidates with a strong background in MRI analysis methods. Experience with image registration packages (e.g. FLIRT, Elastix, ANTS) and viewing software (e.g. FSL, Slicer) would be desirable. Experience working with fetal imaging would be highly desirable.

Applicants must have a PhD in biomedical engineering, mathematics, physics, computer science, or a related field. Candidates should have strong programming skills (such as Matlab, Python, C/C++) and be comfortable working with the LINUX operating system.

The candidate is expected to be self-motivated and work independently, as well as be part of a focused multi-disciplinary team. The post-doctoral researcher will have opportunities to develop new ideas and advance their own research interests, as well as publish their work and that of the group. Some supervision of junior students will be expected.

To apply, please send your CV and a statement describing your research interests, career goals and contact information for 2-3 reference letters to: cmcken@uwo.ca