

Post-Doctoral Associate Position in Cardiac PET/MRI

A three-year post-doctoral associate position is available immediately under the joint supervision of Drs. Frank Prato and Jonathan Thiessen at the Lawson Health Research Institute (LHRI), Schulich School of Medicine & Dentistry at St. Joseph's Health Centre and Western university. This position is funded from an NSERC/Alliance grant including private sector partners London X-Ray Associates (LXA) and Siemens Canada.

The successful candidate will be primarily responsible for facilitating cardiac imaging research studies and projects involving hybrid PET/MRI. These projects will include a) preclinical large animal models of myocardial infarction and myocardial inflammation, b) studies in healthy volunteers and c) studies in cardiac patients with myocardial inflammation. The successful candidate will participate in a) PET/MRI protocol development, b) data analysis c) the preparation and publication of manuscripts, d) research grant applications, e) animal protocol development and f) human ethics submissions. Researchers at the Lawson Imaging research program have conducted innovative hybrid PET/MRI (Siemens Biograph mMR) since 2012 in technology development, brain imaging, prostate imaging and cardiac imaging. The PET/MRI platform includes EEG and multi-nuclear capacity. Present cardiac imaging programs include extensive international, national and local research collaborations. The integration, at one site, of hybrid PET/MRI, small and non-primate large animal facilities and cyclotron and radiochemistry facilities makes it possible to do PET studies with short-lived radioisotopes which cannot be done elsewhere in Canada and only at a very few international sites. The successful candidate will join a cardiac PET/MRI team of medical physicists, radiologists, a nuclear medicine MD specialist, a research registered nurse, large animal technologists, cardiologists, post-doctoral fellows and graduate students imbedded in the extensive Lawson Imaging Research Program. Private sector partner collaborations are extensive providing opportunities to experience both an academic hospital and private sector research environment. To date all former PET/MRI PDFs have found positions in hospital/academic and industry research programs. The successful candidate will also be mentored by a cardiologist (Dr. Gerald Wisenberg) and a radiologist with LXA (Dr. Ali Islam).

The preferred successful candidate will possess:

- A Ph.D. degree in medical biophysics, physics, biomedical engineering or equivalent with a focus on MRI and/or PET
- Experience with MRI and/or PET data acquisition image analysis, statistics and programming (MATLAB, C/C++ or Python)
- Experience with imaging of large animal models of cardiac disease
- Experience with MRI and/or PET imaging of human patients with cardiac disease
- Experience with MRI and/or PET animal and human ethics submission
- Experience with the handling of radioactive materials
- Previous research experience within a team environment
- Previous experience working and analyzing large 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 (Microsoft Office, Reference Manager, EndNote, SPSS, Brain Voyager, 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.

Rate of Pay within the range of \$40,000-\$50,000 per year commensurate with experience and receiving 13% benefits.

Application deadline: June 1, 2021. 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 Shelagh Ross: sross@lawsonimaging.ca with the subject line "postdoctoral application".

Please visit the Postdoctoral Associate Benefits webpage for information:
https://www.uwo.ca/hr/benefits/your_benefits/pda/index.html

We invite applications from all qualified individuals. Western is committed to employment equity and diversity in the workplace and welcomes applications from women, members of racialized groups/visible minorities, Aboriginal persons, persons with disabilities, persons of any sexual orientation, and persons of any gender identity or gender expression. Accommodations are available for applicants with disabilities throughout the recruitment process.