



Department of Medical Biophysics
Schulich School of Medicine & Dentistry
Western University



Baines Research Chair in Translational Cancer Imaging

The Department of Medical Biophysics, within the Schulich School of Medicine & Dentistry, invites applications for a full-time probationary (tenure-track) faculty position at the rank of Assistant Professor, to begin on July 1, 2018. This position will have a research focus on computational analysis of biomedical images for cancer research, including quantitative biological image analysis. The successful candidate will have a primary appointment in the Department of Medical Biophysics and a cross appointment in the Department of Oncology in the Schulich School of Medicine & Dentistry. The successful candidate may also be eligible for supervisory membership in the Biomedical Engineering Graduate Program, subject to approval by the program.

The position will fit into a growing initiative in translational cancer imaging research at the Gerald C. Baines Centre for Translational Cancer Research (the “Baines Centre”) and the Victoria Hospital Cancer Research Laboratories at London Health Sciences Centre (LHSC). Established in 2010, the Baines Centre co-locates basic and clinician scientists within the London Regional Cancer Program (LRCP) at LHSC and houses an imaging research laboratory, radiochemistry laboratory, and clinical trials unit. The adjacent Victoria Hospital Cancer Research Laboratories are home to cancer biology, medicinal chemistry and experimental physics programs. The successful applicant will build on a rich culture of collaboration between Baines Centre investigators and investigators from Biochemistry, Medical Physics, Oncology, Medical Imaging, Surgery, Pathology and Computer Science within LHSC/LRCP, the Lawson Health Research Institute (LHRI), the Robarts Research Institute (RRI) and citywide. The successful applicant will establish an independent, externally funded research program focused on development and validation of cutting-edge techniques for the acquisition and extraction of cancer-relevant information from biomedical image data. The successful applicant will:

1. Have demonstrated expertise and experience in computational algorithm development and validation for image segmentation, registration or classification at the cellular, tissue or organ level. Such expertise may include, but is not limited to, one or more of the following:
 - a. Machine learning, including deep learning techniques, for cancer detection, diagnosis, prognosis, and treatment response based on imaging, biologic, genomic, and/or clinical data.
 - b. Correlation of medical and biological images to histologic, genomic, proteomic, and metabolomic profiles.

- c. Medical image processing for image-guided procedures in oncology.
 - d. Design and execution of expert observer studies supporting clinical translation of novel medical image analysis tools.
2. Have demonstrated potential to apply these computational techniques in the development and interpretation of pre-clinical or clinical models of disease.
 3. Have demonstrated experience working in a multi-disciplinary, team-oriented research environment, including establishment and cultivation of effective intramural and extramural research collaborations with clinicians and basic scientists.

Applicants must possess a PhD degree in Biophysics, Biomedical Engineering, Computer Science, or a related discipline, and exhibit a strong record of peer-reviewed publications, with a high degree of potential for garnering independent grant support and participating in translational research teams. The applicant must have demonstrated a potential for developing innovative approaches within a collaborative research environment and a minimum of two years of relevant postdoctoral research experience. Compensation for this position will be commensurate with qualifications and experience.

The Medical Biophysics departmental website (<http://www.schulich.uwo.ca/biophysics/>) describes our collaborative research-intensive environment involving over 100 graduate students and 70 principal investigators from the University and its affiliated research institutes across the city of London: Lawson Health Research Institute, Robarts Research Institute, the Biomedical Imaging Research Centre, and our affiliated hospitals.

Western is one of Canada's leading research-intensive universities, and Schulich Medicine & Dentistry has a long history of excellence in basic biomedical, applied and clinical research. Western has a full range of academic and professional programs for over 37,000 undergraduate and graduate students. The university campus is in London, with a metropolitan census of approximately 530,000, located midway between Toronto and Detroit. London boasts an international airport, galleries, theatre, music and sporting events and is located close to several lakes and facilities for outdoor activities (www.goodmovelondon.ca). Western's Recruitment and Retention Office is available to assist in the transition of successful applicants and their families to the university and city.

Please send a detailed *curriculum vitae*, a statement of research objectives, the names of three referees, and the form available at: <http://www.uwo.ca/facultyrelations/faculty/Application-FullTime-Faculty-Position-Form.pdf> is included with your application to:

Professor Jefferson Frisbee
Chair, Department of Medical Biophysics
c/o Kathleen Mendelin
Medical Sciences Building, M405
Western University
London, Ontario Canada N6A 5C1

FAX: (519) 661-2123
EMAIL: kathleen.mendelin@schulich.uwo.ca

Applications will be accepted until the position is filled. Review of applications will begin after February 24, 2018. Anticipated start date is July 1, 2018 or as negotiated.

Business Addresses:

Western University, 1151 Richmond Street, N., London, Ontario N6A 5B8, www.uwo.ca

Positions are subject to budget approval. Applicants should have fluent written and oral communication skills in English. The University invites 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.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents.

Accommodations are available for applicants with disabilities throughout the recruitment process. If you require accommodations for interviews or other meetings, please contact Kathleen Mendelin at kathleen.mendelin@schulich.uwo.ca phone 519-661-2111 ext. 86788.

Posted on Faculty Relations website January 24, 2018.