



The Molecular Medicine Lab co-located in the Department of Chemistry & Biomolecular Sciences at the University of Ottawa and the University of Ottawa Heart Institute is accepting applications for a postdoctoral fellowship in the development of radiotracers for atherosclerosis. The anticipated start date will be as soon as possible with a duration of 2 years. The postdoctoral fellow will be involved in projects that will develop novel radiotracers to map cardiovascular inflammation and test the agents in animal models of atherosclerosis with the goal of rapid clinical translation.

Molecular Medicine Lab Background Information

The Molecular Medicine Lab (located in Ottawa, Canada) develops and implements molecular imaging probes across fluorescent, MRI and PET modalities. With a focus on inflammation/cell stress and enzyme activities key to cancer therapy response, the Molecular Medicine Lab is comprised of chemists, biochemists and biologists that design, synthesize and implement new molecular imaging agents. The laboratory has access to state-of-the-art facilities for compound synthesis and characterization, radiochemistry, cell culture and microscopy, and small animal MRI and PET instrumentation. More information about the research group can be found here: <https://www.molmedlabuo.com/>

Research Project Overview

The postdoctoral fellow will be engaged in the development of novel radiotracers targeted to new imaging biomarkers key to the diagnosis of atherosclerosis. In this project, the postdoctoral fellow will synthesize the precursor and cold standard compounds necessary for radiolabeling, and develop the radiofluorination approach. With radiotracer in hand, the postdoctoral fellow will then evaluate the performance of the radiotracer in mouse models of atherosclerosis by *in vivo* and *ex vivo* techniques. This project will be completed in close collaboration with the laboratory of Dr. Katey Rayner at the University of Ottawa Heart Institute, who are internationally-renowned experts in atherogenesis and the molecular determinants of atherosclerosis.

Research Project Supervisor and Principal Investigator

Dr. Adam Shuhendler

Salary

The postdoctoral fellow will be offered a competitive salary commensurate with experience. Registering as a postdoctoral fellow at the Office of the Vice-Provost, Graduate and Postdoctoral Studies (OVPGPS) is mandatory prior to undertaking your fellowship. Registering will allow you access to, among other things, a testimonial of completion, [conference travel grant](#) and activities offered through the [Altitude](#) professional skills-development program.

Position Duties and Responsibilities

The incumbent of this position will, under the direction of Dr. Shuhendler, be responsible for

leading the research activities of the project, including but not limited to the following core responsibilities:

- Synthesis of precursor compounds and cold standards
- Radiofluorination using a GE TRACERlab FX/N Pro module
- Radiopharmaceutical formulation
- Assisting with radiotracer development for projects across the research program
- *Ex vivo* confirmation of target engagement

Job Requirements

- Ph.D. in Chemistry or a related field with expertise in radiofluorination
- Expertise in synthetic organic chemistry
- Experience with GE TRACERlab FX/N Pro module
- Animal handling, microPET, and autoradiography experience are assets

The University of Ottawa and the Molecular Medicine Lab are committed to fostering diversity within its community as a source of excellence, cultural enrichment, and social strength. We welcome those who would contribute to the further diversification of our university including, but not limited to: women; visible minorities; First Nations, Inuit and Métis peoples; persons with disabilities; and persons of any sexual orientation, gender identity and/or expression. The Molecular Medicine Lab understands that career paths vary. Legitimate career interruptions will in no way prejudice the assessment process and their impact will be taken into careful consideration.

We thank all applicants for their interest, however, only those selected for an interview will be contacted. If contacted for an interview, please inform us should accommodation be required, and arrangements will be made in a timely manner. All qualified candidates are encouraged to apply.

How to Apply

Candidates that would like to apply for this fellowship opportunity are invited to submit their cover letter along with a resume/CV to Dr. Adam Shuhendler at ashuhend@uottawa.ca.