

Postdoctoral Fellow – Microsampling devices for lipidomics

Program description: This research program will focus on the design and testing of new microextraction-based microsampling devices for measurement of lipid biomarkers, specifically oxylipins. Successful candidate will be responsible to design and develop suitable prototype microextraction devices for oxylipin specimen collection and to test their performance first in vitro and then in vivo. The design stage will include the evaluation of several different device formats, and selection of materials for inclusion on the device to both enhance extraction and stabilize the selected analytes of interest. Validation experiments will include testing of large set of clinical samples, inter-laboratory study and in-depth comparison to other existing commercial devices. All samples will be analyzed using liquid chromatography-mass spectrometry using established lipidomics workflows. The successful candidate will also regularly collaborate with clinical researchers and communicate findings with multidisciplinary scientific teams.

Academic qualifications required:

- PhD in Chemistry, Biochemistry, Biomedical Engineering or related discipline awarded within the past five years preceding the date of appointment
- Strong publication and presentation record
- Established expertise in separation science and mass spectrometry
- Experience with biomedical device design and testing/validation is a strong asset
- Expertise in lipidomics/metabolomics or biomarker discovery is an asset

Eligibility requirements:

- Applicants must adhere to the postdoctoral fellow eligibility criteria outlined in Concordia University's Postdoctoral Policy ([VPRGS-4.pdf \(concordia.ca\)](#)).

Timeline and Application Process:

- Preferred start date is before June 1, 2024 but can be negotiated
- Applications are accepted until the position is filled. First review of applications will start on Mar 15, 2024

Submission process:

- All documents must be submitted to dr. Dajana Vuckovic at (dajana.vuckovic@concordia.ca)

Application checklist:

- One to three (1-3) page research statement demonstrating fit with the program described above
- Current curriculum vitae demonstrating research excellence and a capacity for leadership in the domain
- Two letters of reference from academic supervisors or current employers to be sent via e-mail directly by the referee to: dr. Dajana Vuckovic (dajana.vuckovic@concordia.ca)