



## Canada Research Chair (Tier II) in Chemical Lipidomics, Faculty of Science

The **Departments of Biological Sciences and Chemistry** in the **Faculty of Science** at the **University of Calgary** invite applications for a **Canada Research Chair (CRC) Tier II in the area of Chemical Lipidomics**. The successful candidate will be appointed at the rank of **Assistant Professor (tenure-track)** or in exceptional cases as an Associate Professor (with tenure) and will be nominated for an NSERC Tier II Canada Research Chair. The candidate's program is expected to combine recent advances in analytical technology and big biological data analysis via biochemical techniques, including high-resolution mass spectrometry, to radically expand the practical scope of Lipidomics analyses of the complex molecular phenotypes that contribute to health or disease states in all kingdoms of life. The anticipated start date for the position is September 1st, 2021.

### Eligibility criteria

CRC Tier II Chairs are intended for exceptional emerging scholars (i.e., candidates must have been an active researcher in their field for fewer than 10 years at the time of nomination). Candidates who are more than 10 years from having earned their highest degree and who have had career breaks resulting from leaves, clinical training, etc., may have their eligibility for a CRC Tier II Chair assessed through the program's Tier II justification process. Please contact University of Calgary's Office of Research Services for more information: [ipd@ucalgary.ca](mailto:ipd@ucalgary.ca).

Further information about the Canada Research Chairs Program can be found on the Government of Canada's CRC website, including eligibility criteria: [www.chairs-chaires.gc.ca](http://www.chairs-chaires.gc.ca) and [www.chairs-chaires.gc.ca/program-programme/nomination-mise\\_en\\_candidature-eng.aspx](http://www.chairs-chaires.gc.ca/program-programme/nomination-mise_en_candidature-eng.aspx).

### The Role and Expected Duties

The Chair will establish an active research program that focuses on the molecular roles that the lipidome plays in biology. Research by the candidate should focus on the analysis of lipids on the systems-level scale (Lipidomics). Examples of Lipidomics research include, but are not limited to, time- and stressor-dependent perturbations in the lipidomes related to cell-cell signaling, role of lipids in promoting or resolving inflammation, microbial lipidomics, whole-body energy regulation, the lipid underpinnings of metabolic disease, unpacking the role lipids play in ageing and tumorigenesis, complex lipid changes induced by viral infections, and the impacts of xenobiotics on lipid and hormonal metabolism. The proposed CRC will develop the Lipidomics platform necessary to investigate emerging areas of biology.

The proposed position will build on existing UCalgary strengths in metabolomics, proteomics, and peptidomics. This new CRC-based program will work closely with the Calgary Metabolomics Research Facility (CMRF), one of Canada's largest mass spectrometry facilities for small molecules, and will interface with the existing suite of structural biology, physical chemistry, and wet laboratory facilities housed in the Department of Biological Sciences. The CRC will advance institutional leadership in the analysis of big data and augment our existing excellence in biomolecular computing through the Centre

for Molecular Simulation (CMS). The **CRC in Chemical Lipidomics** will provide a cross-disciplinary bridge for existing programs in Biochemistry (BCEM), Cell, Microbial and Molecular Biology (CMMB), Nanotechnology/Material Chemistry, and Biological/Medicinal Chemistry in the Departments of Biological Sciences and Chemistry. The Chair will have unique opportunities to interact with leading researchers in health sciences, structural biology, microscopy, structural proteomics, and technology development.

The long-term goal for the Chair is to develop a vibrant and internationally recognized research program in alignment with the recently developed institutional “Growth Through Focus” strategy and the Faculty of Science strategic research plan. “Growth Through Focus” is built around three big ideas that will differentiate our university and drive growth: transdisciplinary scholarship, integration with our community and future-focused program delivery that will see us expand flexibility and customizability of the UCalgary experience. To learn more about this vision please see:

<https://www.ucalgary.ca/unstoppable>

The Chair position fits squarely within the institutional vision catalyzing trans-disciplinary research in “Life Sciences”, a foundational pillar of the “Growth Through Focus” program. The Chair position will have an opportunity to participate in the transdisciplinary “Public Health” and “One Health” initiatives, which will expand the scope of our transformational work on animal and ecosystem health, as well as, more broadly, assist in the creation and maintenance of healthy, resilient, and secure cities and societies. The position will specifically support research priorities in “Engineering Solutions for Health”, “Infection, Immunity, and Chronic Diseases” and the Faculty of Science grand challenge “Personalized Health at the Molecular Level.” The successful candidate will possess the attributes and desire needed to lead research initiatives within strategic interdisciplinary themes at the University of Calgary, build on current strengths, develop strategies for future growth, and promote program development combined with both student engagement and experience. Additionally, the Chair will play an important role in teaching and research supervision of students in the Departments of Biological Sciences and Chemistry undergraduate and graduate programs. Service to the Department, Faculty, University, and Community is also expected.

The University of Calgary is a young and ambitious comprehensive research institution. Located in the nation’s most enterprising city, the university is making tremendous progress on its Eyes High journey to be recognized as one of Canada’s top five research universities, grounded in innovative learning and teaching, and fully integrated with the community it both serves and leads. The student body includes 28,000 undergraduate and 6,800 graduate students enrolled across 100 different undergraduate, graduate or professional degree programs. The University of Calgary inspires and supports discovery, creativity and innovation across all disciplines. For more information, visit [ucalgary.ca](https://www.ucalgary.ca).

Calgary is one of the world's cleanest cities and has been named as one of the world's most livable cities. Calgary is a city of leaders - in business, community, philanthropy, and volunteerism. Calgarians benefit from a growing number of world-class dining and cultural events and enjoys more days of sunshine per year than any other major Canadian city. Calgary is less than an hour's drive from the majestic Rocky Mountains and boasts the most extensive urban pathway and bikeway network in North America.

## **Qualifications**

The University of Calgary requires that the successful candidate possess a PhD or equivalent science degree in biochemistry, chemistry (analytical, organic or physical), cellular biology or molecular biology, and relevant post-doctoral experience.

The successful candidate at the **Assistant Professor** level must have a track record of publications in high quality journals, prior experience in working with external research funding programs including, but not limited to, peer-reviewed post-doctoral fellowships programs, and participation in effective teaching at the University level.

The successful candidate at the **Associate Professor** level must have a strong track record of publications in high quality journals, evidence of securing ongoing external research funding, effectiveness in teaching at the University level, and evidence of effective graduate student supervision.

### **How to Apply**

Interested individuals are encouraged to apply online via the 'Apply Now' link. Please note that the application process allows for only four attachments. Your four application attachments should be organized to contain the following (which may require you to merge documents, such as publications):

- Cover letter and curriculum vitae, including the name and contact information of three referees
- Statement of research interests
- Statement of teaching philosophy/teaching dossier
- Statement on equity, diversity and inclusion

Questions may be addressed to:

Sergei Noskov, Professor and Associate Head (Research)  
Department of Biological Sciences  
+1-403-210-7971  
[snoskov@ucalgary.ca](mailto:snoskov@ucalgary.ca)

### **Applications are accepted until April 09, 2021**

The University of Calgary has launched an institution-wide [Indigenous Strategy](#) in line with the foundational goals of [Eyes High](#), committing to creating a rich, vibrant, and culturally competent campus that welcomes and supports Indigenous Peoples, encourages Indigenous community partnerships, is inclusive of Indigenous perspectives in all that we do.

*The University of Calgary recognizes that a diverse staff/faculty benefits and enriches the work, learning and research experiences of the entire campus and greater community. We are committed to removing barriers that have been historically encountered by some people in our society. We strive to recruit individuals who will further enhance our diversity and will support their academic and professional success while they are here; in particular, we encourage members of the four designated groups (women, Indigenous Peoples, people with disabilities, members of visible minorities, and sexual orientation and gender identities) to apply. All qualified candidates are encouraged to apply; however Canadians and permanent residents will be given priority. To ensure a fair and equitable assessment, we offer accommodation at any stage during the recruitment process to applicants with disabilities.*

*Questions regarding diversity or requests for accommodation can be sent to Human Resources  
([hrhire@ucalgary.ca](mailto:hrhire@ucalgary.ca))*

The University of Calgary recognizes that candidates have varying career paths and that career interruptions can be part of an excellent academic record. Candidates are encouraged but not required to provide any relevant information about their experience and/or career interruptions to allow for a fair assessment of their application. Selection committees have been instructed to give careful consideration to, and be sensitive to the impact of career interruptions, when assessing the candidate's research productivity.

To learn more about academic opportunities at the University of Calgary and all we have to offer, view our [\*\*Academic Careers website\*\*](#). For more information about the Faculty of Science visit [\*\*Careers in the Faculty of Science\*\*](#).

Posting Date: March 10, 2021

Closing Date: April 09, 2021