Canada Research Chair (Tier II) in Lipidomics, Department of Biological Sciences and Department of Chemistry

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 Lipidomics**. The successful candidate will be appointed at the rank of Assistant Professor (tenure-track) or in exceptional cases at the rank of Associate Professor (with tenure), and will be nominated for an NSERC Tier II Canada Research Chair. The candidate's research program is expected to harness advanced lipidomics, proteomics and metabolomics technologies to investigate the complex molecular phenotypes of lipids, and understand how these contribute to fundamental biological processes in different forms of life. The anticipated start date for the position is May 1st, 2023.

Eligibility criteria

CRC Tier II Chairs are intended for exceptional emerging scholars. At the time of nomination, a candidate must have been an active researcher in their field for fewer than 10 years since the conferral of their highest academic degree (PhD or equivalent). Candidates who are more than 10 years past their highest conferred degree but who have had career breaks resulting from leaves, clinical training, and research interruptions due to the COVID-19 pandemic 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.

Further information about the Canada Research Chairs Program can be found on the Government of Canada's CRC website, including eligibility criteria. See: www.chairs-chaires.gc.ca and www.chairs-chaires.gc.ca/program-programme/nomination-mise_en_candidature-eng.aspx.

Role and Expected Duties

The Chair will establish an active research program that focuses on molecular roles of the lipidome in biology. Research by the candidate should harness lipidomics, metabolomics, or proteomics strategies to better understand the functions of lipids within cells and organisms. Examples of research themes include, but are not limited to: time- and stressor-dependent perturbations of 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; roles of lipids in ageing and tumorigenesis; complex lipid changes induced by viral infections; and impacts of xenobiotics on lipid and hormonal metabolism.

The proposed position will build on existing UCalgary strengths in metabolomics, proteomics, and peptidomics. This Chair 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 Chair 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). They 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 within the Departments of Biological Sciences and Chemistry. Unique

opportunities are available to interact with top researchers in health sciences, structural biology, microscopy, structural proteomics, and technology development.

The long-term goal for the CRC chair in Lipidomics is to develop a vibrant and internationally recognized research program in alignment with the recently developed institutional “Growth Through Focus” strategy. “Growth Through Focus" is built around three big ideas that will drive growth: transdisciplinary scholarship, deeper community integration, and future-focused program delivery. To learn more about this vision please see: https://www.ucalgary.ca/unstoppable.

Priority research areas in the University of Calgary and the Faculty of Science include "Life Sciences", "Personalized Health at the Molecular Level" and "One Health" (https://research.ucalgary.ca/one-health). One Health at UCalgary aims to systemically understand health issues on multiple scales spanning environments, communities, and individuals. The successful candidate will possess the attributes and desire needed to lead research initiatives within these strategic transdisciplinary themes, build on current strengths, develop strategies for future growth, and promote program development combined with both student engagement and experience. The main research program should fall within the scope of funding of NSERC (The Natural Sciences and Engineering Research Council of Canada). However, the CRC may receive funding from a combination of research agencies (NSERC, CIHR, Genome Canada, Alberta Innovates, etc.) and industry. 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 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.

Calgary has consistently been named as one of the world's most livable cities. It 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 enjoy more days of sunshine per year than in any other major Canadian city. Calgary is less than an hour's drive from the majestic Rocky Mountains and has the most extensive urban pathway and bikeway network in North America.

Qualifications

- Academic Credentials: PhD (or equivalent) in biochemistry, chemistry (analytical, organic or physical), cellular biology, or molecular biology, and relevant post-doctoral experience
- Research Output and Impact: A strong publication record of high-impact publications in prominent Journals, and/or a strong record in alternative, non-traditional outputs such as (but not limited to): community outreach (popular press, interviews, public or online seminars, scientific social media), and resource development (online databases, protocols, software tools). Applicants may provide evidence of research impact and translation (follow-up studies, entrepreneurial activities, patents, social action, use of results in clinical trials).

- Research Plan: Strong plan for development of future independent research. The main research program should fall within the scope of funding of NSERC (The Natural Sciences and Engineering Research Council of Canada). Entrepreneurial spirit and the ability to interact with industry is a definite asset.
- Teaching Experience: Experience in teaching in Biochemistry/Chemistry (especially Metabolomics/Lipidomics), or a potential for teaching excellence
- Evidence of collaboration: Evidence of collaborative research and collegiality
- Commitment to EDI: Demonstrated commitment to creating a culture of equity, diversity, and inclusion
- Supervisory or leadership record: Experience supervising students either as a PI or as a senior researcher (e.g. "unofficial" postdoctoral mentoring of students) or potential for supervisory excellence. Evidence of leadership ability or of leadership potential.

The successful candidate at the **Assistant Professor** level should have a track record of publications in high quality journals, prior experience in working with external research funding programs such as 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 candidates 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:

- Cover letter and curriculum vitae, including the names and contact information of three referees (no references are needed at the initial application stage)
- Statement of research interests (1-3 pages)
- Statement of teaching philosophy/teaching dossier (1-2 pages)
- Statement describing prior contributions and/or philosophy in the area of Equity, Diversity, and Inclusion (EDI). This should include a description of your ability to work within a culturally diverse and international student, staff, and faculty body (up to 1 page)

Questions may be addressed to:
Peter Dunfield, Professor and Associate Head (Research)
Department of Biological Sciences
pfdunfie@ucalgary.ca

Applications are accepted until October 11, 2022.

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 the impact of career interruptions when assessing research productivity.

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.

As an equitable and inclusive employer, 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 designated groups (women, Indigenous peoples, persons with disabilities, members of visible/racialized minorities, and diverse sexual orientation and gender identities) to apply. To ensure a fair and equitable assessment, we offer accommodation at any stage during the recruitment process to applicants with disabilities. Questions regarding [diversity] EDI at UCalgary can be sent to the Office of Equity, Diversity and Inclusion (equity@ucalgary.ca) and requests for accommodations can be sent to Human Resources (hrhire@ucalgary.ca).

All qualified candidates are encouraged to apply; however Canadians and permanent residents will be given priority. In this connection, at the time of your application, please answer the following question: Are you a Canadian citizen or a permanent resident of Canada? (Yes/No)

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 visit **Careers in the Faculty of Science**.

The University strongly recommends all faculty and staff are fully vaccinated against COVID-19.

About the University of Calgary

The University of Calgary is Canada's leading next-generation university – a living, growing and youthful institution that embraces change and opportunity with a can-do attitude. 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 University of Calgary inspires and supports discovery, creativity and innovation across all disciplines. For more information, visit **ucalgary.ca**.

About Calgary, Alberta

Calgary is one of the world's cleanest cities and has been named one of the world's most livable cities for years. 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 enjoy 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.

Posting Date: August 26, 2022
Closing Date: October 11, 2022