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**Canada Research Chair (Tier 2) in Environmental Exposomics and Integrative Toxicology**

The [University of Saskatchewan](#) (USask) and [School of Environment and Sustainability](#) (SENS) are pleased to invite applications for a **Tier 2 Canada Research Chair** in *Environmental Exposomics and Integrative Toxicology*. The [Canada Research Chairs Program](#) is the flagship of a national strategy to make Canada a world-leading country in research and development.

Chemical contamination of the environment and the resulting health impacts on humans, animals and other biota represent one of the major challenges of the 21<sup>st</sup> century. An *exposomics* approach addresses the cumulative risk associated with interactions among multiple environmental exposures, biological perturbations, internal biochemical pathways, and epigenetic variations over the life span of an organism. Characterizing the exposome requires a holistic understanding of the abiotic and biotic processes that drive external exposure, uptake into biota, internal distribution, target site activity, and the interaction of chemicals.

This CRC in Environmental Exposomics and Integrative Toxicology aims to attract an interdisciplinary scientist that is uniquely qualified to advance the field of exposome science by fusing modern systems biology approaches with advanced analytical technologies. The ideal candidate will work at the intersection of biology and chemistry, will use cutting-edge technology and approaches to advance the science of chemical exposure in toxicology, and will synergize the current world-class expertise in environmental toxicology and chemistry at the University of Saskatchewan.

The successful nominee will initiate and lead an innovative and impactful program of research, foster extensive interdisciplinary and multi-sector collaborations, and raise the profile and impact of USask through an innovative research program and knowledge mobilization within and beyond academia. The academic home of this position will be in SENS and the chair would be based in the Toxicology Centre.

The [School of Environment and Sustainability](#) is home to a diverse and interdisciplinary group of faculty who engage in collaborative and community-engaged scholarship to solve pressing issues that concern our planet, including complex sustainability challenges related to global water security, regenerating and sustaining healthy ecosystems, conserving biocultural diversity, assessing and managing pollution, improving energy security, and advancing good environmental governance – all aligned with [USask Signature Research Areas](#) and several of the [UN's 2030 Sustainable Development Goals](#).

The [Toxicology Centre](#), established in 1982, is the hub of USask toxicological research and provides administrative support for the interdisciplinary toxicology undergraduate and graduate programs. Laboratories at the Centre are well equipped with a comprehensive array of modern research infrastructure, including full analytical chemistry and molecular biology capabilities. The Centre also houses the 650 m<sup>2</sup> Aquatic Toxicology Research Facility for culturing and experimentation with aquatic animals. The Centre enables highly interdisciplinary research that unleashes discovery to tackle complex problems and seek sustainable solutions that benefit society.

The University of Saskatchewan is one of Canada's top 15 research-intensive universities and houses superb analytical facilities (e.g., the [Canadian Light Source Synchrotron](#), the

[Saskatchewan Structural Science Centre](#)). Its main campus is situated in Saskatoon, Saskatchewan, a city on the banks of the South Saskatchewan River known for its quality of life, diverse and thriving economic base, affordability, a vibrant arts community, and a full range of leisure opportunities. The University has a reputation for excellence in teaching, research and scholarly activities, and offers a full range of undergraduate, graduate, and professional programs to a student population of over 25,000.

## **Qualifications**

We aim to recruit a rising research star to continue the legacy of world-class research conducted by the USask Toxicology Centre. The ideal candidate will link environmental exposure of organisms (incl. humans and animals) to contaminants with health outcomes by exploring how life-long exposure dynamics cumulatively perturb biomolecular processes that drive health phenotypes. The successful candidate should be able to link chemical exposure to apical outcomes using state-of-the-science analytical, molecular and biochemical tools, and novel experimental approaches. The candidate should ideally have classical biology and toxicology training allowing them to focus on mechanistic and forensic toxicology problems, with added expertise in advanced analytical and instrumental methods for exposure assessment of chemicals. The reverse expertise profile is also acceptable (i.e., training in analytical, molecular and instrumental methods with expertise in biology and toxicology).

Overall, we are seeking candidates who demonstrate excellence, innovation and creativity through an outstanding record of high-quality research with demonstrated potential to achieve national and international recognition in their fields in the next five to ten years. The successful candidate is expected to have a track record of leading a vibrant, externally funded research program. SENS values diversity and believe it is essential to an innovative, high-quality and modern academic community. Therefore, we strongly encourage candidates from underrepresented groups to apply. All candidates must demonstrate a commitment to equity, diversity and inclusion in their teaching, mentorship and service. The successful candidate will be expected to contribute to teaching at both the undergraduate and graduate levels, and to mentorship that supports diversity and inclusion. Applicants should demonstrate excellence in graduate student and postdoctoral fellow supervision, an outstanding ability at securing competitive external research funding, and a strong record of research output. This latter criterion will be assessed broadly and we encourage candidates to consider their research impact, including academic publications and other relevant measures of research output.

Tier 2 CRCs are intended for exceptional emerging scholars with less than 10 years of experience as an active researcher at the time of nomination. Applicants who are more than 10 years past the year when they earned their highest degree and where career breaks exist (e.g., maternity, parental, extended sick leave, clinical training etc.) may have their eligibility for a Tier 2 Chair assessed through the program's Tier 2 justification process. Please contact the USask Research Acceleration and Strategic Initiatives (RASI) unit for more information ([راسي.اسك.كا](mailto:راسي.اسك.كا)).

The successful applicant will be asked to prepare the Tier 2 CRC proposal with the assistance of USask and, if successful, will subsequently be appointed as a tenured or tenure-track faculty member at the assistant or associate professor level. The CRC nomination is subject to review and final approval by the Canada Research Chairs Program. The faculty appointment is conditional on approval of the CRC.

The standard salary bands for this position for the 2022-2023 academic year are as follows: Assistant Professor: \$99,945 - \$120,099; Associate Professor: \$120,099 - \$140,253, with the possibility of merit-based additions. A chair stipend is also provided. This position includes a

comprehensive benefits package which consists of a dental, health and extended vision care plan; a pension plan, life insurance (compulsory and voluntary), academic long-term disability, sick leave, travel insurance and death benefits; an employee assistance program; a professional expense allowance; and a flexible health and wellness spending program.

### **How to Apply**

Applications for this position should include a cover letter outlining the candidate's fit with the advertised position and with SENS and the Toxicology Centre, a detailed curriculum vitae, a summary of research achievements (1-page max) and teaching interests (1-page max), an outline of the proposed research program (2-page max), a statement on how the candidate's teaching, research, and/or mentorship demonstrates a commitment to diversity and inclusion (1-page max), and the names and contact information for three referees. Applications should be submitted using the University's [online application portal](#). Click on the "Apply Now" button (top left side of the page) to submit an application. Visit the [Tips for Applying](#) page for instructions on how to apply. As part of the application process, applicants will be asked to complete a voluntary employment equity survey.

Review of applications will begin on March 15, 2023; however, applications will be accepted and evaluated until the position is filled.

The impact of personal leaves, interruptions or slowdowns, and professional circumstances (e.g., extended responsibilities, cultural contributions) will be carefully considered when reviewing a candidate's record of research achievement. Candidates are encouraged to explain in their application how personal or professional circumstances may have impacted research productivity. The University of Saskatchewan is committed to supporting employees in need of accommodation in an employment context.

The University of Saskatchewan is committed to employment equity, diversity, and inclusion in its faculty complement and is proud to support career opportunities that address the under-representation of members of the Four Designated Groups (women, members of a racialized minority, Indigenous persons, and persons with disabilities) defined under the Employment Equity Act among chair allocations. In consideration of the University's strategic directions and to achieve the EDI targets and goals of USask's action plan and as established by the CRC Secretariat, this position is restricted to individuals who self-identify as a member of any of the four designated groups. The University of Saskatchewan relies on section 56 of The Saskatchewan Human Rights Code to give this preference in employment. All qualified candidates, Canadian and other nationalities, are encouraged to apply. Recruitment will be guided by the [Canada Research Chairs Equity, Diversity and Inclusion Practices](#) and by the strong commitment of USask to diversity, inclusion, and equity.

For questions related to this position or the selection process, please contact Jennifer Milburn, Executive Assistant, [jennifer.milburn@usask.ca](mailto:jennifer.milburn@usask.ca), 306-966-8431.

***The University believes equity, diversity, and inclusion strengthen the community and enhance excellence, innovation and creativity. We are dedicated to recruiting individuals who will enrich our work and learning environments.***

***We are committed to providing accommodations to those with a disability or medical necessity. If you require an accommodation in order to participate in the recruitment process, please notify us and we will work together on the accommodation request.***

***The University of Saskatchewan's main campus is situated on Treaty 6 Territory and the Homeland of the Métis. We pay our respects to the First Nations and Métis ancestors of this place and reaffirm our relationship with one another. Together, we are uplifting Indigenization to a place of prominence at the University of Saskatchewan.***