
Canada Research Chair (Tier 1) in Predictive Toxicology and Chemical Safety

The [University of Saskatchewan](#) (USask) and the [School of Environment and Sustainability](#) (SENS) are pleased to invite applications for a **Tier 1 Canada Research Chair** in *Predictive Toxicology and Chemical Safety*. The [Canada Research Chairs Program](#) is the flagship of a national strategy to make Canada a world-leading country in research and development.

This is an **internal search**, limited to faculty members who currently hold a tenured appointment at the University of Saskatchewan, or have a firm offer of tenured employment to the University of Saskatchewan that takes effect by July 1, 2023.

Chemical contamination is regarded as one of our planet's greatest threats and is responsible for an estimated nine million premature deaths worldwide annually. With an estimated 350,000 chemicals currently being used by society, the number of substances and environmental samples for which toxicity data are required is huge, backlogged and continues to grow every year. The reason for this poor track record is the antiquated status of chemical safety assessment: current practices are prohibitively time consuming and costly, and they rely on the sacrificing of large numbers of live animals. Thus, regulatory agencies and the scientific community tasked with the assessment of chemicals are demanding a paradigm shift in the environmental and human toxicological sciences towards chemical safety evaluation approaches that are prospective and used early in the chemical assessment process, as well as more rapid, reliable, cost effective, and ethical. Both the European Union and the U.S.A. have therefore developed roadmaps that aim to transition to an animal-free chemical testing regime by 2030 through the development and application of new approach methods (NAMs) rooted in mechanistic toxicology.

This **Tier 1 CRC in Predictive Toxicology and Chemical Safety** will directly address this critical and contemporary issue by advancing chemical safety assessment through transformative, transdisciplinary, and ethical science. The research program of the chair will be a main driver of the above paradigm shift by integrating classic (eco)toxicology with toxicogenomics and systems biology. It will focus on the development of holistic knowledge and NAMs that will apply state-of-the-art concepts such as the Adverse Outcome Pathway (AOP) Framework linking molecular mechanistic responses with physiological and apical outcomes of regulatory relevance to derive toxicity pathway models. Specifically, the CRC will be involved with ground-breaking research furthering our understanding of animal and human biology, ecology, systems biology/toxicogenomics, and environmental and societal systems. As such, the research conducted by this CRC will advance effective and ethical prediction of the health risks of chemicals and environmental pollution to wildlife and humans, as well as support the development of safer chemicals.

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.

Qualifications

We aim to recruit a global leader in their field who displays excellence, innovation, creativity, and leadership in research through a superior record of research accomplishments with demonstrated impacts in their field. The ideal candidate will have established an internationally renowned research program in predictive ecotoxicology and environmental toxicogenomics. As a scientist with a strong track record in toxicology, toxicogenomics, physiology, ecology, systems biology, and *in vitro* toxicology, they will have experience in integrating and applying diverse approaches to derive toxicity pathways across a broad range of vertebrate species. The chair is expected to have led the development of NAMs, such as *in vitro*, early fish embryo, and/or computational tools to support chemical and environmental risk assessment, and to have worked with national and international organizations and regulatory agencies to validate and implement these tools. The candidate will bring a strong network of national and international collaborations.

Applicants must have a Ph.D. and experience in a relevant field. The successful candidate is expected to have a track record of leading a vibrant externally-funded research program and will continue the legacy of world-class research conducted by the USask Toxicology Centre. The candidate will make strong contributions to teaching at both undergraduate and graduate levels, and to mentorship that supports diversity and inclusion. Applicants should demonstrate excellence in graduate student and postdoctoral fellow supervision, and superior ability for 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. All candidates must demonstrate a commitment to equity, diversity and inclusion in their teaching, mentorship and service.

The successful applicant will be appointed as a tenured faculty member at the Full Professor level in the SENS and will be nominated for a Tier 1 Canada Research Chair. Tier 1 Chairs are outstanding and innovative world-class researchers whose accomplishments have had a major impact in their field and are recognized internationally as leaders in their field. The CRC nomination is subject to review and final approval by the Canada Research Chairs Program.

The standard salary band for Full Professor for the 2022-2023 academic year is \$140,253 to \$163,766 plus competitive merit-based additions. A CRC stipend is also provided. This position includes a comprehensive benefits package which includes a dental, health and extended vision care plan; pension plan, life insurance (compulsory and voluntary), academic long-term disability, sick leave, travel insurance, 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 short statement on how their research program contributes to the UN Sustainable Development Goals, a detailed curriculum vitae, a summary of research achievements (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 10, 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. 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, 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.