



- # Canada Research Chair (Tier I) in Translational Crop Genomics in Sustainable Agriculture

CRC Tier I Chairs are intended for exceptional scholars with outstanding leadership ability and an already established research program. Candidates for this position must hold a PhD in Plant Biology, Agronomy, or a related field, with a proven record of research using genomic approaches in plants that demonstrates excellence commensurate with their career stage. Interdisciplinarity is essential to success in this role. The CRC is expected to develop a world-class research program supported by federal and provincial funding agencies such as NSERC (Natural Sciences and Engineering Research Council of Canada), Alberta Innovates, Genome Canada, and private industry. The successful candidate should have a track record of scientific publications and/or other outputs (popular

press, interviews, public or online seminars, scientific social media, clinical trials, online database development, software development, etc.). Prior experience in obtaining grants from external research funding programs (including peer-reviewed fellowship programs), and evidence of effective student mentoring are highly valued qualifications. The successful candidate should have prior experience in being part of and leading large group grants.

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 (www.chairs-chaires.gc.ca) and www.chairs-chaires.gc.ca/program-programme/nomination-mise_en_candidature-eng.aspx (www.chairs-chaires.gc.ca/program-programme/nomination-mise_en_candidature-eng.aspx).

Appointments at the rank of **Associate Professor** require evidence of an established academic program and recognition as an internationally respected scholar, demonstrated through a record of high-quality research and scholarly activities appropriate to the discipline, as well as evidence of teaching effectiveness and a substantive record of service.

Appointment at the rank of **Professor** is reserved for individuals whose academic achievements are recognized nationally and internationally as outstanding within their community, discipline, or field, and who have demonstrated the highest level of excellence in research and scholarship, teaching, and service.

About the University of Calgary

The CRC will build upon existing strengths in plant and crop research in the Biological Sciences Department at the University of Calgary, as well as play an important role in the development of a new undergraduate agricultural science program in alignment with provincial priorities to strengthen the agricultural sector. Active research programs in the Biological Sciences Department include crop biotechnology to develop increased yield, climate resilience and nutrition in canola, peas and wheat, susceptibility/resistance to crop pathogens and pests, pharmaceuticals for biosynthesis of narcotics, phytocannabinoids and psilocybins, phytoremediation of organic pollutants, comparative genomics of climate adaptation, and ecosystems services for agricultural sustainability.

A new state-of-the-art greenhouse with an automated high-throughput precision phenotyping facility is being developed in the next few years as part of the Science District and the Multi-Disciplinary Science Hub. This facility will be unique to Canada and provide the equipment and an outstanding research neighbourhood to perform cutting-edge research in high-throughput crop genomics. This facility will consist of a high-throughput phenotyping gantry system equipped with multispectral and hyperspectral imaging sensors to systematically track growth and development of 300-500 plants simultaneously exposed to a variety of stress conditions. This facility will dramatically enhance the phenomics capabilities required for genomics prediction tools and AI-associated machine learning to rapidly identify new regions or target genes for accelerated molecular breeding.

The CRC will be able to leverage two major University of Calgary initiatives promoting innovative solutions in agricultural research: the Simpson Centre for Food and Agricultural Policy in the School of Public Policy, which focuses on policymaking on agriculture in Canada, to realize a more sustainable agricultural industry; and the Centre for Precision Agriculture and Sustainability (CPAS), a network that promotes innovative solutions and sustainable agriculture through collaborative efforts between researchers, communities, and industry leaders. The CRC will also have access to isolated plots for potential field trials of elite crop lines at the W.A Ranches facility at the University of Calgary whose mandate is to conduct applied research aimed at improving cattle welfare, health and management to achieve sustainable/regenerative agriculture.

The University of Calgary's 'Ahead of Tomorrow' strategic plan outlines our commitment to harness the power of research and innovation to tackle society's biggest challenges. Transdisciplinary collaboration, community integration, and future-focused research into global priority issues are critical to achieving this goal. The CRC will participate, and take a leadership role when appropriate, in a variety of transdisciplinary research initiatives across campus in areas such as One Health, molecular diagnostics, and child health. The One Health at UCalgary research theme (<https://research.ucalgary.ca/one-health>) (<https://research.ucalgary.ca/one-health>) aims to systemically understand health issues on multiple scales spanning environments, communities, and individuals.

The University of Calgary is a young and ambitious comprehensive research institution. Located in the nation's most enterprising city, the university is recognized as one of Canada's top research universities, grounded in innovative learning and teaching, and fully integrated with the community it both serves and leads. The student body includes 30,000 undergraduate and 7,700 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 (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 boasts the most extensive urban pathway and bikeway network in North America.

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:

- Cover letter and curriculum vitae, including the names and contact information of three referees
- Statement of research interests (1-3 pages)
- Statement of large initiatives/grants participated in and led (1 page)
- Statement of mentorship and teaching philosophy and experience (1-2 pages).

- [Digital Privacy Statement \(https://www.ucalgary.ca/sites/default/files/ucgy/groups/Marketing/digital-privacy-statement.pdf\)](https://www.ucalgary.ca/sites/default/files/ucgy/groups/Marketing/digital-privacy-statement.pdf)
- [Privacy Policy \(https://www.ucalgary.ca/policies/files/policies/privacy-policy.pdf\)](https://www.ucalgary.ca/policies/files/policies/privacy-policy.pdf)
- [Website Feedback \(https://ucalgarysurvey.qualtrics.com/SE/?SID=SV_2lcAqNmlryzHpZ3\)](https://ucalgarysurvey.qualtrics.com/SE/?SID=SV_2lcAqNmlryzHpZ3)

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The University of Calgary, located in the heart of Southern Alberta, both acknowledges and pays tribute to the traditional territories of the peoples of Treaty 7, which include the Blackfoot Confederacy (comprised of the Siksika, the Piikani, and the Kainai First Nations), the Tsuut'ina First Nation, and the Stoney Nakoda (including Chiniki, Bearspaw, and Goodstoney First Nations). The City of Calgary is also home to Métis Nation within Alberta (Nose Hill Métis District 5 and Elbow Métis District 6).

The University of Calgary is situated on land Northwest of where the Bow River meets the Elbow River, a site traditionally known as Moh'kins'tsis to the Blackfoot, Wîchîspa to the Stoney Nakoda, and Guts'ists'i to the Tsuut'ina. On this land and in this place we strive to learn together, walk together, and grow together "in a good way."