



MY CANDIDATE PROFILE

New Hire Jobs

University of Alberta

Canada Impact+ Emerging Leader.
Assistant Professor in Functional
Genomics & Generative Biology for
Plant Adaptation

Edmonton, AB, Canada (On-site)

BE THE FIRST TO APPLY

APPLY NOW

JOB INFO

Job Identification	4418
Job Category	Faculty & Faculty Services
Posting Date	10/23/2026, 10:08 AM
Apply Before	11/30/2026, 11:55 PM
Job Schedule	Full time
Locations	Edmonton, AB, Canada (On-site)
Category Type	Academic

[Skip to main content.](#)

Position Type	Faculty (Includes Asst. Professors, Associate Professors)
College/Administrative Portfolio	College of Natural And Applied Sciences
Faculty/Department	Agricultural, Life & Environmental Sciences

ABOUT THE JOB

Posting Date: October 23, 2026

Closing Date: November 30, 2026

The **Faculty of Agricultural, Life & Environmental Sciences** at the University of Alberta invites applications for a tenure-track position at the rank of Assistant Professor in an area broadly related to functional genomics and generative biology, with the focus on plant adaptation and the resilience of managed and natural ecosystems under a changing climate. This Canada Impact+ Emerging Leader position is associated with Dr. Charles Chen's Eddie Goldenberg Research Chair in Adaptive Genomics for Climate-Resilient Forestry and Agriculture in the Department of Renewable Resources at the University of Alberta.

Salary and research support will be specified in the appointment offer. The successful candidate will establish an innovative, independent, and externally funded research program, teach undergraduate and graduate courses, supervise students and other highly qualified personnel, and contribute to interdisciplinary collaboration across the Faculty, the University, and with external partners. We seek an emerging scholar to lead an innovative, externally funded research program integrating functional genomics, biological synthesis and design, and experimental approaches to understand how adaptive biological functions emerge and interact across scales, and how they can be harnessed to enhance resilience in agricultural, forest, and natural-resource systems.

The successful candidate will hold an academic appointment in the Faculty of Agricultural, Life & Environmental Sciences, with an academic home in the Department of Renewable Resources.

Priority Areas of Research

[Skip to main content.](#)

Applications are invited from emerging scholars whose research will advance our understanding of adaptive biological function and develop innovative approaches to enhance the resilience of plants, forests, crops, and natural-resource systems. Areas of interest include functional genomics, genetics, plant and forest breeding, recombination, genome and epigenome engineering, synthetic biology, and AI-guided biological design; advanced genomic approaches, including single-cell and spatial genomics, high-throughput perturbation, and experimental validation of computationally generated hypotheses; and the mechanisms underlying plant adaptation, stress responses, plant health, biotic interactions, and regeneration. Research may span multiple levels of biological organization, from genes, cells, and regulatory networks to tissues, organs, whole plants, populations, and ecosystems, integrating computational, experimental, and design-based approaches to understand, predict, generate, and test biological variation and function.

We particularly welcome research that bridges disciplinary and biological scales and translates fundamental discoveries into applications supporting resilient forests and/or crops, sustainable natural-resource management, and the conservation of biological resources. The successful candidate will establish an independent, externally funded research program, contribute to undergraduate and graduate teaching and student mentorship, and foster interdisciplinary collaborations within the University of Alberta, in addition to Dr. Chen's Eddie Goldenberg Research Chair. Engagement with external partners and stakeholders, including government, industry, Indigenous communities and organizations, forestry and natural-resource professionals, conservation organizations, and tree improvement programs, is encouraged, as are knowledge mobilization, extension, and collegial service.

Canada Impact+ Emerging Leaders Program Eligibility and Appointment

Applicants must be:

- Internationally based (working and residing outside Canada) at the time the Emerging Leader position is accepted.
- An early career researcher, defined as being within five (5) years of the start date of their first research-related appointment (minus eligible leaves of absence, such as parental, medical, community, or bereavement leave) as of the posting date.

[Skip to main content.](#)

Successful nominees will be appointed at the University of Alberta as:

- Assistant tenure-track Professor.
- Successful nominees will be expected to start their position within 12 months of accepting the award.
- The award value is \$100,000 per year over six years and is renewable up to six additional years at the same amount.
- Chairholders will be required to take up their appointment on a full-time basis and located at the University of Alberta.

The University of Alberta recognizes the legitimate impact that life circumstances (e.g., maternity leave, parental leave, leaves due to illness, leaves due to caring for family members, slowdowns due to chronic illness or disability, COVID-19 impacts, etc.) can have on a candidate's record of research achievement and that these circumstances will be taken into careful consideration during the assessment process. Please consult the [Eddie Goldenberg Research Chairs of Canada and Canada Impact+ Emerging Leaders](#) for full program information, including further details on eligibility criteria and application requirements.

The Role and Responsibilities

The Assistant Professor role is the starting point on the academic faculty member career pathway at the University of Alberta. Faculty members are full members of their department and participate actively in academic governance and collegial decision-making. The responsibilities of the role include teaching, research, and service:

- **Teaching:** Contribute to undergraduate and graduate teaching in the Department of Renewable Resources, including classroom instruction, student advising, and the supervision and mentorship of undergraduate and graduate students. Teaching responsibilities will be determined in consultation with the Department Chair and according to the candidate's expertise and departmental needs. Relevant teaching areas may include plant science and genetics, molecular genetics and biotechnology, conservation biology, land reclamation, natural-resource management, forest management, quantitative methods, and related disciplines. The successful candidate is expected to contribute to inclusive and engaging learning environments and support the development of the next generation of researchers and natural-resource professionals.

[Skip to main content.](#)

- **Research**: Establish and sustain an innovative, independent, and externally funded research program in functional genomics/genetics, generative biology, and related areas, with an emphasis on plant adaptation and the resilience of managed and natural ecosystems. The successful candidate will conduct and disseminate high-quality research, develop interdisciplinary collaborations, and translate fundamental discoveries into applications relevant to forests, agriculture, and renewable resources. The position encourages collaboration with the Eddie Goldenberg Research Chair and the broader interdisciplinary research community at the University of Alberta.
- **Service and Collaboration**: Contribute to the intellectual and academic life of the Department, Faculty, and University through collegial service, academic governance, mentorship, and collaborative initiatives. The successful candidate is also encouraged to engage with external partners and stakeholders, including government agencies, industry, Indigenous communities and organizations, forestry and natural-resource professionals, conservation organizations, and tree improvement programs, and to support knowledge mobilization and the application of research findings beyond academia.

The Department Chair supervises faculty members. Faculty members participate in departmental, Faculty, and University activities and contribute to the University's academic mission through research, teaching, mentorship, and service.

Role and Expectations

The successful candidate will:

- Establish an innovative, independent, and externally funded research program in functional genomics, genetics, or generative biology.
- Integrate experimental, computational, and genomic approaches to advance plant adaptation and resilience.
- Publish high-quality research, secure external funding, and develop interdisciplinary collaborations.
- Teach undergraduate and graduate courses and contribute to curriculum development.
- Supervise and mentor undergraduate and graduate students and research personnel.
- Collaborate with the Eddie Goldenberg Research Chair and the broader University research community.
- Engage external partners to translate research into practical applications.

[Skip to main content.](#)

- Contribute to departmental, Faculty, and University service and foster an inclusive academic environment.

Applicants whose research connects functional genomics, genetics, breeding, synthetic biology, artificial intelligence, and experimental approaches to understanding and directing biological function are particularly encouraged to apply. This is an opportunity for an emerging scholar to develop a distinctive research program at the intersection of fundamental biological discovery and innovative applications, advancing the resilience of forests and crops and supporting the sustainable management, conservation, and restoration of natural resources.

About the Canada Impact+ Emerging Leaders Program

Launched in December 2025, the Impact+ Emerging Leaders program is a one-time national initiative designed to support Canadian institutions in growing and sustaining a critical mass of expertise in priority areas identified by the Government of Canada to address pressing domestic and global challenges. While distinct from the senior research chairs, the successful early career researcher (ECR) nominee will be expected to establish an independent program of research that leverages potential synergies and collaborations with incoming institutional Canada Impact+ Research Chairs (CIRC) to accelerate the translation of discoveries into tangible social, environmental, and economic solutions.

About the Faculty of ALES and the University of Alberta

The Faculty of Agricultural, Life & Environmental Sciences is a leader in teaching, research, and community engagement across diverse fields including food systems, sustainable resource management, human ecology, and environmental sociology. With more than 500 faculty and staff, over 1,500 undergraduates, and 600 graduate students, the Faculty of Agricultural, Life & Environmental Sciences leverages 25,000 acres of research land across Alberta to deliver high-impact academic programs and applied research in partnership with industry and communities.

The University of Alberta exists to inspire and ignite the human spirit in pursuit of a better tomorrow. Its work is rooted in a commitment to creating a university community where everyone feels valued, barriers to success are removed, and thriving connections are fostered while honouring Indigenous identities, languages, cultures and world views. As one of the world's top

[Skip to main content.](#)

100 teaching and research universities, the U of A ranks among the Top 4 in Canada, providing a \$19.4 billion annual economic impact in Alberta alone. The U of A seeks to challenge, to change and to always be Leading with Purpose.

More than 46,000 students and 14,000 staff shape the U of A, with outstanding achievements in learning, research, creativity, innovation and engagement across five campuses – including one rural and one francophone. The U of A attracts top talent in rigorous undergraduate, graduate and professional programs in 17 faculties across three colleges and more than \$621 million in sponsored research revenue. The U of A has more than 340,000 alumni worldwide, with alumni-founded companies generating more than \$250 billion in annual revenue.

Working and Living in Edmonton

Benefits, Health, & Wellness

We offer a [health and wellness benefits package](#) that includes a health spending account, parental leave, and pension benefits. For Faculty members, some moving and relocation expenses may be reimbursed. Spouses/partners may be offered employment services through the [University's Spousal/Partner Employment Program](#). The campus offers a medical clinic, and multiple childcare and housing options within steps of campus. Academic faculty members are offered parental and medical leave, retirement benefits, and healthcare benefits. The Faculty of Engineering values families and aims to minimize long-distance separation, when possible, through our spouse/partner hiring practices.

Living in Edmonton

[Edmonton](#) is home to over one million people and Alberta's capital. Edmonton offers a vibrant start-up and technology ecosystem, federal and provincial government offices, and the Corporate Offices of the provincial healthcare system. The city offers the amenities of a large urban centre while maintaining a friendly atmosphere. Several faculty members live in nearby neighbourhoods with a range of multi-family and single-family housing options within walking and biking distance of the University. Alberta is among Canada's top provincial school systems with several primary and secondary schools near campus. Edmonton is known internationally for its thriving arts and festival scene with one of North America's largest stretches of urban parkland, and top-ranked health care services.

Minimum Qualifications

[Skip to main content.](#)

Candidates must have a PhD and postdoc experience in genetics, genomics, plant regenerative biology, biotechnology, breeding, computational and systems biology, or another relevant biological, agricultural, or natural resource discipline. A PhD is a requirement of the Faculty of ALES and not of the Impact+ Emerging Leaders Program.

Applicants should demonstrate expertise in one or more areas relevant functional genomics, generative biology, plant adaptation, or biological design, including but not limited to:

- plant genetic improvement, breeding, quantitative and predictive genomics;
- functional, and regulatory genomics;
- molecular, cellular, developmental, or systems biology;
- genome or epigenome engineering, synthetic biology, or approaches to biological design;
- single-cell, spatial, multi-omic, or other engineering approaches for resolving biological function across scales;
- computational biology, artificial intelligence, or generative approaches for biological discovery and design;
- genetic and biological mechanisms of adaptation, environmental stress, plant health, regeneration, or biotic interactions; or
- other innovative approaches that connect fundamental biological discovery with genetic improvement, sustainable management, conservation, restoration of resilient forests, crops, and natural resources.

We strongly encourage applications from scholars who bring new perspectives, approaches, technologies, and disciplinary expertise that can expand the application of genetics, genomics, and biological innovation to agriculture, forests and renewable resources. Candidates should demonstrate strong potential to establish an independent and innovative research program, publish high-quality research, secure external research funding, contribute to teaching and mentorship, and develop productive interdisciplinary collaborations.

The Following Are Considered an Asset

1. Experience in functional genomics, genetics, plant breeding, synthetic biology, computational biology, or related fields.
2. Experience with interdisciplinary research and large-scale, multi-year collaborative projects.
3. Experience collaborating with industry, government, Indigenous communities, and other external research partners.
4. Experience managing research teams, laboratories, facilities, equipment, and research safety.

[Skip to main content.](#)

5. Teaching experience and training in instruction, curriculum design, and student mentorship.
6. Experience in research, teaching, service, and community engagement, including initiatives supporting equity, diversity, inclusion, and accessibility.
7. Experience securing external research funding, preparing grant applications, and managing research budgets.
8. Experience translating research findings into practical applications for plant improvement, forest health, conservation, or ecosystem resilience.
9. Experience with advanced genomic, computational, or AI-driven approaches to biological discovery and design.
10. Experience building interdisciplinary partnerships and mentoring diverse research teams.

How to Apply

Please ensure that your application shows clearly how your skills and experience meet the criteria above. To apply, please select the Apply Now icon below and submit the following in **ONE PDF** document:

1. **Cover letter**
2. **Curriculum vitae**, including your research, teaching, and service experience related to the role and responsibilities, as well as the qualifications above
3. **Research Plan** (maximum 3 pages) that outlines main areas of current research and short and long-term research goals, and how you will build and retain a high-performing and diverse research team. Please include your plans for design of the research environment and the team, and for equitable opportunities for all members of the team to engage with the work being conducted and other opportunities that will advance their career goals, and up to 3 recent peer-reviewed research publications
4. **Teaching Dossier** including
 - a. Teaching philosophy (maximum 3 pages), including how you will contribute to our culture of providing exceptional educational experiences that focus on learner engagement and inclusivity, experiential and active learning while building engineering knowledge and skills as well as emotional intelligence, social mindedness, and ethics, and
 - b. Evidence and potential for teaching effectiveness, such as related training, teaching assistantships, courses instructed, recent course evaluations, and example course outlines for courses you delivered as an instructor.
5. The names of at least three referees. Letters will be requested only from candidates selected for interviews.

[Skip to main content.](#)

6. Members of selection committees will be aware of the principles of employment equity, fair selection, and the risks of bias. If, for any reason, you have taken a career break or have had an atypical career and wish to disclose this in your application, the selection committee will take this into account, recognizing that the quantity of your research may be reduced as a result.
7. **Self-Identification Questionnaire:** All applicants are required to complete the University's **self-identification questionnaire** accessible through the online application system.
 - a. Please complete the University's self-identification questionnaire at the time of application. For any questions or concerns, please contact equity@ualberta.ca.

Next Steps

- Posting Date: October 23rd, 2026. Closing Date: November 30th, 2026. Review of applications will begin after the closing date. The **latest** start date for this position is July 1st, 2027. University representatives will review application packages, and should the Hiring Committee advance your application, you will be contacted for an online pre-interview.
- Please note that applications with missing information or components will not be considered.

For applicants selected for interviews, three letters of reference will be requested. Applicants will be expected to contact the three referees and arrange to have them submit their letters of reference via email attachment. Details will be provided to those candidates selected for interviews.

Questions

We welcome inquiries of all kinds about the Canada Impact+ Emerging Leaders competition. Candidates who have questions are encouraged to reach out directly to Dr. Nadir Erbilgin, Professor and Chair of Department of Renewable Resources at erbilgin@ualberta.ca for academic-related questions.

Please include "**Impact+**" in the subject line of your email to help ensure your inquiry is directed appropriately.

Applicants who require an accessibility arrangement for their application, interview, and/or subsequent recruitment meetings can contact Sarita De Guzman at saritaan@ualberta.ca to arrange appropriate accommodations.

[Skip to main content.](#)

The selection process will be governed by the **Impact+ recruitment requirements** as well as **requirements for recruitment and nomination process** of the Canada Impact+ Emerging Leaders Program.

This role is subject to the Tri-Agency Policy on Indigenous Citizenship and Membership Affirmation, which includes a two-stage affirmation process. Should you affirm your First Nation, Métis, or Inuit citizenship or membership, you will be required to participate in a document verification process and asked to submit supporting documentation confirming citizenship, membership, or the right to be registered as such in an Indigenous collective in Canada, prior to nomination if you are deemed meritorious for the opportunity. Such an affirmation is optional and not a prerequisite for consideration for this opportunity.

*The successful candidate will be offered a tenure-track appointment at the rank of Assistant Professor, including a comprehensive **benefits package**.*

*The terms and conditions of this appointment are governed by **Schedule A** of the collective agreement between the Board of Governors of the University of Alberta and the Association of Academic Staff of the University of Alberta.*

ABOUT UNIVERSITY OF ALBERTA

The University of Alberta, its buildings, labs and research stations are primarily located on the territory of Nêhiyaw (Cree), Niitsitapi (Blackfoot), Métis, Nakoda (Stoney), Dene, Haudenosaunee (Iroquois) and Anishinaabe (Ojibway/Saulteaux), lands that are now known as part of Treaties 6, 7 and 8 and homeland of the Métis. The University of Alberta respects the sovereignty, lands, histories, languages, knowledge systems and cultures of all First Nations, Métis, and Inuit.

The University of Alberta is a community of knowledge seekers, change makers and world shapers who lead with purpose each and every day. We are home to over 14,000 faculty and staff, more than 40,000 students and a growing community of 300,000 alumni worldwide.

Your work will have a meaningful influence on a fascinating cross-section of people - from our students and community members, to our renowned researchers and innovators, making discoveries and generating solutions that make the world healthier, safer, stronger and more just. [Learn more.](#)

[Skip to main content.](#)

This position requires that the incumbent be eligible to participate in government-funded research projects including active ability to receive federal research funds on behalf of the university. Individuals having an active affiliation with a **Named Research Organization** are ineligible to participate in government-funded research projects in **Sensitive Technology Research Areas** in Canada. Applicants must be able to meet all applicable research security requirements.

At the University of Alberta, we are committed to creating an inclusive and accessible hiring process for all candidates. If you require accommodations to participate in the interview process, please let us know at the time of booking your interview and we will make every effort to accommodate your needs.

We thank all applicants for their interest; however, only those individuals selected for an interview will be contacted.

All University employees have a responsibility to foster a workplace that prioritizes safety in all its forms - physical, cultural, and psychological. This is achieved by promoting a safe environment, adhering to all safety laws, policies and procedures, completing all required safety training, identifying hazards and implementing controls, reporting incidents, and contributing to a culture of belonging and respect, while endeavoring to ensure that all colleagues feel valued and safe to express their thoughts, perspectives and concerns.

The University of Alberta is committed to creating a university community where everyone feels valued, barriers to success are removed, and thriving connections are fostered. We welcome applications from all qualified persons. We encourage women, First Nations, Métis and Inuit persons, members of visible minority groups, persons with disabilities, persons of any sexual orientation or gender identity and expression, and all those who may contribute to the further diversification of ideas and the University to apply.

L'Université de l'Alberta s'engage à créer une communauté universitaire où chaque personne se sent valorisée, où les obstacles à la réussite sont éliminés et où des connexions

enrichissantes peuvent se développer. Nous accueillons les demandes de toutes les personnes qualifiées. Nous encourageons les femmes; Premières nations, Métis et Inuits; membres des groupes minoritaires visibles; personnes handicapées; personnes de toute orientation sexuelle ou identité et expression de genre; et toutes les personnes qui peuvent contribuer à la diversification des idées et à l'université à postuler.

APPLY NOW

Similar Jobs

Canada Impact+ Emerging Leader.
Assistant or Associate Professor in
Sustainable Transportation Futures

Edmonton, AB, Canada (On-site) • Posted
on 10/22/2026 •



 **BE THE FIRST TO APPLY**