

# Canada Research Chair (CRC) Tier II in Computational Genomics

Last updated: October 17, 2023, 1:42 p.m.

**Job title:** Canada Research Chair (CRC) Tier II in Computational Genomics

**Position code:** 23\_C\_BIOL\_M

**Date posted:** October 16, 2023

**Application deadline:** November 30, 2023

**Advertised until:** Position is filled

## Position description

The Department of Biology in the Faculty of Arts and Science at Concordia University invites applications for a Canada Research Chair (CRC) Tier II in Computational Genomics, a research-intensive tenure-track faculty position. We are seeking candidates who will augment computational and data science capabilities in the life sciences at Concordia University. The successful candidate will have a strong track-record in developing and applying cutting-edge genomic and computational/data science methods to the study of biological systems related to human health, synthetic biology, sustainability, and/or the ecology and evolution of life in the biosphere. The successful candidate will have the opportunity to collaborate with members of the Centre for Applied Synthetic Biology and the Centre for Structural and Functional Genomics, as well as with faculty in the Department of Computer Science and Software Engineering and the Applied Artificial Intelligence Institute.

## Qualifications and assets

Candidates must have a PhD in a field related to the life sciences or computer science and have relevant postdoctoral experience in areas including, but not limited to, synthetic and systems biology, multi-omics analysis and data integration, functional genomics, high throughput screens, phenomics, microbial or fungal genomics, environmental genomics, cancer genomics and/or single cell analysis. Qualified candidates will also have a demonstrated capacity to work independently and in collaborative groups. The successful candidate will provide evidence of an outstanding record of research and peer-reviewed publications and a demonstrated ability to attract substantial external funding for an evolving research program, taking into full consideration career stage, career breaks and special circumstances. The candidate will also have strong potential to attract high quality research students and trainees, for leadership, to achieve international recognition as required by the CRC Tier II program, and for excellent teaching and mentoring contributions at both the undergraduate and graduate levels.

Candidates eligible for Tier II chair positions must be excellent emerging scholars within 10 years of their highest degree at the time of nomination (exclusive of career interruptions). Potential Tier II candidates who are more than 10 years from their highest degree should take note that certain career interruptions may still make them eligible for nomination. Potential candidates are encouraged to submit a formal justification by means of the Tier II Justification Assessment Form, which will be considered in the review of applications. Please consult the [Canada Research Chairs website](#) for full program information, including further details on eligibility criteria and acceptable justifications to the extension of the eligibility term.

Notwithstanding the above and irrespective of their submission of a formal justification, candidates are encouraged to share any career interruptions or personal circumstances that may have had an impact on their career goals (such as the decision to have a family, eldercare, illness, and so forth) in their letter of application. These will be carefully considered in the assessment process. The Department values diversity among its faculty and strongly encourages applications from women and members of underrepresented groups. Concordia University is an English-language institution of higher learning at which the primary language of instruction and research is English. Since this position supports academic functions of the university, proficiency in English is required. Working knowledge of French, including reading and grading student work in French, is an asset.

# How to apply

All qualified candidates are encouraged to apply; Canadians and Permanent Residents will be given priority. To comply with the Government of Canada's reporting requirements, the University is obliged to gather information about applicants' status as either Permanent Residents of Canada or Canadian citizens. While applicants need not identify their country of origin or current citizenship, all applicants must include one of the following statements:

Yes, I am a citizen or permanent resident of Canada

or

No, I am not a citizen or permanent resident of Canada

Application packages should be addressed to, Dr. Selvadurai Dayanandan, Chair of the Department of Biology, and must include a cover letter clearly identifying the title and position code [23\_C\_BIOL\_M], the name and complete contact information (phone and email) of three references in the cover letter, a detailed curriculum vitae, copies of three representative publications; a statement of research achievements and plans, including explanations of the three most important research contributions to date; and a statement of teaching philosophy/interests, including evidence of teaching interests and effectiveness. Applications should be submitted electronically to [crc-compngenomics@concordia.ca](mailto:crc-compngenomics@concordia.ca), with the subject heading CRC Application, by **November 30, 2023**, but will continue to be reviewed until the position is filled. Only short-listed candidates will be notified. The appointment is expected to commence in **August 2024**. All inquiries regarding this position can be directed to David Walsh at [david.walsh@concordia.ca](mailto:david.walsh@concordia.ca).

Concordia University is strongly committed to building a diverse, equitable, and inclusive community, and recognizes the importance of inclusion in achieving excellence in teaching and research. As part of this commitment to providing our students with the dynamic, innovative, and inclusive educational environment of a Next-Generation University, we require all applicants to articulate in their cover letter how their background, as well as lived and professional experiences and expertise have prepared them to teach in ways that are relevant for a diverse, multicultural contemporary Canadian society.

Possible examples to demonstrate a diverse experience may include, but are not limited to:

- teaching about underrepresented populations
- mentoring students from underrepresented backgrounds
- relevant community work
- offering or organizing educational programming
- participation in training and workshops

All applicants will receive an email invitation to complete a short equity survey. Participation in the survey is voluntary and no identifying information about candidates will be shared with hiring committees. Candidates who wish to self-identify as a member of an underrepresented group to the hiring committee may do so in their cover letter or by writing directly to the contact person indicated in this posting.

## Adaptive measures

Applicants who anticipate requiring adaptive measures throughout any stage of the recruitment process may contact, in confidence, Anna Barrafato, Accessibility Change Lead: [anna.barrafato@concordia.ca](mailto:anna.barrafato@concordia.ca) or by phone at 514.848.2424 extension 3511.

### Information about the Department

The faculty within the Department of Biology collectively maintain well-funded research programs with strong genomic and computational biology themes. Biology is a research-intensive unit comprised of two complementary sectors: Cell/Molecular Biology and Ecology. In Cell/Molecular Biology, existing areas of research include microbial biology aimed at infectious disease, environment, and industrial applications; plant growth, development, and physiology; cell biology of genetic diseases, cancer, aging and therapeutics development. In Ecology, a diverse collection of researchers employs multiple approaches, including advanced statistical and computational analyses, to address ecological research questions in aquatic (marine and freshwater), terrestrial and urban systems. Synthetic biology is a particular area of concentration, where researchers use genomic technologies to engineer enzymes and microorganisms for health and industrial applications, and to decipher the origin of cancer and genetic diseases. In total, the successful candidate will find a diverse network of collaborators in the Department of Biology in which, depending on the focus of their research program, will be able to address critical world problems in either health, agriculture, ecology, the environment, and bioproducts.

### Information about the Faculty of Arts and Science

The Faculty of Arts and Science is the largest faculty at Concordia. Through our 27 departmental units and our several research centers, we foster an inclusive and supportive environment, where knowledge generation and innovation thrive in the Humanities, the Social and the Natural Sciences. We have a strong tradition of connection with communities. Our research and creative activities are both disciplinarily grounded as well as resolutely interdisciplinary and interconnected. Our scholars tackle the complex issues facing our world globally and locally. Our teachers activate students to make an impact. Our students challenge conventional ways of thinking and doing.

Our research activity is funded by Tri-Council agencies (CIHR, NSERC, and SSHRC), from the FRQ (FRSQ, FQRNT, and FQRSC), as well as national and international funding bodies, both public and private. Our academic communities develop and utilize cutting-edge pedagogical tools and strategies with an emphasis on experiential learning to teach within and across boundaries.

For more about the Faculty of Arts and Science, please visit: [www.concordia.ca/artsci](http://www.concordia.ca/artsci).

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### Information about Concordia

Concordia University is located on unceded Indigenous lands. Tiohtià:ke/Montreal, on the traditional lands and waters of the Kanien'kehá:ka Nation, is historically known as a gathering place for many First Nations. Today it is home to a diverse population of Indigenous and other peoples. We respect the continued connections with the past, present and future in our ongoing relationships with Indigenous and other peoples within the Montreal community.

Building on the skills of our faculty and the strengths of Indigenous, local, and global partnerships, we set our sights further and more broadly than others and align the quality of learning opportunities to larger trends and substantial challenges facing society.

"Concordia is a young, forward-looking university. It's a unique place where experimentation, innovation and creativity are truly valued. Our community of students, faculty, staff and alumni all contribute to our momentum as Canada's next-gen university." — Concordia President Graham Carr.

Profoundly global, Concordia is North America's top university under the age of 50 and is recognized for attracting some of the most talented faculty and students from around the world. Driven by ambition, innovation and a commitment to reconciliation, research and community engagement, Concordia is celebrated for advancing transformative learning, convergent thinking and public impact.

### Information about Montreal

Tiohtià:ke/Montreal, is exceptional; safe, vibrant and diverse, with new things to discover around every corner. The Kanien'kehá:ka Nation is recognized as the custodians of the lands and waters on which we gather and conduct our activities. With a population of 1.7 million, Tiohtià:ke/Montreal is home to four major universities and several clinical research centres and has been named the best student city in the world. It offers the most affordable tuition in Canada.

The city enjoys a thriving multicultural scene. Bilingualism is a part of Montreal's tradition and adds to its inspiring atmosphere. While supporting a significant anglophone population, it is the one of the largest French-speaking cities in the world.

Montreal is famed for its innovative culinary scene and festivals. It was also the first metropolis to be designated a UNESCO City of Design by the Global Alliance for Cultural Diversity.

The city is recognized globally as an important centre for commerce, aerospace, transport, finance, pharmaceuticals, technology, design, gaming and film.

## Territorial Acknowledgement

*Concordia University is located on unceded Indigenous lands. The Kanien'kehá:ka Nation is recognized as the custodians of the lands and waters on which we gather today. Tiohtià:ke/Montreal is historically known as a gathering place for many First Nations. Today, it is home to a diverse population of Indigenous and other peoples. We respect the continued connections with the past, present and future in our ongoing relationships with Indigenous and other peoples within the Montreal community.*

## Employment Equity

*Concordia University is strongly committed to employment equity within its community, and to recruiting a diverse faculty and staff. The University encourages applications from all qualified candidates, including women, members of visible minorities, Indigenous persons, members of sexual minorities, persons with disabilities, and others who may contribute to diversification; candidates are invited to self-identify in their applications.*

## Immigration Status

*All qualified candidates are encouraged to apply; however, Canadian and Permanent Residents will be given priority. To comply with the Government of Canada's reporting requirements, the University is obliged to gather information about applicants' status as either Permanent Residents of Canada or Canadian citizens. While applicants need not identify their country of origin or current citizenship, all applications must include one of the following statements:*

*Yes, I am a citizen or permanent resident of Canada*

*or*

*No, I am not a citizen or permanent resident of Canada.*