



Tier 1 Canada Research Chair in Structural Biology and AI-Driven Drug Discovery
Professor, Tenure | Department of Biochemistry and Molecular Biology

Date Posted: March 3, 2025

Date Closed: April 4, 2025

At UBC, we believe that attracting and sustaining a diverse workforce is key to the successful pursuit of excellence in research, innovation, and learning for all faculty, staff and students. Our commitment to employment equity helps achieve inclusion and fairness, brings rich diversity to UBC as a workplace, and creates the necessary conditions for a rewarding career.

The Department of Biochemistry and Molecular Biology at The University of British Columbia (UBC) invites applications for a Tier 1 Canada Research Chair in Structural Biology and AI-Driven Drug Discovery. This is an internal search and applicants must hold a full-time, tenured appointment at the rank of Professor in the Department of Biochemistry and Molecular Biology.

Tier 1 Chairs are seven-year positions, renewable once, intended for experienced researchers who are world leaders in their fields. Applicants must hold or be eligible to hold a full-time, tenure-stream appointment at the rank of Professor at UBC, though applicants at the rank of Associate Professor are also eligible if they anticipate being promoted to Professor within one or two years of taking up the Chair.

The [Canada Research Chair Equity, Diversity, and Inclusion Action Plan](#) guides the University's efforts to sustain the participation of people with disabilities, Indigenous people, racialized people, women, and people from minoritized gender identity groups, and thus pursuant to Section 42 of the BC Human Rights code, UBC is currently restricted in the recruitment, selection, and nomination of CRCs to members of these groups.

For more than fifty years, the Department of Biochemistry & Molecular Biology (BMB: <https://biochem.ubc.ca/>) has played an active and important role at UBC and in the greater scientific community. All members of the Department maintain active, well-funded research programs that encompass many areas of modern biochemistry, molecular and structural biology. The Department hosts an active Graduate program with more than 90 students and offers over 15 undergraduate courses and laboratory courses for honours, major and minor Undergraduate programs.

Reporting to the Head of the UBC Department of Biochemistry and Molecular Biology, the successful candidate will lead an internationally recognized, independent research program at the intersection of **structural biology, cryo-electron microscopy (cryo-EM), and AI-driven drug discovery**. The research focus will be on **developing cutting-edge imaging and computational approaches to accelerate therapeutic discovery for cancer, infectious diseases, and neurodegenerative disorders**.

As the Chairholder, the individual will be expected to:

- Lead a research program in structural biology and drug discovery, leveraging cryo-EM, computational modeling, and artificial intelligence to drive innovation.
- Develop novel methodologies for high-resolution imaging and molecular-level drug design, publishing in top-tier scientific journals.
- Foster interdisciplinary collaborations across UBC, including with the School of Biomedical Engineering, Centre for Blood Research, and BC Cancer Research Institute, as well as industry and clinical partners.

- Secure competitive funding from national and international agencies and contribute to the translation of structural discoveries into clinical applications.
- Mentor and train the next generation of scientists in advanced imaging, machine learning applications in biology, and structural drug design.
- Promote equity, diversity, and inclusion (EDI) within research, teaching, and mentorship, while engaging with the broader scientific and clinical communities.
- Sustain and grow their research portfolio in alignment with the Faculty of Medicine's strategic priorities, contributing to UBC's global leadership in precision medicine and therapeutic innovation.
- Participate in the teaching activities of the Department, as well as provide service to the University and the broader academic and professional community.

Qualifications and Experience:

- A Ph.D. with a strong track record in structural biology, biophysics, biochemistry, or a related field.
- Extensive experience with cryo-EM, cryo-electron tomography, or complementary structural and imaging techniques.
- A demonstrated record of excellence in teaching, wide recognition for sustained and productive scholarly activity, and significant participation in academic and professional affairs.
- A demonstrated ability to integrate computational approaches, including AI and machine learning, into structural biology and drug discovery.
- A history of securing competitive research funding and developing high-impact publications.
- Proven leadership in fostering interdisciplinary collaborations and mentoring graduate students and trainees.

In addition, the successful candidate will demonstrate a willingness to respect diverse perspectives, including perspectives in conflict with one's own, and a commitment to enhancing one's own awareness, knowledge, and skills related to equity, diversity, and inclusion.

An application package should include:

1. A cover letter (1 page)
2. The main application, containing the following sections:
 - a. Most significant contributions statement (1 page)
 - b. Research program proposal (5 pages, excluding references)
 - c. Teaching and mentorship statement (1 page)
 - d. Equity, diversity, and inclusion statement of the applicant's current or planned contributions to advancing equity, diversity, and inclusion in academic, professional, or community contexts (1 page)
3. A full curriculum vitae (no page limit)
4. The names of three referees who meet the CRC program's conflict of interest requirements as per <https://www.chairs-chaires.gc.ca/program-programme/referees-repondants-eng.aspx>.

Applications should be submitted to:

Jörg Gsponer, MD-PhD
 Professor and Department Head
 Department of Biochemistry & Molecular Biology
 University of British Columbia
 Vancouver, Canada

C/o: Zoe Yeung
 Subject: CRC Tier 1 Application
 Email: zoe.yeung@ubc.ca

Should you have any queries around this position, please contact Human Resources Manager, Ayaka Bosshard (ayaka.bosshard@ubc.ca).

Review of applications will begin **early May 2025**, and continue until the position is filled. The successful applicant will be required to prepare a CRC package by the **August 15, 2025**, UBC internal deadline for the **October 2025** CRC deadline. The earliest anticipated start date for this position is **April 1, 2026**, or upon a later date to be mutually agreed in writing and will ultimately depend on the CRC award date.

In assessing applications, UBC recognizes the legitimate impact that leaves (e.g., parental leave, leave due to illness) can have on a candidate's record of research achievement. These leaves will be taken into careful consideration during the assessment process.

Nominations are subject to review by the CRC Secretariat, and appointment as a CRC is conditional upon their approval. Consult the Canada Research Chairs website <http://www.chairs.gc.ca> for full program information, including further details on eligibility.

In accordance with [UBC's CRC Equity, Diversity, & Inclusion Action Plan \[https://research.ubc.ca/federal-research-chair-programs/canada-research-chairs/ubcs-commitment-equity-diversity-and\]](https://research.ubc.ca/federal-research-chair-programs/canada-research-chairs/ubcs-commitment-equity-diversity-and), and pursuant to Section 42 of the BC Human Rights code, the selection will be restricted to members of the following designated groups: people with disabilities, Indigenous people, racialized people, women, and people from minoritized gender identity groups. Applicants to CRC positions are asked to complete this equity survey [\[https://ubc.ca1.qualtrics.com/jfe/form/SV_6WJHol7SfPxRMu9\]](https://ubc.ca1.qualtrics.com/jfe/form/SV_6WJHol7SfPxRMu9) as part of the application, and candidates from these groups must self-identify as belonging to one or more of the designated equity groups to be considered for the position. Because the search is limited to those self-identifying as members of designated equity groups, candidates must also provide their name to be considered.

Personal information is collected under the authority of sections 26(a) and 26(c) of the BC Freedom of Information and Protection of Privacy Act. The information you provide will only be used to determine whether you qualify for participation in this hiring process. Data will be collected by the UBC Equity & Inclusion Office and only the names of those who identify as people with disabilities, Indigenous people, racialized people, women, and people from minoritized gender identity groups be shared with the search committee.

The University is committed to creating and maintaining an inclusive and equitable work environment for all members of its workforce. An inclusive work environment presumes an environment where differences are appreciated, recognized, and integrated into current structures, planning, and decision-making modes. Within this hiring process, we are committed to creating an inclusive and equitable process for all candidates (including but not limited to people with disabilities). Confidential accommodations are available on request. Please contact **Zoe Yeung** via email at zoe.yeung@ubc.ca. If you have any questions regarding accommodations or accessibility during the recruitment and hiring process or for more information and support, please visit UBC's Centre for Workplace Accessibility website at <https://hr.ubc.ca/health-and-wellbeing/workplace-accessibility/centre-workplace-accessibility> or contact the Centre at workplace.accessibility@ubc.ca. To learn more about how the University is working to create a more inclusive working and learning environment, please see the UBC Inclusion Action Plan's goals related to recruitment and retention at [this link](#).

With gratitude, we acknowledge that the University of British Columbia Faculty of Medicine and its distributed programs, which include four university academic campuses, are located on traditional, ancestral and unceded territories of First Nations Peoples and communities around the province.

Our Vision: To Transform Health for Everyone.

Ranked among the world's top medical schools with the fifth-largest MD enrollment in North America, the **UBC Faculty of Medicine** is a leader in both the science and the practice of medicine. Across British Columbia, more than 12,000 faculty and staff are training the next generation of doctors and health care professionals, making remarkable discoveries, and helping to create the pathways to better health for our communities at home and around the world.

The Faculty - comprised of approximately 2,200 administrative support, technical/research and management and professional staff, as well approximately 650 full-time academic and over 10,000 clinical faculty members - is

composed of 19 academic basic science and/or clinical departments, three schools, and 24 research centres and institutes. Together with its University and Health Authority partners, the Faculty delivers innovative programs and conducts research in the areas of health and life sciences. Faculty, staff and trainees are located at university campuses, clinical academic campuses in hospital settings and other regionally based centres across the province.

UBC - One of the World's Leading Universities. As one of the world's leading universities, the University of British Columbia creates an exceptional learning environment that fosters global citizenship, advances a civil and sustainable society, and supports outstanding research to serve the people of British Columbia, Canada and the world.

UBC hires on the basis of merit and is committed to employment equity. All qualified persons are encouraged to apply. Equity and diversity are essential to academic excellence. An open and diverse community fosters the inclusion of voices that have been underrepresented or discouraged. We encourage applications from members of groups that have been marginalized on any grounds enumerated under the B.C. Human Rights Code, including sex, sexual orientation, gender identity or expression, racialization, disability, political belief, religion, marital or family status, age, and/or status as a First Nation, Metis, Inuit, or Indigenous person. All qualified candidates are encouraged to apply; however, Canadians and permanent residents of Canada will be given priority.

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