

Career Opportunities

Tier 1 Canada Research Chair (CRC) in Al-driven Medical Imaging FOS, Physics

Posted: November 28, 2025

Deadline to Apply: Wednesday, January 28, 2026

Start Application Process

Located in downtown Toronto, the largest and most culturally diverse city in Canada, and situated on the territory of the Anishinaabeg, Haudenosaunee, Mississaugas of the Credit and the Wendat Peoples, the Department of Physics, in the Faculty of Science at Toronto Metropolitan University (TMU) (formerly Ryerson University), invites applications for a Tier 1 Canada Research Chair (CRC) position in the area of Al-driven Medical Imaging. Conditional upon a successful CRC application and subject to final budgetary approval, the successful candidate will be appointed to a tenure-track position at the rank of Associate Professor or Professor, effective July 1, 2027.

The <u>Canada Research Chairs Program</u> is a federally funded program that seeks to achieve excellence by attracting and retaining the most accomplished and promising researchers. Further details on the CRC eligibility criteria can be found on the CRC Program's *Nominate a Chair* webpage [https://www.chairs-chaires.gc.ca/program-programme/nomination-mise_en_candidature-eng.aspx].

In collaboration with TMU, the successful candidate will develop the CRC application for the April 21st, 2026 deadline. The CRC Tier 1 appointment is tenable for seven years and renewable once. All nominations are subject to review and final approval by the CRC Secretariat.

The successful candidate will engage in a combination of research, teaching, and service duties, and maintain an inclusive, equitable, and collegial work environment across all activities. The incumbent will be expected to develop and maintain a strong, independent, externally funded research program that will be internationally recognized as leading in their field. The CRC will also mentor and support diverse trainees, students, future researchers, and colleagues in forms such as organizing workshops, co-authoring papers, obtaining patents, and contributing to public policy and professional practice. The incumbent will also effectively teach undergraduate and graduate courses and engage in collegial service.

With recent investments of over **\$22M** in infrastructure and operation funding by TMU, the successful candidate will join a rapidly growing ecosystem focused on Medical Imaging and Therapy involving the Greater Toronto research hospital cluster, TMU's newly opened School of Medicine, as well as the Institute for Biomedical Engineering, Science, and Technology (iBEST), a partnership between TMU and St. Michael's Hospital (SMH - part of the Unity Health Toronto network), bringing together science, engineering, biomedical research and clinical expertise at SMH's Keenan Research Centre for Biomedical Science.

Qualifications

Candidates must have a Ph.D. or a terminal degree in Medical Physics, Physics or a related discipline. Nominees for Tier 1 Chair positions must be full professors or associate professors who are expected to be promoted to the full professor rank within one or two years of the nomination. Alternatively, if they come from outside the academic sector, the nominees must possess the necessary qualifications to be appointed to these ranks. If the candidate falls outside these requirements but fits the other criteria of research excellence, their individual eligibility will be sent to the CRC Tri-agency Institutional Programs Secretariat (TIPS) for verification.

Candidates must also:

- be outstanding and innovative world-class researchers whose accomplishments have made a major impact in their fields, in accordance with the CRC Program guidelines;
- be recognized internationally as leaders in their fields, in accordance with the CRC Program guidelines;
- have superior records of attracting and supervising graduate students and postdoctoral fellows (taking into account different practices in the relevant field or discipline) and, as chairholders, be expected to attract, develop and retain excellent trainees, students and future researchers, in accordance with the CRC Program guidelines;
- be proposing an original, innovative research program of the highest quality, in accordance with the CRC Program guidelines;
- have a strong research profile that demonstrates creativity and evidence of impact, such as peer reviewed publications/contributions, patents, special papers, reviews, conference/ symposia proceedings and abstracts, government publications and policy contributions, book reviews by the nominee or published reviews of their work, papers presented at scholarly meetings or conferences, and other forms of scholarly expression, including participation in public discourse and debate and non-peer reviewed publications, which constitute a contribution to research;
- have a record of establishing successful research collaborations;
- demonstrate the ability to establish an independent, highly productive program of research which will attract high levels of external funding, including Tri-Council funding;
- expand their leadership and influence within their academic discipline through editorships, awards, refereed publications, policy briefs, reports, conference organization and other leadership contributions;
- collaborate effectively within a multi-disciplinary community of researchers with various theoretical and/or experimental orientations and levels of analysis;
- have a record of demonstrated commitment to equity, diversity and inclusion in leadership, teaching and research, including recommended practices of recruiting, mentoring and supporting students and research trainees with diverse backgrounds and experiences and from underrepresented groups, such as women, racialized people, persons with disabilities, Indigenous Peoples, Black people, and 2SLGBTQ+ people;
- demonstrate the ability to effectively teach students with diverse backgrounds and experiences in Physics and Medical Physics courses in undergraduate and graduate programs, and the potential to contribute to inclusive and accessible learning, course development and pedagogy; and

• demonstrate the ability to participate in leadership activities in collegial (internal and external) service.

The Tier 1 CRC is intended for outstanding researchers acknowledged by their peers as world leaders in their fields. TMU recognizes a broad spectrum of scholarly contributions, including community-engaged, creative, practice-based, interdisciplinary, and other non-traditional forms of research and knowledge mobilization. Candidates are encouraged to include diverse outputs and impacts that demonstrate excellence and innovation in advancing knowledge, practice, and community engagement.

TMU recognizes that scholars have varying career paths and that career interruptions can be part of an excellent academic record. Life circumstances such as illness, disability, family and community responsibilities (e.g., maternity leave, parental leave, sick leave, leaves due to caring for family members, or slowdowns due to chronic illness or disability) are expected to have an impact on a candidate's record of research achievement. Candidates are encouraged to provide any relevant information about their experience and/or career interruptions to allow for a fair assessment of their application. Search committee members have been instructed to give careful consideration to diverse experiences and knowledge, and to be sensitive to the impact of career interruptions in their assessments. All eligible leaves will be credited at twice the amount of the actual leave taken.

This position falls under the jurisdiction of the Toronto Metropolitan Faculty Association (TFA). View the TFA collective agreement [https://www.torontomu.ca/faculty-affairs/resources/documents/TFA collective-agreements/ffa-collective-agreement/] and a summary of TFA benefits [https://www.torontomu.ca/faculty-affairs/about/exploring-employment-at-tmu/why-tmu/l.

The salary minimums for the Associate and Full Professor ranks are \$131,194.32 and \$150,029.14 per annum respectively. Salary will be commensurate with qualifications.

About the Canada Research Chairs (CRC) Tier 1 Program

The CRC Tier 1 program aims to recruit outstanding and innovative world-class researchers whose accomplishments are recognized internationally and have had a major impact in their field. The social and economic benefits of the program will impact Canadians and others around the world through the commercialization, knowledge translation and mobilization the research generates.

Following a highly competitive and rigorous selection process involving peer review, the successful CRC Tier 1 candidate is appointed for a period of seven years (renewable once). Chairholders are also eligible for infrastructure support from the Canada Foundation for Innovation's John R. Evans Leaders Fund to help acquire state-of-the-art equipment essential to their work. The Chair will be awarded in alignment with the TMU Strategic Research Plan priorities in Health and Wellbeing and Transformative Technology:

The key objectives of the CRC program are to:

- Attract and retain world-class researchers: The program strives to bring leading researchers to Canada to bolster its
 research capacity and international standing.
- Strengthen research excellence: The CRC program aims to foster excellence in engineering and the natural sciences, health sciences, humanities, and social sciences.
- Build research capacity: By attracting and retaining top researchers, the program helps to create a strong base of
 expertise in priority research areas.
- Train the next generation of researchers: Chairholders play a crucial role in mentoring and training students, contributing to the development of highly qualified personnel.
- Enhance Canada's international competitiveness: The program helps to position Canada as a leader in research and innovation, attracting further investment and collaboration.
- Promote equity, diversity, and inclusion: The CRC program is committed to ensuring equitable access and representation for individuals from all backgrounds in its nominations and appointments.
- Contribute to social and economic benefits: By supporting research that addresses societal challenges, the program
 aims to generate positive impacts for Canadians.

The selection process will follow TMU's <u>Canada Research Chair Equity</u>, <u>Diversity and Inclusion Action Plan</u>, which commits the University to intentionally pursuing and implementing system-wide equity initiatives to embed diversity and inclusivity in all university structures, programs, policies, and practices.

TMU is required to implement and comply with the following:

- Ontario Ministry of Colleges Universities Research Excellence and Security (MCURES) research security mandate [https://forms.mgcs.gov.on.ca/en/dataset/on00708];
- the Government of Canada's Policy on Sensitive Technology Research and Affiliations of Concern (STRAC) [https://science.gc.ca/site/science/en/safeguarding-your-research/guidelines-and-tools-implement-research-security/sensitive-technology-research-and-affiliations-concern/policy-sensitive-technology-research-and-affiliations-concern]; and
- 3. the National Security Guidelines for Research Partnerships (NSGRP).

 [https://science.gc.ca/site/science/en/safeguarding-your-research/guidelines-and-tools-implement-research-security/national-security-guidelines-research-partnerships]

The Canada Research Chairs Program is part of the Government of Canada's Policy on Sensitive Technology Research and Affiliations of Concern (STRAC), and it is the responsibility of all candidates to have read and understood what this means as part of their CRC nomination.

The Department of Physics

The Department of Physics [http://www.torontomu.ca/physics] offers an undergraduate degree in Medical Physics and Master's and Doctoral degrees in Physics in the fields of Biomedical Physics, CAMPEP-Accredited Medical Physics and Complex Systems to students of diverse backgrounds. The Department has 17 full-time faculty members, 6 post-doctoral fellows, 55 graduate students, and 8 staff members. Its core group of scientists have secured substantial external peer-reviewed funding for cutting-edge research in Medical Physics, Biomedical Physics and Complex Systems, including an NSERC CRC Tier 2 and is currently competing internally for the opportunity to apply for a Canada Excellence Research Chair.

Faculty members collaborate extensively with the surrounding biomedical community in what the City of Toronto has designated as the Discovery District. The City of Toronto designates the Discovery District as a key employment and innovation zone that houses one of North America's largest concentrations of biomedical research. Within walking distance are leading institutions such as the University Health Network, the Hospital for Sick Children, Mount Sinai Hospital, Women's College Hospital, Unity Health Toronto and the MARS Discovery District innovation hub, creating an outstanding environment for interdisciplinary research, clinical translation, and commercialization in the life sciences. The University holds interinstitutional agreements with Sunnybrook hospital and Unity Health Toronto that provide access to clinical and research radiation therapy and imaging facilities. Our faculty prides itself on the excellence of its research, the quality of its teaching and community engagement. We are interested in candidates who will contribute to our existing strengths in research/creativity activity and teaching through academic, professional and diverse lived experiences and perspectives.

Serving a highly diverse student population of over 45,000, TMU offers over 100+ <u>undergraduate</u> and <u>graduate</u> programs built on the integration of theoretical and practical learning. Distinguished by a professionally focused curriculum and a strong emphasis on excellence in teaching, research and creative activities, <u>TMU</u> is a vibrant, urban university known for its culture of innovation, entrepreneurship, community engagement and city building, reflected in its award-winning architecture.

At the intersection of mind and action, TMU is on a transformative path to become Canada's leading comprehensive innovation university. Our new academic plan, <u>Transformative Futures</u>, offers an exciting roadmap towards our ongoing pursuit of academic excellence and to addressing the complex and evolving challenges of our time.

At the heart of TMU's remarkable achievements and its ambitious aspirations are its students, faculty and staff. Committed to a people first culture, the university prides itself on offering exceptional <u>benefits and perks</u>, <u>celebrating the achievements of its faculty and staff</u> and maintaining its unwavering commitment to <u>equity, diversity and inclusion</u>, including its ongoing commitment to <u>Truth and Reconciliation</u>, <u>confronting Anti-Black Racism</u> and <u>accessibility</u> for persons with disabilities. Among its many recognitions include being ranked number one on the <u>Forbes list</u> of Canada's Best Employers for Diversity. We invite you to <u>explore employment at TMU</u> as well as our community of diverse <u>faculty and staff networks</u>.

Connect with us on LinkedIn for the latest news and opportunities at TMU.

How to Apply

Applicants must submit their application online via the Faculty Recruitment Portal [https://hr.cf.torontomu.ca/ams/faculty/] by clicking on "Start Application Process" to begin. Applications should be received by **January 28th, 2026 at 11:59 p.m.** to be considered. The application must contain the following:

- 1. a letter of application that includes your interest in the position; what you would bring to the Department and Faculty; the impact on the field of Al-driven Medical Imaging that you foresee for your research (your 3-page research proposal for the CRC can elaborate on this); and what makes you a strong candidate overall as a researcher, educator, and community member. Please indicate in your letter of application whether at the time of this application, you hold tenure at your current institution.
- 2. a current curriculum vitae providing a clear sense of your scholarly and professional development via your education and your research activities and outcomes, including but not limited to: peer-reviewed and non-peer reviewed publications conference presentations, public talks, articles reaching specialist and non-specialist audiences; effective use of social media for research impact and networking; as well as your contributions to making your discipline a more equitable and inclusive discipline through committee work, community engagement, social media, and advocacy;
- 3. a **research statement** discussing the significance, originality, and potential impacts of your current research program (up to 3 pages), and a research proposal for the first term of your CRC research program (up to 3 pages);
- 4. recent examples of research activities and outcomes, including, but not limited to, peer-reviewed and non-peer-reviewed publications, conference presentations, public talks, articles reaching specialist and non-specialist audiences, and effective use of social media for research impact and networking, knowledge dissemination and translation;
- 5. a teaching statement (up to 3 pages) and a dossier of syllabi and other evidence, if available. These must demonstrate how you engage, encourage, and develop the learning capacity of students entering higher education from a diverse array of backgrounds and experiences, and how you embed practices and principles of equity, diversity and inclusion, including universal design for learning in your classroom, course materials, guest lectures, how you embed practices and principles of accessibility, equity, diversity and inclusion in your classroom, your assignments, and your classroom style;
- 6. the names and email contact information of three academic referees who know you and your research well; and
- 7. a statement discussing your record of demonstrated commitment to equity, diversity and inclusion, including your record of attracting and mentoring a diverse group of students, trainees, and research personnel, and establishing an equitable and inclusive research environment. This should include a plan for establishing and maintaining a diverse core team (at the student, trainee, personnel and early-career researche levels), and an environment that is safe and inclusive and allows all team members to reach their full research potential (e.g., through the recruitment and outreach strategy, equitable training opportunities, and professional development and mentoring).

Please note that all qualified candidates are encouraged to apply; however, applications from Canadians and permanent residents will be given priority, in accordance with Canadian immigration regulations.

At Toronto Metropolitan University, we believe that diversity of knowledge, worldviews and experiences that come from membership in different groups, is fundamental to innovation, teaching and scholarship and that our students are best served by faculty who reflect the diversity of TMU's student body and the community in which TMU is situated. To ensure representation of the excellent talent in Canada, we are particularly interested in applications from members of historically disadvantaged and marginalized groups including: First Nations, Métis and Inuit peoples, Indigenous peoples of North America, Black-identified persons, other racialized persons, persons with disabilities, and those who identify as women and/or 2SLGBTQ+.

Contacts

Any confidential inquiries about the opportunity can be directed to the Department Hiring Committee (DHC) Chair, Dr. Pedro Goldman (goldman@torontomu.ca).

For more information about TMU's CRC nomination process, please contact Dayle Levine, Director, Institutional Programs, the Office of the Vice-President, Research and Innovation (dayle.levine@torontomu.ca).

For confidential inquiries about Research Security, please contact An Chi Lee, Director, Research Security, the Office of the Vice-President, Research and Innovation (researchsecurity@torontomu.ca) with "Tier 1 Application" in the subject line.

Candidates who belong to one or more of the equity-deserving groups recognized at TMU (women, racialized people, First Nations, Métis and Inuit (FNMI) Peoples, Black people, persons with disabilities and 2SLGBTQ+ people) are welcome to connect with Debbie Thompson, Executive Director, Office of the Vice-President, Equity and Community Inclusion (debbie.thompson@torontomu.ca).

Indigenous candidates who would like to learn more about working at TMU are welcome to contact James McKay, TMU's Indigenous Human Resources Lead (Indigenous@torontomu.ca).

For any confidential accommodation needs in order to participate in the recruitment and selection process and/or inquiries regarding accessing the Recruitment Portal, please contact OVPFA (vpfa@torontomu.ca).