

L'Université
de Montréal
et de votre
carrière.

Deeply rooted in Montreal and dedicated to its international mission, Université de Montréal is one of Canada's Top 100 Employers. Like the city whose name it bears, it is effervescent and multicultural.

UdeM attracts over \$500 million in research funding every year, making it one of the three university research hubs in Canada. It also ranks among the best universities worldwide and among the five best French language universities.

Through the achievements of the members of its community, UdeM participates in building today's and tomorrow's world.

Assistant Professor in Drug discovery and development assisted by Artificial Intelligence (AI)

Faculty of Pharmacy

In collaboration with the Institute for Research in Immunology and Cancer of the Université de Montréal (IRIC), the Faculty of Pharmacy is looking for an assistant professor who will be a principal investigator at IRIC.

The successful candidate will develop an independent research program in the field of **AI for drug discovery and development**, which may include, but not limited to, predictions of compound activity, predictions of compound physical/pharmaceutical properties, virtual screening of drug libraries, drug optimization, and design of retrosynthetic schemes. The successful candidate should be a specialist in AI (neural networks for deep learning, reinforcement learning, diffusion models, etc.) and develop new cutting-edge computing approaches.

The Faculty of Pharmacy at the Université de Montréal, the largest French-speaking pharmacy school in North America, is dedicated to remain at the forefront of research and training in pharmaceutical care and sciences. With a team of 55 dedicated, pioneering, and proficient professors, we educate professionals and researchers who significantly impact both society and the scientific community, thereby solidifying our institution's international acclaim. As a Professor joining our faculty, you will play a crucial role in our mission to lead in pharmaceutical education and research. We employ an interdisciplinary and innovative approach to address the evolving health challenges facing our society.

IRIC's primary goal is to better understand the biological processes that contribute to cancer and identify ground-breaking avenues in the development of effective therapies. IRIC is located in a state-of-the-art building on the main campus of UdeM. It currently hosts 27 Principal Investigators and nearly 450 trainees, graduate students, postdoctoral fellows, research associates and support staff. IRIC also comprises several cutting-edge core facilities, including Bioimaging, Biophysics & NMR, Flow Cytometry, Genomics, High-Throughput Screening (chemical, RNAi, and CRISPR), Bioinformatics, Histology, Medicinal Chemistry, Proteomics, and In Vivo Biology/Animal facility. Most importantly, IRIC houses one of the largest Drug Discovery Unit in an academic setting in Canada. Its activities are led by a team of 65 expert chemists and biologists who have extensive drug discovery experience in an industrial setting. A collegial, dynamic and curiosity-driven research environment is a defining feature of the Institute.

For more information: Faculty of Pharmacy : [pharm.umontreal.ca.](http://pharm.umontreal.ca/); IRIC: <https://www.irc.ca/en/>;
Université de Montréal: <https://www.umontreal.ca/en/>

The Faculty of Pharmacy and IRIC offer competitive start-up conditions, a stimulating research environment, state-of-the-art facilities and competitive graduate study programs. Access to IRIC's core facilities and the extensive expertise of its drug discovery unit will provide the successful candidate with a unique environment to validate the proposed algorithmic approaches. In addition, the Université de Montréal counts among its ecosystem the internationally renowned Institut québécois d'intelligence artificielle (MILA) and the Institut de valorisation des données (IVADO), helping to make Montreal a global AI hub.

The successful candidate will have the opportunity to request infrastructure from the Canadian Foundation for Innovation (CFI) and may request the title of IVADO Professor, that will provide an affiliation with MILA. She or he could also be eligible for a Canada Research Chair (www.chairs-chaire-gc.ca). To facilitate the start-up of research activities, IRIC will provide the successful candidate with laboratory space and an office as well as highly competitive start-up funds.

Your academic responsibilities

As an assistant professor, you will have the opportunity to actively contribute to upholding and promoting excellence within the Faculty of Pharmacy. This role encompasses four key academic responsibilities, each crucial to our institution's success and commitment to excellence in academia and research.

- > **Research:** The successful candidate is expected to establish and lead an independent and innovative research program that achieves international recognition. This involves developing cutting-edge research initiatives, securing funding, and contributing to the global scientific community through impactful discoveries and advancements in their field.
- > **Teaching Responsibilities:** The successful candidate is expected to make significant contributions to both undergraduate and graduate education within the Faculty of Pharmacy, with a particular focus on AI in drug discovery and development. In addition to the teaching duties, the candidate will also be responsible for the mentorship and supervision of undergraduate and graduate students, as well as postdoctoral trainees, fostering an environment of academic excellence and innovation.
- > **Impact and contribution to the successful functioning of the organization:** The successful candidate will be instrumental in advancing his/her field by actively engaging in promoting their discipline through conferences, publications, and scientific activities. Additionally, they will contribute to the effective operation of both the Faculty of Pharmacy and the IRIC by participating in committees and working groups, thereby playing a vital role in the collaborative and dynamic environment of our institutions.

To succeed in this role, you will need to:

- > Hold a Ph.D. in a discipline relevant to the position;
- > Have significant experience and productivity at the postdoctoral level in a discipline relevant to the position;
- > Have demonstrated the ability to collaborate on projects with large multidimensional data sets requiring experience in the integration of genomic, proteomic and/or clinical data, as well as drug screening;
- > Demonstrate potential to develop internal and international collaborations;
- > Demonstrate skills to provide high-quality university education, including undergraduate education;
- > Be ready to submit your application to the salary award program of the Fonds de recherche du Québec – Santé or the Canadian Institutes of Health Research;
- > Having training in pharmacy, pharmacology, cancer or immunology is an asset;
- > An adequate knowledge of the French written and spoken language or a strong commitment to mastering the proficiency level required, in accordance to [Université de Montréal's Language Policy](#). An institutional learning support program is offered to all professors wishing to learn French or improve their communication skills.

How to submit your application

We invite you to submit, **by March 31, 2024 at the latest**, your resume and a three-page description of your research program for the next four years. In addition, a letter is requested indicating how you envisage your integration into the Faculty of Pharmacy and IRIC, with regard to teaching and research. You must also attach three letters of recommendation to your application and forward it by email to:

Lucie Blais, Ph.D.

Vice-doyenne aux affaires professorales et internationales
Faculté de pharmacie, Université de Montréal
lucie.blais@umontreal.ca

Additional information about the position

Reference number	PHA 01-24 / 01
Application deadline	Until March 31, 2024, inclusively
Salary	<i>Université de Montréal</i> offers competitive salaries and a full range of benefits
Starting date	August 1 st , 2024 or after depending on the candidate's availability

DIVERSITY AND INCLUSION

Université de Montréal is strongly committed to fostering [diversity and inclusion](#). Through its *Equal Access Employment Program (EAEP)*, UdeM invites applications from women, Aboriginal people, visible and ethnic minorities, as well as persons with disabilities. We will –confidentially – adapt our recruitment mechanisms to the specific needs of people with disabilities who request it.

UdeM embraces a broad and inclusive definition of diversity that goes beyond applicable laws, and therefore encourages all qualified individuals to apply, regardless of their characteristics. However, in accordance with Canadian immigration requirements, priority will be given to Canadians and permanent residents.

In order to measure the impact of its equity, diversity and inclusion actions, UdeM is collecting data on applicants identifying themselves with one of the groups targeted by the Equal Employment Opportunity Act, namely women, Aboriginal people, visible minorities, ethnic minorities and people with limitations. To this end, we thank you for completing [this self-identification questionnaire](#). The information you provide through this form is **strictly confidential** and will be shared only with those responsible for the UdeM EAEP. If you wish, you may also indicate that you belong to one of the targeted groups in your cover letter, which will be reviewed by the selection committee and the assembly of peers.

Université de Montréal's application process allows all members of the Professor's Assembly to review the application files submitted. If you wish to keep your application confidential until the shortlist is established, please mention it in your application.

