

Institution: The Lunenfeld-Tanenbaum Research Institute of Sinai Health, Toronto, Canada

Job title: Principal Investigators in Population Health Data Science (2 positions)

Posting date: Monday, August 27 2025

Application Closing date: Monday, October 20th, 2025 (midnight, Eastern Time)

Starting date: Anticipated start is September 1, 2026 or a date to be mutually agreed upon.

1. Position Summary

The <u>Lunenfeld-Tanenbaum Research Institute</u> (LTRI) of <u>Sinai Health</u>, a University of Toronto-affiliated research centre, is seeking two (2) emerging leaders in the broad area of **Population Health Data Science**. The appointments will be for Full-Time Principal Investigators, rank equivalent to Assistant or Associate Professors, with the anticipated starting date of September 1, 2026, or a date to be mutually agreed upon. The LTRI provides competitive start-up packages and salaries, commensurate with experience and qualifications.

We seek applicants who will develop independent, outstanding and innovative Population Health Data Science research programs. We will consider applicants spanning all areas of Population Health Data Science, including complex disease epidemiology, infectious disease research, risk prediction modeling, population and medical data linkage, geospatial data mining, multi-omics data integration, and artificial intelligence (AI) applications in health sciences, such as causal machine learning, deep learning for medical imaging, generative AI and more. The positions are open to both those who are specialized in methodological development, as well as those focused on innovative applications to impactful population health issues. The health topics include but are not limited to perinatal and maternal-child health, cancers, cardiometabolic conditions, autoimmune diseases and other complex health issues.

The Lunenfeld-Tanenbaum Research Institute is one of Canada's leading biomedical research institutes, located within Mount Sinai Hospital at Sinai Health in downtown Toronto. The LTRI is dedicated to excellence in health research and the development of early-career investigators. LTRI's faculty members are internationally renowned for their work in cancer, maternal-infant health, diabetes, inflammatory conditions, and genetic disorders among others. Large-scale health data has been collected through multiple research initiatives and platforms. Within the LTRI, the Prosserman Centre for Population Health Research comprises multi-disciplinary scientists focusing on quantitative research of complex diseases, including precision health and multi-omics data integration based on large-scale cohorts and biobank data. Partnering with the Data Sciences Institute, the Dalla Lana School of Public Health, the Department of Statistical Sciences, and the Department of Computer Science at the University of Toronto, the Prosserman Centre for Population Health Research is a hub for an active research community of public health research, complex disease epidemiology, omics data sciences and quantitative method innovation.

LTRI provides a research-intensive environment with modern and innovative core facilities. These include institutional high-performance computing clusters, biobanking as well as next-generation sequencing,

single-cell platforms, proteomics, robotics, and advanced cellular imaging, which drive technology development and are housed in the <u>Network Biology Collaborative Centre</u>. LTRI has a fully accredited <u>Biospecimen Repository</u> for biobanking and a dedicated Research Trainee Centre that supports trainees across disciplines from around the world.

LTRI research groups engage in productive collaborations with the larger University of Toronto community, as well as national and international networks. The University of Toronto boasts one of the world's most concentrated biomedical research communities, and is notably home to the Toronto Academic Health Science Network (TAHSN), the Vector Institute for Artificial Intelligence and the Data Sciences Institute. Government agencies such as the Ontario Institute for Cancer Research and Public Health Ontario, with whom our researchers partner, are also based in Toronto. Toronto is a vibrant, safe, multicultural city with excellent quality of life.

2. Appointment Details

Investigators at the Lunenfeld-Tanenbaum Research Institute are appointed to independent positions equivalent to Assistant, Associate or Full Professor, depending on experience. Preference for this open position will be given to individuals who qualify at the level of Assistant or Associate Professors. The Investigators will be cross-appointed at the University of Toronto in the academic department best aligned with the candidates' backgrounds and research topics and, when applicable, with a possible affiliated appointment at the Vector Institute. The investigator will be integrated into the extensive network of data scientists affiliated with the Data Sciences Institute at the University of Toronto.

3. Education and Experience Requirements

Candidates must hold a PhD, ScD, MD or equivalent doctoral degree, with postdoctoral or additional research experience and an established record of research accomplishment as demonstrated by outstanding publications, presentations at major international conferences, awards and accolades, as well as endorsement by reference letters. A track record of securing external funding and experience in cross-disciplinary collaborations is an asset. The successful candidates are expected to initiate and lead innovative, independent, and externally funded research programs of the highest international calibre and impact.

As an equal opportunity employer who understands that diversity enriches our community and culture, we invite applications from all qualified candidates, including Indigenous Peoples, racialized people, disabled people/people with disabilities, women, and members of 2SLGBTQIA+ communities. The Lunenfeld-Tanenbaum Research Institute and Sinai Health recognize that scholars have diverse career paths and that career interruptions due to personal circumstances can be part of an exceptional academic record. Candidates are encouraged to explain any personal circumstances to allow for a fair application assessment. The committee will carefully consider any impact of career interruptions in its decision-making.

4. How to Apply

Applications should include the following documents:

1. A cover letter

- 2. A one-page structured summary that includes: **A)** a brief education/training history; **B)** a summary of the applicant's most important research contributions (up to five), and **C)** an abstract of the research plan
- 3. A complete curriculum vitae with complete publication list, and evidence of prior funding
- 4. A research statement highlighting the proposed research program (not exceeding 3 pages, including figures; references can be on a separate page)
- 5. A statement (0.5 to 1 page) highlighting past and future commitment to equity, diversity and inclusion (EDI). Please describe your strengths and experiences in promoting EDI in your previous institutional environments, as well as your commitment to supporting diverse trainees and colleagues in the future.
- 6. Three reference letters

Applications should be submitted via the Interfolio website prior to October 20, 2025: https://apply.interfolio.com/172529

Applicants needing additional information can contact the Search Committee Chair, Dr. Rayjean Hung via DataScience_search@lunenfeld.ca. Note that e-mailed applications will not be accepted.

5. Diversity Statement and Employment Conditions

Employment at Sinai Health is conditional upon the verification of credentials, completion of a health review, and demonstrating proof of immunity and vaccination status of vaccine-preventable diseases. All employees and affiliates will follow safe work practices and comply with health and safety policies, procedures and training. If you believe you are one of the very few people who may require an exemption from vaccination, supporting medical information must be submitted to our Occupational Health department, who will review and assess.

Sinai Health is comprised of Mount Sinai Hospital, Hennick Bridgepoint Hospital, Lunenfeld-Tanenbaum Research Institute and our system partner Circle of Care. We deliver excellent care in hospital, community and home, focusing on the comprehensive needs of people. Sinai Health discovers and translates scientific breakthroughs, pushes boundaries for health solutions and educates future clinical and scientific leaders. Clinical areas of specialization include rehabilitation and complex continuing care, surgery and oncology, urgent and critical care, and women's and infants' health. The Lunenfeld-Tanenbaum Research Institute ranks among the top ten biomedical research institutes in the world. Sinai Health is a full affiliate of the University of Toronto.

As an equal opportunity employer who understands that diversity enriches our community and culture, we invite applications from all qualified candidates including Indigenous Peoples, racialized people, disabled people/people with disabilities, women, and members of 2SLGBTQIA+ communities. If you require accommodation(s) due to disability at any point during the application and hiring process, please contact the Lunenfeld-Tanenbaum Human Resources Department via email at kdudas@lunenfeld.ca. We recognize that scholars have varying career paths and that career interruptions due to personal circumstances can be part of an excellent academic record. Candidates are encouraged to explain any personal circumstances to allow for a fair assessment of their application. Search committee members

have been instructed to give careful consideration to and be sensitive to the impact of career interruptions in their assessments.

All qualified applicants are strongly encouraged to apply; however, in accordance with Canadian immigration requirements, Canadians and permanent residents will be given priority.

Collection of Equity Data

As part of your application, you will be asked to complete a brief Diversity Survey directly on the Interfolio site. This form is voluntary, and any information directly related to you is confidential and cannot be accessed by the search committee. Results will be aggregated for institutional planning purposes as part of our Equity, Diversity and Inclusion initiatives.