

Multiple Co-op, Research Assistantship and Postdoctoral Fellowship opportunities are available in the general area of data processing, analytics and visualization, as well as dashboard development to support the on-going collaboration between the Laboratory for Industrial and Applied Mathematics (LIAM), the Public Health Ontario, and Sanofi. This on-going collaboration is supported by the Disaster and Health Emergency Urban Systemic Risk Transformation Cluster funded by York University, and the NSERC Alliance (Mitacs partnered) program “Advanced Mathematical Technologies for Respiratory Infection Risk Assessment and Pharmaceutical Intervention Scenario Analysis”.

The collaboration aims to develop mathematical models, and AI/statistical data analyses in supporting dashboard development for projecting a range of emerging and seasonal infectious disease transmission trend. In addition to postdoctoral fellows, the program is recruiting research assistants (PhD and Masters), co-op and interns (undergraduate) from Canadian universities. We hope to enhance the existing team of trainees with complementary background in public health, software engineering, data sciences, mathematical sciences (mathematics, statistics and computational sciences), economics and financial risk assessment and management.

The successful candidates will a). contribute to a team effort, participate in the group discussions; b). undertake an independent research, dashboard development, and risk assessment component of a team research project; c). conduct critical literature reviews relevant to the research, development and risk assessment component; d). present the review to the group, and update the review weekly.

Depending on the positions, the successful candidate must have the following skills:

- Communication and team-work skills: the candidate must be able to interact with team members, academic supervisors and participating partners; the candidate must be able to work in a team environment, and is able to communicate with the team; the postdoctoral fellow candidate are expected to play a leading role in the team-work.
- Analytic skills: the co-op candidate must be able to extract relevant information and conduct relevant analyses for a research and risk assessment component of a team research project; the postdoctoral fellow candidate must be able to formulate the mathematical and AI models from relevant practical problems;
- Computer related skills: the co-op candidate must be able to run and modify existing codes; the research assistant and/or postdoctoral fellow candidate must have experience developing the dashboard.

Interested students should send a CV and a statement of interest to describe the relevant background and skills, and indicate the desirable starting and ending dates.

Interested students should send these materials to wujh@yorku.ca by January 15, 2024. Review of the applications will be conducted immediately, and only selected applicants will be contacted.