



UNIVERSITY OF  
TORONTO

## **Post-Doctoral Fellowship Opportunity at the University of Toronto** **Interdisciplinary focus on Human-Centered Design and Data Science**

The Data Sciences Institute (DSI) is a central hub and incubator for data science research, training, and partnerships at the University of Toronto. The DSI Postdoctoral Fellowships are designed to support multi/interdisciplinary training and collaborative research in data sciences. Further details can be found here: <https://datasciences.utoronto.ca/data-sciences-institute-postdoctoral-fellowships/>.

Our collaborative research team at the University of Toronto will support applications for this postdoctoral fellowship opportunity. We are looking for highly motivated individuals who are interested in multidisciplinary training in **Data Science** and **Human Computer Interaction/Human Factors Engineering**.

### ***The Team:***

Our research team combines expertise across epidemiology, predictive modelling, machine learning, human factors engineering, and public health. Our research approach involves collaboration with end-users in public health who understand their communities and are eager to build capacity in applying data-driven approaches for preventing and managing the burden of chronic disease.

### ***The Project:***

Population-based risk tools offer data-driven support to guide resource allocation and public health planning. Our team has recently developed a novel algorithm using population-level health system data to predict the burden of chronic diseases years in advance to inform interventions, resource planning and to support precision public health approaches. We are currently working on enhancing our chronic disease model to include additional equity considerations and developing a user-focused visual analytics system to deploy these models for use by health decision-makers.

### ***Your Role:***

As a post-doctoral researcher, you will be co-supervised by Professor Laura Rosella ([Population Health Analytics Laboratory](#)) to refine the current chronic disease risk model to include equity, economic, and intervention measures and by Professor Birsen Donmez ([Human Factors and Applied Statistics Laboratory](#)) in developing the prediction model interface and implementing human-centered design approaches.

### ***Requirements:***

- A PhD in Engineering, Computer Science, Biostatistics or Information Science
- Skills in programming (e.g., Python, Java, C# or R)
- Skills in data science

If you are interested, please contact Prof. Birsen Donmez ([donmez@mie.utoronto.ca](mailto:donmez@mie.utoronto.ca)) by **December 10<sup>th</sup>, 2021** with a CV and a cover letter outlining your interest in this opportunity.