Comparing inter-provincial SARS-CoV-2 dynamics within vulnerable populations

Samira Mubareka (Sunnybrook Research Institute) and Finlay Maguire (Dalhousie University) are seeking a co-supervised postdoctoral fellow for a collaborative genomic epidemiology project with public health partners. The postdoctoral fellow will lead phylogeographic and phylodynamic analyses of linked viral genomic and epidemiological data to investigate the impact of varied public health measures on SARS-CoV-2 dynamics in vulnerable populations across Ontario and Quebec during the 3rd wave of the COVID-19 pandemic in Canada.

The position is available immediately, however the starting date as well as remote/physical location can be flexible.

Responsibilities:

The postdoctoral fellow will be responsible for coordinating access to genomic and epidemiological datasets with public health partners and using said data to estimate epidemiological parameters, viral dynamics, and potential impact of viral control measures across social determinants of acquisition and transmission risk.

The postdoctoral fellow will be expected to present their work at national and international conferences, and publish their work in peer-reviewed journals.

Qualifications:

Applicants should have the following qualifications:

- A PhD in a relevant field such as bioinformatics, epidemiology, or statistics
- Experience with phylogenetic inference methods and tools
- Familiarity with epidemiological statistics and modelling
- Experience with SARS-CoV-2 data, and data analysis skills such as cleaning, visualisation, and analysis-related programming (e.g., python/R) is an asset.