



Post-Doctoral Fellowship Position in Decision Modelling

Employer: School of Pharmacy, University of Waterloo

Location: Kitchener, Ontario, Canada

Start date (tentative): January 2021

A post-doctoral fellowship (PDF) position is available at the School of Pharmacy at the University of Waterloo in Kitchener Ontario, Canada. The PDF will be part of an established research team that includes mathematical modelers, health services researchers, health economists, physicians, biostatisticians and health policy makers.

This PDF position involves implementing a mathematical/infectious disease model to estimate the prevalence, the untreated population, and the undiagnosed population for hepatitis B virus (HBV). The model will use the observed occurrence of current HBV-related events to make inference about the HBV-incidence in the past that lead to them using Bayesian method. The PDF will work closely with analysts, the Principal Investigators, and other members of the study team, to identify important parameters and architecture for the model.

Responsibilities

- Designing and implementing an infectious disease model for HBV
- Working with and potentially managing other researchers and analysts
- Performing necessary data collection for the model
- Supporting and/or conducting analyses for other related projects
- Writing peer-reviewed publications and peer-reviewed grants

Requirements

- PhD in statistics, applied mathematics, computer science, management science, health economics, or epidemiology with a strong interest in disease modelling for health policy research
- Having experience in agent-based modeling and/or discrete event modeling is a plus.
- Understand Bayesian methods, in particular Markov chain Monte Carlo (MCMC) method
- Ability to program in C++ and R with transferable skills
- The sense of urgency necessary to meet goals, objectives, and deadlines
- Strong multi-tasking and organizational abilities

This PDF position is initially for one year with possibility extending to two years and carries a competitive stipend. Applications should be sent via email to Dr. William W.L. Wong, School of Pharmacy, University of Waterloo: wwlwong@uwaterloo.ca

An application should include an application letter, curriculum vitae, a related research paper or research summary and name of three referees. Review of applications will begin on November 1, 2020 and continue until the position is filled.

