

Laboratory for Industrial and Applied Mathematics

Postdoctoral Fellowship Position in Zika Transmission Dynamics Modeling

A postdoctoral fellowship (PDF) position is available at York University and the University of Toronto, Canada. The PDF will be part of an established international multidisciplinary team of academic researchers and knowledge users with expertise in entomology, infectious disease epidemiology, clinical sciences, mathematical modeling, computer simulation, health services research, economic evaluation and knowledge to action initiatives.

The PDF's primary role is to develop a Zika virus (ZIKV) transmission models and analyses to inform ZIKV intervention strategies. This is part of a larger project characterizing the transmission dynamics of ZIKV and designing integrated ZIKV intervention approaches in different eco-epidemiological settings (Argentina, Colombia, Ecuador). The PDF will work closely with the project team. We have established strong partnerships with important institutional stakeholders and other ZIKV research teams.

Key Responsibilities:

- Develop a Zika virus (ZIKV) transmission model to under the infection dynamics and to evaluate the impact of integrated ZIKV intervention strategies.
- Present research at relevant meetings and conferences, draft manuscripts and other publications and write grant applications with the support of the team.

Knowledge and Skills:

- Expertise in vector-borne disease transmission dynamics modeling and analysis.
- Demonstrated proficiency in model parameterization, validation, simulation, visualization and interpretation.
- > Strong communication and interpersonal skills to work effectively within a multidisciplinary team.

Education and Experience:

Doctoral degree in mathematical biology

Position Details:

This PDF is initially for one year with the possibility to renew for a second year. Start date is flexible (anticipated Fall/Winter 2017). Primary location is at the Laboratory for Industrial and Applied Mathematics (LIAM), York University, Toronto, Canada.

Interested candidates should submit their CV and a detailed cover letter to Professor Jianhong Wu, wujh@mathstat.yorku.ca, with subject "CIHR-IDRC Zika Project". Applications will be considered immediately, and only selected candidates will be contacted.