



Agent-Based Modelling Laboratory



Postdoctoral Fellowship -Computational Modelling of Disease Epidemics

Agent-Based Modelling Laboratory, York University

Deadline: June 30, 2014

Applications are invited for a postdoctoral position in **Computational Modelling of Disease Epidemics** at the Agent-Based Modelling Laboratory (ABM-Lab). The successful candidate will be expected to play a major role in trans-disciplinary projects involving university-industry partnership. The research will apply computational techniques, data analysis and visualization, and software engineering practices to develop novel agent-based models of disease spread and apply them to evaluate policy effectiveness. These models will address strategies for the use of new influenza vaccines to reduce burden of specific population settings. Under the supervision of Dr. Seyed Moghadas, the successful applicant will work collaboratively with the industrial partner in this project.

Applicants should have significant practical experience for computer programming of large-scale simulations and one or more areas of epidemiology, agent-based disease modeling, statistical analysis of large databases, or multi-agent-systems. The successful candidate will have excellent English language communication skills (both written and verbal). Previous experience working in a trans-disciplinary research environment, writing scientific articles, experience with GPU and parallel programming, and machine learning would be an asset.

Applicants must be within 4 years of having completed their PhD in a field that is relevant to the research project (e.g., computational biology, bioinformatics, applied mathematics or computer science, software engineering, computer engineering). The initial appointment will be for one year beginning July 2014 or soon after (but no later than July 31, 2014). Extension of the appointment for the second year is possible, but subject to funding availability and satisfactory performance during the first year. The salary commensurate with the experience of the candidate in the range of \$38,000 to \$46,000 CDN (including benefits).

Review of applications will begin immediately, and continue until the position is filled. Applicants must submit a cover letter, curriculum vitae along with complete contact information, copies of 2 recent publications (if applicable), a one page summary of research experience and its relevance to the objectives of this position, and arrange for two letters of recommendation to be sent directly to abmlab@yorku.ca. We appreciate receiving applications; however, only selected applicants will be contacted. Position is subject to funding approval.