



## **Mathematical Modeling Post Doctoral Fellowship**

Applications are invited for two Postdoctoral Positions in Mathematical Modeling within the Division of Mathematical Modeling (DMM) at the University of British Columbia Centre for Disease Control, BC, Canada. UBC CDC is a research and training Centre for Excellence. It assures that the public, as well as health practitioners, have access to experts with the latest knowledge. The Centre plays a leading role in Canada by applying research to protect people from infectious and chronic diseases.

The successful candidates will be part of the research program in mathematical modeling of communicable diseases at the DMM. They will contribute substantially to the development of new mathematical and computational tools to study the transmission dynamics of communicable diseases and to devise and evaluate strategies to control the spread of disease in populations by providing quantitative analysis to support and assist informed policy recommendations. In addition, they will contribute substantially to at least one of the following research areas:

a) modeling the transmission dynamics of pandemic and inter-pandemic influenza;

- b) modeling the transmission dynamics of sexually-transmitted and blood borne infections;
- c) modeling outbreaks in hospitals;
- d) modeling farm-based animal infection transmission.

Strong candidates active in related areas of theoretical or computational physics, biology/epidemiology, nonlinear analysis and mathematical modeling will be given careful consideration.

Applicants should possess a PhD degree in physics, applied mathematics, mathematical biology/epidemiology and have a demonstrated interest and experience in mathematical modeling and scientific computing. Proven ability to work independently and experience in network theory, statistical physics and complex systems are considered to be important assets for this position.

The appointments are funded by grants from the Canadian Institutes of Health Research. The positions are for one year in the first instance. These positions have the potential to be extended for up to 3 years for suitably qualified candidates if skills, interest and performance allow. Ability to quickly adapt to new scientific environment and good personal and communication skills are assumed for these positions.

The application must include the following:

- \* cover letter highlighting his/her suitability for this position;
- \* curriculum vitae;
- \* up to 3 selected preprints/reprints most relevant to this position;
- \* 3 letters of reference.

Electronic applications are preferred and are to be sent to krista.english@bccdc.ca (only PDF files will be considered). Informal inquiries by email are welcome. Those applicants who would like to send hard copies of their applications (in addition to electronic copies or stand alone) should direct them to: Dr. Babak Pourbohloul, BC Centre for Disease Control, 655 West 12<sup>th</sup> Avenue, Vancouver, BC, Canada, V5Z 4R4.

The positions are available, beginning in the fall of 2007 and will start at a mutually agreed upon date. All qualified candidates are encouraged to apply.

"Understanding and controlling disease dynamics, one equation at a time"