Postdoctoral position in land-atmosphere interactions at the University of Toronto

Position details

Employer and location: University of Toronto, Toronto, Canada

Education Level: Ph.D.

Job Type: Postdoctoral Fellow

Salary: up to CAD 65–70,000 per year depending on experience Term: Full Time, 1 year, with possibility of renewal for a total of 2 year Closing date: review of applications will continue until the position is filled

Minimum requirements

- Ph.D. in hydrology, atmospheric science, civil engineering or related fields
- Hand-on experience with regional climate models, e.g., RegCM, WRF
- Hand-on experience with high-resolution dynamical downscaling simulations
- High level of independence and experience in an interdisciplinary research setting
- Strong oral and written communication skills, with peer-reviewed publications
- Knowledge of programming languages such as Fortran, python, CDO, NCL, NCO

The successful candidate will analyze the physical mechanism of seasonal, extreme events in eastern and western Canada, characterize the operating land-atmosphere processes, quantify the associated impacts, and propose adaptation strategies. These tasks will be carried out by performing and analyzing high-resolution simulations in a regional climate model with boundary forcing determined by global climate simulations carried out as part of the EXplain and PrediCT Regional Climate Changes (EXPECT) program. The simulations will be interpreted in the context of teleconnected signals of climate extremes, considering anthropogenic and natural forcing effects. This project is part of Theme 3 of the EXPECT program, which involves researchers in Europe and North America. The successful candidate will collaborate with several international colleagues and institutions.

The successful candidate will work with Professor Hamed Ibrahim in the Department of Civil & Mineral Engineering and Professor Paul Kushner in the Department of Physics and will be hosted at either departments. The successful candidate will join a diverse group of researchers with a strong interest in promoting diversity in science and engineering. Accordingly, qualified persons of any gender, sexual orientation, minority group and persons with disability are welcome and encouraged to apply.

How to apply

The application must include (**in a single pdf**) a cover letter, a short statement of your research interests (**1 page max**), a complete CV (with academic transcripts) and the contact information of three references to support the candidacy. To apply, or inquire about the position, please contact Hamed Ibrahim (<u>hamed.ibrahim@utoronto.ca</u>).