



Postdoctoral Fellow in data science education

The Department of Microbiology and Immunology (MICB) at the University of British Columbia is seeking a full time Postdoctoral Fellow (PDF) to lead the Experiential Data science for Undergraduate Cross-disciplinary Education (EDUCE) initiative. EDUCE develops and delivers data science modules in undergraduate MICB courses to progressively build student computational competency and data literacy over two years of integrated coursework. In-class experiences are augmented with data science workshops sponsored by the [ECOSCOPE training program](#).

The principal responsibilities of the PDF include:

- Co-development and delivery of reproducible data science modules in existing MICB courses. The PDF will prepare lesson plans, lecture materials, hands-on tutorials, and assignments in consultation with Dr. Steven Hallam (MICB), Statistics (STAT), and faculty course coordinators. Existing (2017-2019) EDUCE course materials are available for use and/or modification as the PDF sees fit.
- Coordination, training, and evaluation of EDUCE teaching assistants (TAs) with input from Dr. Hallam and STAT. TAs assist with the development and delivery of course and workshop content as needed.
- Creation and maintenance of electronic education materials such as the [EDUCE GitHub](#), [videos](#), and [website](#) including interactive Shiny applications.
- Evaluation of EDUCE and course material effectiveness toward publication in peer-reviewed journals. The PDF will compile and analyze evaluation metrics such as pre/post-course and workshop surveys.
- Coordination and promotion of co-curricular opportunities including ECOSCOPE workshops. The PDF may also offer additional co-curriculars such as e-hangouts, hackathons, etc.

Required qualifications:

- PhD in a relevant discipline *e.g.* Ecology, Microbiology, Physics, Statistics, or Bioinformatics
- Competency in R or Python including reproducible documents and workflows
- Familiarity with version control (*e.g.* git)
- Experience in undergraduate level instruction
- Strong communication skills
- Ability to work independently as well as part of an interdisciplinary team

Preferred qualifications:

- Enthusiasm for microbiome data analysis and microbial ecology
- Familiarity with curriculum development
- Experience with survey analysis and/or educational research
- Interest in scholarship of education leadership and data science innovation

UBC hires on the basis of merit and is strongly committed to equity and diversity within its community. We especially welcome applications from visible minority group members, women, Aboriginal persons, persons with disabilities, persons of minority sexual orientations and gender identities, and others with the skills and knowledge to productively engage with diverse communities. All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.

Application

Applicants should submit the following elements to our [application system](#).

- cover letter specifically addressing how this position relates to the applicant's experience and career aspirations
- curriculum vitae
- contact information for three references
- teaching philosophy
- evidence of teaching effectiveness or links to relevant data-driven experience (optional)

For full consideration, please submit your application by **March 31, 2019**. The appointment is initially for one year, with option for renewal dependent on performance and funding. Ideally, the position will commence by May 1, 2019.

Sincerely,

Steven Hallam
ECOSCOPE Director
CIFAR Scholar and Canada Research Chair in Environmental Genomics

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