

Faculty Opportunities

Postdoctoral Fellow/Computational Biology

The Department of Microbiology & Immunology is seeking a highly qualified and motivated full-time Bioinformaticist to start January/February 2018. The successful candidate will join the Hancock research group and will perform algorithmic and statistical analyses on genomic and transcriptome sequencing data sets. Specific projects will involve cystic fibrosis, sepsis, bacterial mobility as well as novel peptide therapeutics that target inflammation. This position involves running genome sequencing data analysis pipelines, testing and maintenance of existing sequence-analysis pipelines, automation of routine programming and data-analysis tasks and workflows, managing and processing genomic data, interpretation of results and, where necessary, contributing to the development of software implementing novel algorithms and statistical models. The successful candidate will provide consultation to researchers on study design, analysis and statistical methods.

Qualifications and experience: recent completion (< 3years) of a PhD in a biological science discipline (Biology/Immunology/Biochemistry/Cell Biology). Track record of publishing in top-level, peer-reviewed journals. Demonstrated expertise in bacterial genetics, immunology and cell biology. Demonstrated experience in analyzing transcriptomic data sets. Demonstrated ability to work productively in a collaborative research team. Additional experience required:

- Experience in working with next generation sequencing data and related analysis tools and workflows
- 2+yrs experience working in a research or corporate environment
- Strong knowledge of Unix/Linux operating system
- Considerable programming/scripting skills in R and Python
- Familiarity with human genome databases (Ensembl, UCSC genome browser, NCBI)
- Familiarity with parallel computing environments (Linux clusters, SunGridEngine, etc)
- Experience with bioinformatics tools such as Bioconductor considered an asset
- Experience in development of algorithms/machine learning/statistical models for bioinformatics considered an asset
- Experience with RNA-Seq data analysis an asset
- Experience with data sets from human biological samples an asset

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.

Candidates without a PhD, but with similar skills and experience could be considered for positions appointed through M&P or Research Assistant/Technician classifications depending on degrees held and level of experience. Applicants with PhDs in Bioinformatics and/or Computer Science need to show demonstrated experience with biological data and a strong comprehension of human biological systems.

To Apply: Submit a CV, a short (one-two-page) description of research interests and experience, and contact information for at least two references by e-mail to: careers@hancocklab.com [1]

Assistant Professor in Microbiology, Tenure Track

The Department of Microbiology & Immunology at The University of British Columbia invites applications for a tenure-track Assistant Professor position in microbiology, with emphasis on the following themes: bacterial pathogenesis and virulence, commensalism, antibiotic resistance, and anti-infective/anti-microbial agents. Individuals using molecular or cellular approaches to uncover host-bacteria interaction mechanisms in any experimental system are encouraged to apply.

The position requires a Ph.D. degree, postdoctoral experience, and an outstanding record of research achievements and publications in this field. The successful applicant will be expected to develop a strong, externally-funded and internationally-competitive research program, supervise graduate students and postdoctoral fellows, collaborate with other faculty members, actively participate in service to the department, university, and academic/scientific community, and deliver outstanding teaching in both undergraduate and graduate courses. S/he is expected to be able to teach introductory, upper level, and graduate courses in bacterial pathogenesis, bacterial physiology, and bacterial genetics. The ability to teach introductory bioinformatics would be an asset. Evidence of teaching excellence and an interest in innovative teaching methods are required.

The successful applicant will become a member of the Department of Microbiology & Immunology (<https://microbiology.ubc.ca> [2]), which consists of 25 research faculty with strengths in microbiology, immunology, virology, and host-pathogen interactions. S/he will have laboratory space in the UBC Life Sciences Center, which houses the Life Sciences Institute (<http://lsi.ubc.ca> [3]), a world-class group of 85 laboratories carrying out fundamental research in molecular and cellular life sciences. The successful applicant will have opportunities to collaborate with a large and diverse community of researchers at UBC and affiliated hospitals. Established research groups and facilities include the Centre for Tuberculosis Research, Canada's Michael Smith Genome Sciences Centre, and the Centre for Drug Research and Development. The successful applicant will also have access to state-of-the-art proteomics, genomics, and flow cytometry, as well as the Centre for Disease Modeling, which enables the use of rodent models of disease, the FINDER level-3 biosafety containment facility, and imaging facilities that include a Titan Krios 300kV cryo-electron microscope.

Appointment is expected to be at the Assistant Professor level. Salary will be commensurate with

qualifications and experience. Competitive start-up and infrastructure development funds will be provided. All positions are subject to final budgetary approval. The successful candidate is expected to assume the position by no later than September 1, 2018.

Applicants should send a cover letter, a *curriculum vitae*, a detailed summary of research interests describing two potentially fundable projects (maximum 5 pages), and a statement of teaching accomplishments and interests to Dr. Parvin Bolourani at parvin@mail.ubc.ca [4]. In addition, the applicant should arrange for support from at least 3 referees to be sent to the same e-mail address. Review of completed applications with reference letters will begin on December 1, 2017.

Equity and diversity are essential to academic excellence. An open and diverse community fosters the inclusion of voices that have been underrepresented or discouraged. We encourage applications from members of groups that have been marginalized on any grounds enumerated under the BC Human Rights Code including sex, sexual orientation, gender identity or expression, racialization, disability, political belief, religion, marital or family status, age, and/or status as a First Nation, Metis, Inuit or Indigenous person. All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.

Department of Microbiology and Immunology and the Djavad Mowafaghian Centre for Brain Health | Assistant Professor, Tenure Track

The Djavad Mowafaghian Centre for Brain Health (DMCBH) (<http://www.centreforbrainhealth.ca> [5]) and the Department of Microbiology & Immunology at the Vancouver campus of the University of British Columbia invite applications for a tenure-track Assistant Professor position in the area of neuroimmunology. We seek an outstanding applicant with an innovative research program in central nervous system neuroinflammatory or neuroimmune mechanisms, with emphasis on one or more of the following themes: neurodegeneration and other brain disorders, behavior and brain function, synaptic development and remodeling, and glial-neuronal interactions.

The DMCBH is an interdisciplinary neuroscience research centre focused on discovering the basis for nervous system function and dysfunction, with the aim of developing new treatments. The Department of Microbiology & Immunology consists of 25 research faculty with strengths in immunology, microbiology, virology, and host-pathogen interactions.

The position requires a PhD and/or MD degree, postdoctoral experience, and an outstanding record of research achievements and publications in this field. The successful applicant will be

expected to develop a strong, externally-funded and internationally-competitive research program, supervise graduate students and postdoctoral fellows, collaborate with other faculty members, actively participate in service to the Department, University, and academic/scientific community, and effectively teach undergraduate and graduate courses in their field of expertise. Evidence of teaching excellence and an interest in innovative teaching methods is required.

The successful applicant will have opportunities to collaborate with a large and diverse community of neurobiologists, immunologists, cell biologists and clinicians at UBC and affiliated hospitals. Established research groups and facilities include Canada's Michael Smith Genome Sciences Centre, the Centre for Drug Research and Development, and the Genome Science & Technology training program. The successful applicant will also have access to state-of-the-art microscopy, proteomics, genomics, and flow cytometry as well as the Centre for Disease Modeling, which enables the use of rodent models of disease, and FINDER, a level-3 biosafety containment facility.

Appointment is expected to be at the Assistant Professor level. Salary will be commensurate with qualifications and experience. Competitive start-up and infrastructure development funds will be provided. All positions are subject to final budgetary approval. The successful candidate is expected to assume the position by no later than September 1, 2018.

Applicants should send a cover letter, a *curriculum vitae*, a detailed summary of research interests describing two potentially fundable projects (maximum 5 pages), and a statement of teaching accomplishments and interests to Dr. Brian MacVicar at bmacvicar@brain.ubc.ca [6]. In addition, the applicant should arrange for support from at least 3 referees to be sent to the same e-mail address. Review of completed applications with reference letters will begin on December 1, 2017. All e-mails related to this position should have the word "Neuroimmunology" in the subject line.

The University of British Columbia is a global centre for research and teaching, consistently ranked among the top 20 public universities in the world and 3rd largest university in Canada with an economic impact of 12.5 billion to the provincial economy. Since 1915, UBC's West Coast spirit has embraced innovation and challenged the status quo. Its entrepreneurial perspective encourages students, staff and faculty to challenge convention, lead discovery and explore new ways of learning. At UBC, bold thinking is given a place to develop into ideas that can change the world. As one of the world's leading universities, The University of British Columbia creates an exceptional learning environment that fosters global citizenship, advances a civil and sustainable society, and supports outstanding research to serve the people of British Columbia, Canada and the world.

Equity and diversity are essential to academic excellence. An open and diverse community fosters the inclusion of voices that have been underrepresented or discouraged. We encourage applications from members of groups that have been marginalized on any grounds enumerated under the B.C. Human Rights Code, including sex, sexual orientation, gender identity or expression, racialization, disability, political belief, religion, marital or family status, age, and/or status as a First Nation, Metis, Inuit, or Indigenous person. All qualified candidates are encouraged to apply; however Canadians and permanent residents will be given priority.

