

Job Title:

Research Associate – Fernandez Lab

Department

Department of Microbiology & Immunology, Faculty of Science (Rachel Fernandez lab)

Salary Range: \$69,000- \$72,000

The Department of Microbiology & Immunology at the University of British Columbia Vancouver campus invites applications for a full-time, one-year term appointment as a Research Associate in “Characterization of novel *Bordetella pertussis* vaccines”. The anticipated start date is June 1st, 2025.

The Research Associate will expand the development of novel pertussis vaccines recently described in the laboratory and complete research projects that address the regulation of the modification of *B. pertussis* lipid A.

Applicants must have a PhD in Microbiology with a minimum of 3 years postdoctoral experience working with *Bordetella pertussis*. Applicants should have a strong record of research accomplishments including experience in molecular biology, bacterial genetics, bacterial glycosylation systems, gene regulation mechanisms, protein purification and analyses, and mass spectrometry.

Applicants are expected to lead collaborative projects in the laboratory and see projects to completion. Exceptional organizational and analytical skills are required. Strong writing and verbal communication skills, the ability to work independently and to be detail-oriented are essential.

Primary responsibilities will include:

- Further develop recently described novel vaccines for *Bordetella pertussis*
- Assess potential vaccine adjuvants in a collaborative project
- Complete characterization of existing novel pertussis vaccines
- Assess scale-up of novel vaccine candidates in a collaborative project
- Apply molecular biology – including making mutants and complemented strains, protein purification, and structural analyses to address project goals
- Participate in preparing manuscripts on vaccine and gene regulation projects in the laboratory
- Preparation of invention disclosures and funding proposals
- Disseminate research findings via publications and research conferences
- Mentor undergraduate/co-op students in the Fernandez lab
- Maintain standard operating procedures for lab protocols and equipment.

Applicants must submit the following: (1) a cover letter that describes how your research interests and previous research experience fit with the position, and provide specific details about how you meet the requirements outlined above; (2) a curriculum vitae; and (3) the names and contact information for 2-3 references. All applications must be submitted online at micb.recruitment@ubc.ca.

Review of applications will commence: May 15, 2025.

We provide a supportive and highly interactive environment with strong mentoring as well as opportunities for intellectual and professional growth, innovation, project leadership, and collaboration. Wet-lab work will be carried out in the UBC Life Sciences Institute (LSI)(<http://www.si.ubc.ca>), which houses 85 laboratories carrying out cell and molecular biology research in a highly collaborative setting. Excellent facilities for super-resolution microscopy, single-particle tracking, and real-time imaging are available in the LSI, along with access to advanced facilities for genomics, proteomics, metabolomics, animal models, bioinformatics, and advanced computing. Further information on the Department of Microbiology & Immunology is available at <https://mbim.ubc.ca/>.

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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.

UBC hires on the basis of merit and is committed to employment equity. All qualified persons are encouraged to apply. 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.