THE UNIVERSITY OF BRITISH COLUMBIA
Faculty of Medicine

CAREER OPPORTUNITY

Research Associate – Lung Imaging and Stereology | Department of Anesthesiology, Pharmacology & Therapeutics

The Department of Anesthesiology, Pharmacology & Therapeutics at The University of British Columbia (UBC) invites applications for a full-time, term position (1.0 FTE) at the rank of Research Associate to work in the field of Lung Imaging and Stereology.

The UBC Department of Anesthesiology, Pharmacology & Therapeutics consists of more than 450 physicians, scientists and teaching faculty who provide undergraduate and graduate programs in pharmacology and therapeutics, postgraduate residency programs and fellowships in anesthesiology. This faculty appointment within the Department of Anesthesiology, Pharmacology & Therapeutics will provide the candidate with opportunities for collaboration with the scientists in the department and the wider Faculty of Medicine scientific community, as well as linkages to relevant research centres and institutes at UBC.

Reporting to Dr. Tillie Hackett, the successful applicant will examine the pathology of asthma, chronic obstructive pulmonary disease (COPD) and idiopathic pulmonary fibrosis (IPF) using a combination of multi-resolution CT imaging, transcriptomics, and histology. The successful applicant will work closely with an active research group focused on environmental and genetics causes of human lung disease.

REQUIRED QUALIFICATIONS:

- A PhD in micro-computed tomography (micro-CT) imaging, lung pathology and/or lung stereology, and a minimum of 5+ years postdoctoral experience is preferred.
- Experience in developing multi-resolution CT imaging and image processing pipelines to understand human lung disease.
- Strong bioinformatics skills, with an emphasis on imaging software and statistical analysis of datasets in R.
- Prior experience performing stereology on microCT data sets.
- Prior experience of downstream tissue assays, such as immunohistochemistry, gene expression, lung inflation and preservation protocols.
- Evidence of excellent scientific writing including strong publications and successful grant writing in the field.
- Demonstrated ability to manage a microCT research facility.
- Demonstrated ability to work with others in a team environment and mentor students on imaging pipelines and research projects.

DUTIES MAY INCLUDE:

The successful candidate will be expected to plan, troubleshoot and carry out research in a relatively independent manner on lung pathology, lung histology, and development of custom image processing algorithms used for quantitative analysis of lung structure, while managing the Principle Investigators laboratory micro-CT imagining infrastructure and supervision of research assistants, graduate and undergraduate students using imaging in their projects. They are also expected to present results at various meetings, play an active role in developing research proposals, writing manuscripts for publication, and other related documents. Working as part of a team is essential to complete complex experiments and projects and may involve other duties as required.

SUPERVISION RECEIVED:

The incumbent will receive supervision by the Principal Investigator, Dr. Tillie Hackett

SUPERVISION GIVEN:

The incumbent may be required to supervise trainees and research assistants involved in the research program.

DURATION AND SALARY:
The anticipated start date is July 1, 2023 or upon a date to be mutually agreed. The position is full-time for one year with the possibility of extension, subject to work performance and funding availability. Salary will be commensurate with qualifications and experience.

HOW TO APPLY
Interested individuals should send, no later than **June 15, 2023** their curriculum vitae, the names and contact information of three references and a cover letter describing the applicant's experience relevant to the required qualifications.

Applications should be directed to:

Allison Rintoul
Senior Administrator, UBC Department of Anesthesiology, Pharmacology & Therapeutics
Email: allison.rintoul@ubc.ca
Subject Line: Research Associate – Lung Imaging and Stereology

Review of applications will begin on **June 15, 2023** and continue until the position is filled. The anticipated start date for this position is **July 1, 2023** or upon a date to be mutually agreed.

This position is located within a health-care facility, therefore, the successful candidate will be required to provide verification of full vaccination against Covid-19 provided prior to the start date, as required by a provincial health mandate.

The **University of British Columbia** is a global centre for research and teaching, consistently ranked among the top 20 public universities in the world. Since 1915, UBC's entrepreneurial spirit has embraced innovation and challenged the status quo. UBC encourages its 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.

Our Vision: To Transform Health for Everyone.

Ranked among the world's top medical schools with the fifth-largest MD enrollment in North America, the **UBC Faculty of Medicine** is a leader in both the science and the practice of medicine. Across British Columbia, more than 11,000 faculty and staff are training the next generation of doctors and health care professionals, making remarkable discoveries, and helping to create the pathways to better health for our communities at home and around the world.

The Faculty - comprised of approximately 2,200 administrative support, technical/research and management and professional staff, as well approximately 650 full-time academic and over 9,000 clinical faculty members - is composed of 19 academic basic science and/or clinical departments, three schools, and 24 research centres and institutes. Together with its University and Health Authority partners, the Faculty delivers innovative programs and conducts research in the areas of health and life sciences. Faculty, staff and trainees are located at university campuses, clinical academic campuses in hospital settings and other regionally based centres across the province.

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 of Canada will be given priority.