Centre for
Heart Lung Innovation
UBC and St. Paul's Hospital

SFU SIMON FRASER UNIVERSITY

The Koelwyn lab is looking for a PhD student and postdoctoral fellow to join our lab focused on translational research in exercise and disease pathogenesis.

PhD/Postdoctoral Fellow Position

Our lab welcomes applications from prospective PhD students and postdoctoral fellows interested in joining the Koelwyn laboratory. Our lab studies how structured, precision exercise training induces adaptations to the inflammatory-immune axis to improve outcomes in individuals with heart and lung diseases, as well as those who have required critical care. For publications, see here. We are looking for students and post docs interested in applying 'omic's based technologies, across mouse models and clinical samples, to decipher the molecular mechanisms that enable exercise to protect from and/or reverse immune dysregulation in these diseases.

The lab is uniquely positioned across the Centre for Heart Lung Innovation (HLI), Simon Fraser University (SFU) and the University of British Columbia (UBC). HLI, where our lab is located, is situated within Providence Health Care's St. Paul's Hospital, a UBC teaching hospital in downtown Vancouver. HLI is a world-leading research centre that connects basic science and clinical research across heart, lung, and critical care disease. The lab also has access to SFU and UBC's research and educational infrastructure, enabling cutting-edge approaches, specialized coursework, and diverse collaborative opportunities for trainees.

Trainees will benefit from a foundation of preliminary findings in our lab and established infrastructure for translational research. This includes a dedicated preclinical animal facility for our Centre located one floor below our wet lab space within the Hospital. Our clinical-research collaborations enable unique access to fresh/frozen blood and tissue samples from patients, which complement our exercise testing suites within the High Acuity Unity, adjacent to the ICU, and exercise testing and training lab spaces in partnership with cardiac rehabilitation. We are also fully supported by on site core facilities for molecular phenotyping, 'omics analyses, histology, imaging, and genetically engineered model systems.

Candidates should demonstrate strong critical thinking and communication skills. Special consideration will be given to applicants with previous experience in immunology, exercise physiology and/or computational biology. Our lab offers competitive salaries and benefits for all trainees through unique funded opportunities at HLI, Michael Smith Health Research BC, SFU, and UBC.

Interested applicants can email their CV and cover letter to graeme.koelwyn@hli.ubc.ca.