a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA

Three Postdoctoral Positions in Cancer Proteomics & Bioinformatics

Dr. Philipp Lange, Canada Research Chair in Translational Proteomics of Pediatric Malignancies at the University of British Columbia (UBC) in **Vancouver, Canada**, is seeking up to three highly talented, creative and motivated postdoctoral fellows to join his research team in UBC's Department of Pathology and Laboratory Medicine.

We are a team of experimental and computational scientists interested in **post-translational protein modifications** in **pediatric cancers**. We study **protein dynamics** during cancer progression and treatment response. Our goal is to develop new diagnostic & therapeutic approaches to detect and treat children suffering from cancer earlier, better and with reduced impact on their life. To move towards this goal, we specialize in **quantitative mass spectrometry** based proteomics, cell models and **bioinformatics**. We recently launched a precision medicine initiative (BRAVE) at BC Children's Hospital, where we integrate proteomics and targeted NextGen sequencing with functional cell culture studies and patient derived xenograft mouse models. One area of focus is **cell signaling** and **proteolytic processes** in the **bone marrow microenvironment** in childhood cancers.

State-of-the-art cell-biology and biochemistry lab space with access to latest instrumentation spanning high-content, live & high-resolution imaging, Flow- and Mass- Cytometry and high-performance compute infrastructure is available. A dedicated nano-LC coupled Orbitrap Q-Exactive HF (Thermo) mass spectrometer and Ion-S5 NextGen sequencing system are complemented by access to Orbitrap Fusion and TripleTOF 5600+ mass spectrometers.

The successful candidates will have the opportunity to develop their own research project and take the lead in a node in the **personalized medicine initiative program** or in a Canadian Cancer Society funded project focused on the identification of **highly specific surface epitopes in leukemia and brain cancers**.

We are seeking candidates with a recent PhD (<2years) and strong publication record in high-impact journals to fill the following positions:

- **bioinformatics,** will have demonstrated expertise in analysis of (targeted) NextGen sequencing data, integration of proteomics, genomics and phenome data and excel in statistical analysis and at least one programming language.
- **targeted proteomics,** will have hands on expertise in proteomics sample processing and enrichment techniques (e.g. FFPE, Phosphoenrichment, etc.), processing of small sample amounts, development and validation of targeted PRM assays (PRM), label-based and label free quantification and data analysis.
- **functional cancer biology & proteomics,** will have hands on expertise in isolation of cell surface-proteins and receptor/ligand interactions, proteomic secretome analysis, phosphoproteomics, antibody development and functional cell assays (proliferation, apoptosis, senescence, migration, etc.).

All applicants should be fluent in written and spoken English and have exceptional analytical skills.

Located at the BC Children's Hospital Research Institute (BCCHRI), the leading pediatric research center in Western Canada, the research fellows will be embedded in the highly innovative and interdisciplinary research environment spanning BC Children's Hospital, UBC and the BC Cancer Research Centre. Vancouver repeatedly ranks among the most livable places in the world and combines excellence in research with high quality of life. Excellent opportunities for personal and professional development are provided.

The positions will commence as soon as possible. They are one-year term appointments, with potential for annual renewal. **To apply,** please send a cover letter expressing your research interests, career goals and fit for the position as well as your CV and contacts for three references to brenda.tse@ubc.ca. The positions will remain open until filled.

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.

Lange Lab - www.langelab.med.ubc.ca
University of British Columbia - Faculty of Medicine – Deps. of Pathology & Computer Science
BC Children's Hospital & BC Cancer Research Centre