

## POSITION DESCRIPTION

**Job Title:** Research Associate in Proteome Modulation and Signaling in the Cancer Microenvironment (Lange Lab)

**Employee Group:** Faculty

**Department:** Pathology & Laboratory Medicine

### Job Summary:

Dr. Philipp Lange, Canada Research Chair in Translational Proteomics of Pediatric Malignancies and his team at The University of British Columbia (UBC) in **Vancouver, Canada**, seek an outstanding candidate with exceptional passion to advance the fundamental understanding of proteome modulation in the cancer microenvironment and its implications on treatment of childhood cancers. They have exciting early data waiting for a research associate to take on to make significant advances to the field.

The Department of Pathology and Laboratory Medicine at UBC is a hybrid, academically intensive Department within the UBC Faculty of Medicine whose activities span a broad spectrum of teaching, research, and academic service, often performed in the milieu of clinical practice, and are ultimately devoted to improving the care, treatment, and well-being of patients. The Department offers academic degrees at the bachelor's (Bachelor of Medical Laboratory Science (BMLSc)) and graduate (MSc, PhD) levels with the graduate program, one of the largest in the Faculty of Medicine, which has been recognized by UBC for its quality. The Department plays a major role in the MD undergraduate program and offers an accredited residency-training program. Faculty members participate across a spectrum of research from basic investigative to translational to clinical applied research and are recognized locally, nationally and internationally for their excellence.

### Organizational Status:

The successful candidate will report directly to Dr. Philipp Lange, the principal investigator, and will work in a strongly collaborative and collegial fashion with cross-functional project team members to meet research goals and objectives.

### Work Performed:

The research associate will lead research projects studying the **post-translational modification driven regulation of cell-cell communication in the cancer microenvironment** and pursue activities **to advance findings towards diagnostic tests and new treatment approaches**. They will drive the development of biological model systems spanning from *in vitro* cultured cells to patient-derived chicken chorioallantoic membrane (CAM) and murine xenograft models. They will use their expertise in genome editing and recombinant protein engineering to deconstruct signaling pathways and develop new treatment approaches.

The incumbent will train graduate and undergraduate students, introduce new methodologies to the lab, represent the laboratory in national and international collaborations, and make major contributions to grant proposals and manuscripts. They will be part of a dynamic team of experimental and computational scientists and embedded in the local BRAvE and national PROFYLE pediatric precision oncology initiatives, where you will work with basic scientists, pathologists, analysts and clinicians. They will have direct access to state-of-the-art cell culturing and chicken chorioallantoic membrane (CAM) modeling facilities, mass-spectrometry, next-generation sequencing, flow cytometry, imaging and compute infrastructure.

**Consequence of Error:**

The successful applicant is expected to exercise a considerable amount of judgment, responsibility, and initiative in determining work procedures and methods. He/she should carefully observe and evaluate their work. All works are subject to assessment by Dr. Lange. Consistent poor judgment decisions or errors can result in incorrect data interpretation and potential loss of funding.

**Supervision Received:**

The applicant is expected to work independently under the direction of Dr. Lange, who will be available to provide consultation on unusual problems and project developments.

**Supervision Given:**

Assist with training graduate students and junior lab staff; provide input on staff/co-op student selection and performance evaluation.

**Qualifications:**

- PhD in cancer biology, immunology or related area
- Strong publication record
- Fluent in written and spoken English
- Demonstrated exceptional communication and analytical skills.
- Demonstrated hands on expertise in CRISPER genome editing, functional cell assays, recombinant protein engineering
- Hands on expertise in organoid cultures, CAM modeling, mass spectrometry, processing of small sample amounts / single cell proteomics, cell surface characterization, receptor/ligand interaction and secretome characterization are important assets.
- Strong statistical foundation

**Research Team & Environment:** Located at the BC Children's Hospital Research Institute (BCCHRI), the leading pediatric research center in Western Canada, you will be embedded in the highly innovative and interdisciplinary research environment spanning BC Children's Hospital, UBC and BC Cancer Agency. 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.

**How to apply:**

Review of applications will begin February 1<sup>st</sup>. Please send a **cover letter** expressing your long-term research vision, career goals and fit for the position (detailing how you meet the requirements, as well as when you intend to start this position and relocation plans, if applicable), PDF copies of your most impactful papers (max 3, submitted manuscripts OK) as well as your CV and contacts (full address, email and phone number) for three references to [brenda.tse@ubc.ca](mailto:brenda.tse@ubc.ca). Only shortlisted candidates will be contacted.

The initial appointment will be for one year and may be renewed subject to work performance and funding availability. Salary will be commensurate with qualifications and experience. The start date will be March 1, 2021 or as soon as possible thereafter. The appointment will be based at UBC Vancouver.

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.