Postdoc in Single-Molecule Biophysics and Mechanobiology

I am seeking a highly motivated postdoc to work in experimental biophysics and mechanobiology as part of my lab in the Department of Chemistry at the University of British Columbia’s Okanagan campus.

My group is primarily interested in understanding the regulatory roles of molecular forces in biological systems, from cell adhesion to cell mobility, signalling and differentiation. We have a strong focus on developing and characterizing DNA-based molecular sensors and devices that will interface with cells to measure and control molecular forces leading to cell behaviour and function modulation. In addition, we develop new biophysical and imaging strategies that will maximize the information content from our molecular devices.

The successful candidate will be part of our highly interdisciplinary research team to develop the next-gen molecular force probes and applying them to cellular mechanobiology research. The research project will combine the use of state-of-the-art single-molecule fluorescence, force spectroscopy techniques as well as super-resolution microscopy. The design space to explore in this project are bound only by your creativity and curiosity. The ideal candidate should have outstanding problem-solving skills, curiosity and motivation in the research area, and a strong background in one or more of the following fields: single-molecule biophysics, mechanobiology, stem cell biology, DNA nanomechanics, and live-cell imaging. Postdocs will have access to cutting-edge technologies and extremely active multidisciplinary collaborations with faculties in chemistry, biology, and bioengineering. Salary is competitive and commensurate with experience. The initial appointment is for 1 year and can be extended to 2 years and beyond, based on mutual agreement. The start date is flexible, but ASAP.

UBC has two distinct campuses, one in Vancouver and one in Kelowna. UBC’s new Okanagan campus, where we are at, is situated in the city of Kelowna at the heart of the Okanagan Valley – one of the most scenic regions in Canada. We have beautiful sunny days for the majority of the year and clearly defined four seasons where snow is available in the winter (but the temperature is milder than most other cities in Canada)! The city is on the Okanagan lake and surrounded by mountains where hiking, biking, rock climbing, skiing and watersports are easily within reach. The city is also famous for its wineries and local produce, short commute time, making it one of the cities with the highest quality of life.

Applications should include a cover letter, CV, and contact information of three referees. Please address all enquiries to Isaac Li: isaac.li@ubc.ca.

Isaac T.S. Li, PhD
Assistant Professor
Department of Chemistry and Department of Biochemistry and Molecular Biology
University of British Columbia | Okanagan
3247 University Way, Kelowna, BC, V1V 1V7, Canada
250.807.8069 | isaac.li@ubc.ca | https://people.ok.ubc.ca/isaacli/