

Postdoctoral Positions are available in the Laboratory of Structural Virology @ University of Toronto.

The Laboratory of Structural Virology, directed by Prof. Jeffrey E. Lee, is interested in understanding the structural and molecular mechanisms of key viral and cellular processes. Specifically, the thrust of our research is focused on two areas:

- (a) Virus-cell and cell-cell fusion
- (b) Anti-viral immune restriction factors

Our goal is to reveal new strategies that viruses use to control cellular processes and pathogenesis, and to transform how we think about host-virus interactions. We employ novel hybrid methods that integrate X-ray crystallography, cryo-electron microscopy, small angle X-ray scattering, deuterium exchange mass spectrometry, biochemistry, and virology.

The lab has made seminal contributions with a strong publications record in the past 5 years (Cook et al. *PNAS* 2017; Aydin et al. *Nature* 2016; Siu et al. *Nature Communications* 2013).

Overall, the lab is well-equipped with excellent structural biology and biochemistry facilities. We have a fully-equipped protein expression facility for insect, human, bacterial, and yeast systems. Moreover, a full suite of biophysical (nanoITC, BLI, CD, UV/Vis, fluorescence polarization, SEC-MALS, DLS) and structural (Art Robbins Scorpion, Douglas Instruments Oryx 8, Formulatrix UV Rock Imager 1000, FRAP/fluorescence microscope) infrastructure is available in-house. Regular synchrotron access is available to the lab at the Canadian Light Source, Brookhaven NSLS-II, Advanced Photon Source (Chicago), and Advanced Light Source (Berkeley).

The lab is located directly in downtown Toronto on the main St. George campus at the University of Toronto within the Medical Sciences Building. The laboratory is in the heart of the Toronto Discovery District and close proximity to the University of Toronto-affiliated research hospital institutes.

A full description of the research themes and publications in the lab can be found at: www.leelab-utoronto.com

We are looking for full-time postdoctoral leaders for our two fully-funded projects.

Candidates are expected to have:

- scientific curiosity and creativity
- independence and ability to collaborate
- self-motivation, strong work ethics and dedication
- experience in molecular biology (cloning)
- knowledge of bacterial, insect or mammalian protein expression (bonus if candidate knows all three)
- expertise in X-ray crystallography, protein biochemistry, biophysics, and/or virology
- structural studies of macromolecular complexes by crystallography or cryo-EM are considered assets
- a recent PhD in structural biology, biochemistry or related discipline (or completing in 2017) a strong peer-reviewed publication record

Toronto is considered one of the world's most dynamic and multi-cultural cities. It is consistently ranked top 5 most liveable cities in the world.

The position is fully-funded and scheduled for an immediate start. **Applications (or enquiries) should be addressed to Prof. Jeffrey Lee [\[jeff.lee@utoronto.ca\]](mailto:jeff.lee@utoronto.ca)jeff.lee@utoronto.ca.** I will be happy to discuss details of the projects. Applications should include a cover letter addressing suitability and ambition for the position, CV with list of first-authored publications, and academic referee contact information. The position will remain open until filled.