

The Division of Microscopic Anatomy and Structural Biology at the Institute of Anatomy of the University of Bern, led by Prof. Benoît Zuber, conducts research on membrane biology using structural biology approaches. In particular the lab applies time-resolved cryo-electron tomography (cryo-ET) to address the mechanism of exocytosis at the neuronal synapse as well as in neuroendocrine cells and in vitro reconstituted systems. The lab is well known for its expertise in cryo-electron microscopy of vitreous sections, which enables to study the molecular structure of cells and tissues preserved in their native state. Furthermore, membrane protein structure is investigated by near atomic resolution single particle cryo-electron microscopy (cryo-EM). The lab is equipped with a 200-kV electron microscope with state-of-the-art direct electron detector (Falcon 3 with electron counting mode) and volta phase plate, as well as with a home built spray-mixing plunge freezer. Excellent access to Titan Krios electron microscope is available.

PhD position in structural biology and neuroscience

Your tasks

- You will work on an exciting project about the structure and function of synapses. This will involve:
- Specimen preparation
- Experiments in cell and molecular biology
- Data acquisition by cryo-electron tomography
- Three-dimensional reconstruction
- Advanced data analysis
- Participation in peer-reviewed scientific publications

Your profile

- Master's degree or equivalent in Life Science or Physics
- Candidates with experience in cell biology, molecular biology, neuroscience, or biophysics will be preferred. Enthusiasm to conduct challenging research on technical instrumentation and involving good computer skills.
- Proficiency level in English. German knowledge is of advantage but not required

We offer

The position is available immediately. Salary conditions are according to guidelines by the Swiss National Science Foundation. Further information about the laboratory can be obtained on http://www.anaweb.ch/about_us/management/detail/index_eng.php?id=329
http://www.ana.unibe.ch/research/microscopic_anatomy_and_structural_biology/index_eng.html

Contact

Your application must include a letter of motivation, a CV, and the contact details of two references. Please send it to Benoît Zuber (benoit.zuber@ana.unibe.ch). For further information or an informal chat please contact please contact Benoît Zuber.

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