

Workshop

Title:	Serial Block Face Scanning Electron Microscopy
Date, duration:	On demand, 1 day
Location:	Institute of Anatomy old building, Bühlstrasse 26
Lecturer(s):	Prof. Dr. phil. nat. Benoît Zuber (ANA)
Number of participants:	2 – 4 students
Target audience:	Master and PhD students of the University of Bern. Lecture Series on Advanced Microscopy plus exam (KSL 9256)
Registration:	Send request to Benoît Zuber (zuber@ana.unibe.ch) cc: CEM Administration (cem.mic@unibe.ch)
KSL:	470969
Reward:	0.5 ECTS
Costs:	300 CHF (total costs per course) - PhD students enrolled in the Graduate School for Cellular and Biomedical Sciences (GCB) can apply for refund at the PhD program Cutting Edge Microscopy - Amount accounts for students of the University of Bern. Other participants, please request quote.
Learning goals:	Get an overview of the procedure of serial block face scanning electron microscopy
Description:	Serial block face scanning electron microscopy (SBF-SEM) enables the three-dimensional ultrastructural investigation of relatively large biological sample. Samples are prepared in a similar fashion as for transmission electron microscopy. They are then mounted on an ultramicrotome situated directly inside the electron microscope. The surface of the sample is im- aged, then an ultrathin slice is removed by the microtome, and the proce- dure is repeated hundreds or thousands of time automatically.



Course structure:	The students will get an overview of sample preparation for serial block face scanning electron microscopy (SBF-SEM). They will get a demonstration of sample mounting in the microscope, three-dimensional data acquisition, and data visualization.
Assessment:	To be determined