

Workshop

Title:	Course of Histology: Immunolabelling of Paraffin-embedded Sections, cryo- sections and cells
Date, duration:	On demand, 3-7 November 2025 / 5 days
Location:	DBMR LCI Core Facility, Murtenstrasse 28, 3008 Bern
Lecturer(s):	Dr. Yury Belyaev (MIC) PD Dr. phil. Fabian Blank (DBMR LCI) Dr. Ekaterina Ivanova (DBMR LCI) Selina Steiner (DBMR LCI) Dr. Ana Stojiljkovic (DSL)
Contact:	fabian.blank@unibe.ch
Number of participants:	Min. 3 / Max. 6 students
Target audience:	Master and PhD students of the University of Bern. Attendees of the Lecture Series on Advanced Microscopy (KSL 9256)
Registration:	Send request to Fabian Blank (fabian.blank@unibe.ch) Applicants for the course are kindly asked to provide a brief outline of their interest in the course (e.g. a project requiring methods performed in the course; problems with a current method/protocol, etc.). Due to limited number of participants, we will not accept requests from students not in real need of those techniques.
KSL:	454901
Reward:	2.5 ECTS
Costs:	CHF 400 per student of the University of Bern. - Other participants, please request quote. - PhD students enrolled in the Graduate School for Cellular and Biomedical Sciences (GCB) can apply for refund at the PhD specialization program Cutting Edge Microscopy. Contact cem.mic@unibe.ch .
Learning goals:	Opportunities and pitfalls in histological procedures; Handling of required reagents in an optimized economic way.



Description:	Teaching of basics and advanced techniques
	1. Sample preparation a. Preparation and fixation of Tissue b. Embedding in paraffin c. Cutting and mounting of paraffin sections 2. Labeling procedure a. Permeabilisation, antigen retrieval, blocking b. Incubation with antibodies: Direct/Indirect labeling c. Counterstaining, mounting of samples, bleaching protection 3. Special a. Controls for proper tissue processing; controls for proper immunolabeling b. Optimization of labeling protocol for individual experiments c. Optimized imaging using bright field and fluorescence (conventional/LSM) microscopy d. Approaches for digital image analysis (e.g. QuPath)
Course structure:	Lectures and practical trainings
Assessment:	Poster or oral presentation or exam