Workshop on: Conventional fluorescence microscopy, laser scanning microscopy and digital image processing

KSL: 12284
Course teachers: PD Dr. Fabian Blank, Carlos Wotzkow, Dr. Yury Belyaev, Selina Steiner
Duration: 2 days
Date: Tuesday, 12.06.2018 and Wednesday, 13.06.2018
Location: DBMR LCI Core Facility, Murtenstrasse 50, 3008 Bern

Content: Teaching of basics of

1. Sample preparation
   a. The use of fixed samples (what is the ideal fixation method?)
   b. Labelling of individual samples with immunofluorescence and fluorescence dyes
   c. Mounting of samples (requirements for mounting media and coverslips etc.)

2. Microscopy
   a. Conventional Fluorescence Microscopy
   b. Laser scanning microscopy
   c. Spinning disk microscopy

3. Image processing
   a. Optimizing fluorescence signal quality (e.g. deconvolution)
   b. Image processing and image presentation

Prerequisites:
- Master students: Passing the exam of lecture “Cutting Edge Microscopy”
- PhD Students: Basic knowledge in light microscopy (in particular fluorescence microscopy)
- Participants have to pay a fee of CHF 500.- per person for this course. Students involved in the PhD program of the graduate School for Cellular and Biomedical Sciences (GCB) are entitled to ask for refund by contacting the GCB office (http://www.gcb.unibe.ch/about_us/contact/index_eng.html).

Exam: Poster or oral presentation or exam
ECTS: 1.0