

b UNIVERSITÄT BERN

Medizinische Fakultät Vetsuisse Fakultät Phil.-Nat. Fakultät

Microscopy Imaging Center

Workshop

Title: Light Sheet Microscopy

Date, duration: On demand, 3 days

Location: Institute of Anatomy, Baltzerstrasse 2

Lecturer(s): Prof. Dr. Nadia Mercader (ANA)

Number of participants: 3 - 6 participants

Target audience: Researchers, Master and PhD students of the University of Bern.

Registration: Send request to Nadia Mercader <u>nadia.mercader@ana.unibe.ch</u>

cc: alexander.ernst@ana.unibe.ch

KSL: 471132

Reward: 1.5 ECTS

Costs: 150 CHF per student

- 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: Light Sheet microscopy of entire cleared organs and in vivo samples

Sample embedding 3D image analysis

Description: Light sheet microscopy is a cutting edge fluorescence microscopy method,

particularly suited for imaging large samples with cellular resolution and in vivo imaging with low light exposure. In this practical course you will learn all the steps from sample embedding, imaging until handling the big 3D

data produced by the microscope.

Course structure: Day 1: Introduction and in vivo imaging

Day 2: Cleared sample imaging

Day 3: 3D image processing and analysis

Assessment: Presentation (for ECTS)

