



D UNIVERSITÄT BERN

MIC training:	Fundamentals of	f wide 1	field	microscop	y
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Date: May 09-11, 2023.

Time: 9 am – 5 pm.

Location: Institute of Cell Biology, room C159, Baltzerstr. 4, 3012 Bern.

Trainers: Dr. Julien Toquant, Zeiss, Jena (DE); Dr. Mathias Pasche,

Photometrics, Birmingham (UK); Dr. Michael Sommerauer, AHF, Tubingen (DE); Dr. Laure Plantard, FMI, Basel (CH); Dr. G. Witz, MIC-DSL, Dr. Yannick Blum, ICB, Dr. Yury Belyaev, MIC, University of

Bern (CH).

Organizer: Dr. Y. Belyaev, MIC of the University of Bern (<u>www.mic.unibe.ch</u>).

Supported by the PhD specialization Cutting Edge Microscopy.

Number of participants: Maximum 25 (lectures), 15 (hands-on).

Registration: until May 2, 2023 <u>here.</u>

Target audience: PhD students, postdocs, and everyone who needs wide field

microscopy in their research. Participants of Cutting Edge Microscopy

specialization program are particularly invited.

Credits: Certificate of attendance.

On request, PhD students of the Cutting-Edge Microscopy program can obtain 1.5 ECTS upon presenting the learning outcome in the

context of his/her project at a separate meeting.

Content: Basics of wide field microscopy. Basics of fluorescence. Filters and

light sources. Digital cameras and digital imaging. Basics of image

visualisation and processing. Deconvolution. Denoising.

Learning outcome: Participants will learn how to set up and optimally operate wide field

microscope and visualize and quantify images.

Schedule: See next page.

MIC training: Fundamentals of wide field microscopy

May 09-11, 2023

Time	Day 1 Tuesday, 09.05.23	Day 2 Wednesday, 10.05.23	Day 3 Thursday, 11.05.23
9:00- 12:00	Lecture Basics of wide field microscopy L. Plantard, FMI	Lectures Basics of fluorescence Y. Belyaev, MIC Filters and light sources M. Sommerauer, AHF Digital cameras M. Pasche, Photometrics	Lectures FIJI basic functionalities Y. Belyaev, MIC Deconvolution microscopy Y. Belyaev, MIC Deconvolution of wide field images with HRM Y. Belyaev, MIC
12:00- 13:30	Lunch	Lunch	Lunch
13:30- 17:00	Hands-on Setting up microscope for wide field imaging L. Plantard, FMI J. Toquant, Zeiss Y. Belyaev, MIC	Hands-on Digital imaging M. Pasche, Photometrics Filters for fluorescence M. Sommerauer, AHF Multicolour fluorescence imaging Y. Blum, ICB	Hands on Denoising Background correction 3D visualisation (Using open-source software) G. Witz, MIC-DSL