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**UNIVERSITÄT
BERN**

MIC online training: Fundamentals of wide field microscopy

- Date:** May 26-28, 2021.
- Time:** 9 am – 5 pm.
- Location:** Zoom.
- Trainers:** Dr. Julien Toquant, Zeiss, Jena (DE); Dr. Matt Kose-Dunn, Photometrics, Birmingham (UK); Dr. Michael Sommerauer, AHF, Tübingen (DE); Dr. Laure Plantard, Dr. Laurent Gelman, FMI, Basel (CH); Dr. G. Witz, MIC-SciTS, Dr. Yannick Blum, ICB, Dr. Yury Belyaev, MIC, University of Bern (CH).
- Organizer:** Dr. Y. Belyaev, MIC of the University of Bern (www.mic.unibe.ch). Supported by the PhD specialization Cutting Edge Microscopy.
- Number of participants:** Minimum 10, maximum 25.
- Registration:** until May 19, 2021 [here](#).
- 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.

Fundamentals of wide field microscopy

Time	Day 1 Wednesday, 26.05.21	Day 2 Thursday, 27.05.21	Day 3 Thursday, 28.05.21
9:00-12:00	<p>Lecture, Zoom</p> <p>Basics of wide field microscopy L. Plantard, L. Gelman, FMI</p>	<p>Lectures, Zoom</p> <p>Basics of fluorescence Y. Belyaev, MIC</p> <p>Filters and light sources M. Sommerauer, AHF</p> <p>Digital cameras M. Kose-Dunn, Photometrics</p>	<p>Lectures, Zoom</p> <p>Deconvolution microscopy Y. Belyaev, MIC</p> <p>Deconvolution of wide field images with HRM Y. Belyaev, MIC</p> <p>FIJI basic functionalities G. Witz, MIC-SciTS</p>
12:00-13:30	Lunch	Lunch	Lunch
13:30-17:00	<p>Online demos</p> <p>Setting up microscope for wide field imaging J. Toquant, Zeiss Y. Belyaev, MIC</p>	<p>Online demos</p> <p>Digital imaging M. Kose-Dunn, Photometrics</p> <p>Filters for fluorescence M. Sommerauer, AHF</p> <p>Multicolour fluorescence imaging Y. Blum, ICB</p>	<p>Online demos</p> <p>Denoising</p> <p>Background correction</p> <p>3D visualisation</p> <p>(Using open-source software) G. Witz, MIC-SciTS</p>