



# Symposium of the Microscopy Imaging Center



## Imaging cellular dynamics across scales

<sup>b</sup>  
UNIVERSITÄT  
BERN

<b>Date</b>	Friday November 18, 2022, 9:30 – 17:00
<b>Location</b>	University of Bern, UniS, lecture hall S003, Schanzeneckstrasse 1, 3012 Bern
<b>Scientific committee</b>	Olivier Pertz & Christian Soeller
<b>Organized by</b>	Microscopy Imaging Center (MIC) of the University of Bern, <a href="http://www.mic.unibe.ch">www.mic.unibe.ch</a>
<b>Approved</b>	0.5-day credit for continued education in animal experimentation in the Canton of Bern

09:30 Registration and welcome coffee

10:15 Welcome by MIC Board and scientific committee of the meeting

10:20 Introduction into the topic “Imaging cellular dynamics”

### Session 1, Chair: Olivier Pertz Imaging cellular and subcellular structures

10:30 Francesca Peri  
Department of Molecular Life Sciences, UZH  
Brain imaging across scales: studying neuronal-immune interactions during the development of the CNS

11:10 Suliana Manley  
Department of Physics, EPFL  
Mysteries and insights into mitochondrial structure and dynamics

11:50 Charles William Amirmansour  
Agilent  
The Agilent BioTek Cytation C10 Technology: A revolutionary and modular tool for smarter detection, characterization, and screening

12:00 **Certificate award** to the graduates of the CEM PhD program.

12:10 Lunch and industry exhibition

### Session 2, Chair: Christian Soeller Imaging organoids and the ABC of fluorescent proteins

13:10 Albert Schürer  
Prospective Instruments  
Cellular time-lapse imaging in live Zebrafish and 3D Cell culture using Two-Photon Microscopy

13:20 Miki Ebisuya  
EMBL, Barcelona  
Synthetic developmental biology: Cross-species comparison and manipulation of organoids

14:00 Joachim Goedhart  
Swammerdam Institute for Life Sciences & University Amsterdam  
An ABC of fluorescent proteins: advances, brightness and considerations

14:40 Arina Rybina  
EMBL, Heidelberg  
Euro-BiolImaging: Opportunities for Open User Access & Research within the European Landscape

14:55 Coffee and industry exhibition

### Session 3, Chair: Yury Belyaev Imaging molecular signals

15:30 Wolf Heusermann  
Zeiss  
Visualization of cellular dynamics - different scales, unique and common challenges

15:40 Olivier Pertz  
Institute of Cell Biology, UniBE  
Self-organization of MAPK signaling dynamics in epithelial cellular ecosystems

16:20 Christian Soeller  
Institute of Physiology, UniBE  
Nano-domain regulation of cardiac myocyte calcium release

17:00 Conclusions and farewell by scientific committee

Organized by

Registration

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