Subject: MIC Newsletter August
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Dear friend of the Microscopy Imaging Center

We’re happy to be back in your inbox and excited to share the latest updates with you!

In this edition, we’re thrilled to introduce our new microscopes—bringing enhanced capabilities and new possibilities to our research community. We also highlight several upcoming events: our annual **MIC Symposium**, the **EM MIC Mini Symposium**, and the externally hosted **Swiss Microscopy Day**—all excellent opportunities for connection and knowledge exchange.

Looking back, we’d also like to thank everyone who contributed to making the recent **MIC Research Day** such a great success!

For more information
about the MIC and its activities, check our website regularly.

NEWSLETTER OVERVIEW

MIC EVENTS IN 2025 - SAVE THE DATE!

MIC at Nacht der Forschung

Whether you're young or old, curious, or knowledgeable, a journey into the microcosmos
is sure to open your eyes, spark your imagination, and reveal the breathtaking beauty and complexity of life beyond the limits of sight.
Together with our microscopy colleagues from the Faculties of Medicine, Vetsuisse, and Science, the MIC invites you to explore this invisible world through stunning microscope images, hands-on workshops, captivating presentations, and immersive VR experiences– come visit us!

The Nacht der Forschung will take place **September 06, 2025,** from 4pm until 11pm.
Location: Second Floor, Hochschulstrasse 4, Bern, Switzerland

MIC Symposium
Each year, the MIC committee decides on a special topic for the MIC Symposium and forms a scientific committee. Experts of the chosen topic are invited as speakers and industry with scientific oriented portfolio is invited, too. The MIC Symposium attracts attendees from all over Switzerland and abroad.
The MIC Symposium will take place on **November 14, 2025,** registration is open
Topic: Multi-Scale Imaging Across Modalities
Scientific committee: Prof. Dr. Britta Engelhardt, PD Dr. Steven Proulx, PD Dr. Ruslan Hlushchuk
Location: UniS, Bern, Switzerland

Electron Microscopy MIC Mini Symposium
The Electron Microscopy MIC Mini-Symposium officially launches the scanning and transmission electron microscopes at the Vetsuisse Faculty. The event showcases the power of subcellular imaging and our ability to visualize the smallest details of biological tissues and particles. During the symposium, brief presentations will illustrate a range of structures that can be identified through electron microscopy. These structures will span from ancient objects from the Bronze and Iron Ages to modern biological specimens.
The MIC Mini Symposium will take place on **December 9, 2025**
Topic: Official inauguration of the scanning and transmission electron microscopes at the Vetsuisse Faculty
Location: Vetsuisse, Länggassstrasse 120, 3012 Bern, Switzerland

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MIC TRAININGS

MIC trainings are open to all staff of UniBE. They range from introductions to specialist Trainings, from widefield microscopy to bioimaging analysis.

09 - 11 September 2025 Fundamentals of confocal microscopy
Number of participants: 9 – 25
Register here.

26 - 27 November 2025 Quantitative microscopy of molecular dynamics
Number of participants: 15 – 30

Register here.

For PhD students and former attendants of the Lecture Series Cutting Edge Microscopy,

the MIC Workshops extend the MIC training portfolio to more science-oriented courses with the opportunity to gain ECTS.

PAST EVENTS

MIC Research Day 2025

On June 25, 2025, more than 180 participants from the Universities of Bern, Fribourg, Zürich and Bellinzona as well as representatives from the industry attended our traditional MIC Research Day. This year also with a brand-new Image Contest!

Read more here.

NEW MICROSCOPES

GIUB_Bruker_Lumos II_FT-IR

The Bruker Lumos II is a widefield FT-IR microscope using a TE-MCT detector and mid-IR

laser source (1800–950 cm^{-1}). It enables label-free chemical imaging with an 8x air objective.

Ideal for spectroscopic microanalysis, it integrates seamlessly with LUMOS II Wizard software

for precise IR mapping of heterogeneous samples. Contact: aurea.hernandez@unibe.ch

PKI_IncuCyte_S3

The IncuCyte S3 enables fully automated, long-term live-cell imaging within an incubator.

With brightfield and fluorescence (FITC/Rhodamine) LED illumination and 4x–20x objectives,

it supports real-time cellular assays via advanced software modules for chemotaxis, cell health,

and spheroid analysis. Contact: darko.stojkov@unibe.ch

DBMR_MU24_Nikon SMZ25_Stereomicroscope

The Nikon Ti-E is a versatile stereomicroscope equipped with high-NA Plan Fluor objectives (4x–63x),

LED illumination, and full fluorescence capability (DAPI, FITC, Cy3, Cy5). Paired with

dual Nikon cameras and NIS software, it's ideal for multi-channel imaging of fixed or

live samples. Contact: fabian.blank@dbmr.unibe.ch

IGMP_IncuCyte_S3

This IncuCyte S3 system supports continuous live-cell imaging inside an incubator, featuring 4x–20x objectives and dual fluorescence channels (FITC/Rhodamine). Integrated modules for wound healing, organoid, and spheroid assays make it a robust platform for dynamic cell behavior studies under physiological conditions. Contact: martin.sadowski@unibe.ch

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CEM PHD SPECIALIZATION PROGRAM

Graduates- Congratulations!

Lazar Ivanovic

On April 29, 2025, Lazar Ivanovnic, student of the Cutting Edge Microscopy (CEM) program under the supervision of Prof. Wanda Kukulski, successfully defended his PhD thesis with the title “Molecular and architectural organization of tricalbin-mediated ER-PM contact sites in budding yeast.”

Mohammad Amin Khosrozadeh

On January 30, 2025, Mohammad Amin Khosrozadeh, member of the Institute of Anatomy, Research Group of Prof. Dr. Benoît Zuber, University of Bern, and student at the Graduate School for Cellular and Biomedical Sciences (GCB) and the PhD program
Cutting Edge Microscopy (CEM), has successfully defended his PhD thesis entitled "Morphological Principle of Synaptic Transmission Regulation Using Cryo-Electron Tomography and Data-Driven Models".

Invitation PhD Defense

Oleksiy Khoma, student at the PhD program Cutting Edge Microscopy (CEM) under The supervision of PD Dr. med. Ruslan Hlushchuk, will hold his PhD Defense on August 22, 2025 at 2pm at the Ewald Weibel Auditorium A224, Institute of Anatomy, Bühlstrasse 26, 3012 Bern.
The title of the presentation is: Micro(angio)CT in preclinical peri-implant research.

CEM Summer School 2025

On the 3rd and 4th of July 2025, the annual Summer School of the PhD specialization program Cutting Edge Microscopy (CEM) took place at Schwarzsee in the canton of Fribourg, Switzerland. During these two days the CEM PhD students presented their own projects, focusing on the data obtained with microscopy.

In lively discussions they received feedback and gained fresh perspectives on their research. Read more here.

EXTERNAL EVENTS WITH RELEVANCE TO MICROSCOPY

04-05 September 2025
Symposium 2025: Towards the next 25 years of the life sciences
University of Zürich, Switzerland

18 September 2025
Swiss Microscopy Facilities Day 2025
Campus Biotech Geneva, Switzerland

29-30 September 2025
Revvity Pan-European High Content Screening User Group Meeting 2025
Madrid, Spain

08-11 October 2025
EMBO | EMBL Syposium: Seeing is believing: imaging the molecular processes of life
EMBL Heidelberg and Virtual

26-31 October 2025
GloBIAS Bioimage Analysis Conference 2025
Kobe, Japan

For further news and information please check our website.

Please accept our apologies for possible cross-postings. If you do not wish to receive this newsletter in the future, please write to info.mic@unibe.ch. This newsletter is sent to people who have been active in the MIC community within the last three years.

Kind regards,
Your MIC Team