

## **MIC Symposium 2018**

On November 30, 2018, record high 185 participants from the University of Bern, from all over Switzerland, France and Germany attended the traditional MIC Symposium entitled *From Organoids to Organisms: Multiscale Imaging*. Nadia Mercader and Olivier Guenat, who formed the scientific committee of this meeting, ensured a well-balanced and highly informative content. The symposium started with a welcome address by Hans-Uwe Simon, the dean of the medical faculty, and by Britta Engelhardt, the president of the MIC. Then, six scientific talks of Swiss and internationally renowned scientists and two company presentations imparted their most recent achievements in the areas of intravital microscopy or in vitro imaging of organoids. The lunch break was intensely used as a platform for discussion and networking. Active participation of company representatives provided latest information on technology development at first hand. We thank the scientific committee for preparing the interesting program, the speakers for sharing their research results and enthusiasm for microscopy, the students of the PhD program *Cutting Edge Microscopy* for help in the organization, all the participants for their interest in microscopy and the sponsors for the generous financial support of the symposium.

## **Report of Guillaume Witz, the new imaging specialist of the MIC**

During his first few months of activity, Guillaume had the opportunity to meet a number of research groups and to collect information about research topics involving image processing and analysis. In the following areas, he already contributed with his expert knowledge. First, he offered introductions to software usage (e.g. specific Fiji plug-ins) and gave advice on selecting the best software solution for particular applications. Second, using existing software and custom-written scripts (Fiji, TrakEM2, Chimera), he provided documented workflows to users desiring to automatize specific repetitive tasks. Third, he helped solving IT issues in the area of data storage and transfer. Finally, the largest part of his activity was dedicated to provide scientific software consulting on specific projects. That activity involves meeting with scientists, discussing a particular research project and the issues they face in the area of image processing, and finally writing a custom software pipeline that solves those issues. Several projects are currently ongoing, involving for example the segmentation of multi-dimensional or particularly noisy data for which standard solutions are not satisfactory. In the coming weeks, Guillaume will start giving courses and trainings, in particular for Fiji and image processing with Python ([https://ilias.unibe.ch/goto\\_ilias3\\_unibe\\_crs\\_1431497.html](https://ilias.unibe.ch/goto_ilias3_unibe_crs_1431497.html)). See also our links to software, documented workflows and course materials soon available on the MIC webpage ([http://www.mic.unibe.ch/image\\_data\\_analysis.php](http://www.mic.unibe.ch/image_data_analysis.php)). Guillaume is looking forward to work with anyone who needs help in image processing in this new year 2019, so feel free to contact him directly ([guillaume.witz@math.unibe.ch](mailto:guillaume.witz@math.unibe.ch)).

## **MIC user fees and SNF eligible costs**

MIC administration and the financial department of the University of Bern have worked out a calculation sheet that has been approved by the SNF. Please contact [Ruth Lyck](#) for any questions regarding your microscope usage invoices.



## MIC lecture series on advanced microscopy

In autumn semester 2018, the MIC conducted the lecture series on advanced microscopy. 56 students at the master and PhD level participated, from which 48 students have taken the exam. We thank all the colleagues who helped to offer this important fundamental piece of education in microscopy.

## New Members of the MIC Commission

At the last MIC commission meeting on December 13, 2018, the MIC commission elected Kerry Woods, laboratory manager at the Institute for Animal Pathology, and Giuseppe Locatelli, principal investigator at the Theodor Kocher Institute (TKI), as new members of the MIC commission. Kerry will contribute live cell imaging expert knowledge within the MIC commission and is the responsible contact person for the GE DeltaVision Elite microscope at Vetsuisse. Giuseppe will contribute 2-photon microscopy expert knowledge at the MIC commission and be the responsible contact person of the LaVision Biotec TrimScope II machine at the TKI.

## Highlights of the MIC in 2019

MIC Research Day:	July 3, 2019
MIC Summer School:	July 3 – 5, 2019
MIC Symposium:	November 29 <b>OR</b> December 6, 2019 – please reserve both dates. (The exact date will be communicated as soon as possible)
MIC Commission meetings:	February 14, 2019 May 9, 2019 August 22, 2019 December 12, 2019

## Call for communication of events and presentations

The MIC aims to improve collaborations between researchers of the University of Bern. Please announce lectures of team members of guests to the [MIC coordinator](#) for publication on the MIC homepage and the MIC newsletter!

## Presentations, Trainings, Workshops, Demonstrations – upcoming events at the University of Bern

### January 23, 2019

Presentation. Novel Tools and Practical Considerations for Fluorescence Microscopy and High Content Analysis, by Oggie Golub, Ph.D. Biosciences Division Molecular Probes™ Education. Seminar room F502, DBMR, University of Bern, Murtenstrasse 50, at 2.00 pm. More information [here](#).

### January 24, 2019

Presentation. Dr. Anna Kreshuk, Cell Biology and Biophysics Unit, EMBL, Heidelberg, Germany, will give a presentation with the title “Automating image analysis with machine learning” in the seminar room A263 of the Institute of Anatomy, at 12.00 am. More information [here](#).

### January 29 – 30, 2019

Training. Basics of super-resolution microscopy. Links to course information and registration on ILIAS [here](#).

### February 12, 2019

Training. Imaris: Basics and advanced. Links to course information and registration on ILIAS [here](#).

### March 26, 2019

Mini-Symposium on 3D image data analysis. Scientific committee: Guillaume Witz and Ruslan Hlushchuk. More information follows soon on [MIC News](#).



**From September 20, 2019**

Lecture Series on Advanced Microscopy, organized by the MIC. Further information will be posted on the MIC webpage [here](#) and on ILIAS [here](#).

**Trainings, Workshops, Demonstrations  
– further events in Switzerland and abroad**

**January 20 – 25, 2019**, ETH Zürich, Switzerland.

13<sup>th</sup> Microscopy Winter School 2019 - Practical Course in Advanced Microscopy. Further information can be found here: <http://www.excite.ethz.ch/>

**January 22 – February 8, 2019**, Karolinska Institute, Stockholm, Sweden.

Microscopy: improve your imaging skills – from sample preparation to image analysis. Details and more information see [here](#).

**January 29 – February 1, 2019**, Amsterdam University, The Netherlands.

Basics in fluorescence microscopy course. Details and more information see [here](#).

**February 2 – 8, 2019**, Luxembourg.

3<sup>rd</sup> NEUBIAS conference. NEUBIAS is a COST Action which brings together life-scientists, microscopists, bioimage analysts and image analysis developers from 36 European, three neighboring countries + Australia, Singapore and the USA ([www.neubias.org](http://www.neubias.org)). Details and more information see [here](#).

**February 2 – 5, 2019**, Luxembourg.

5<sup>th</sup> Training School for Early Career Investigators (TS10) offered by NEUBIAS. More information [here](#).

**February 2 – 5, 2019**, Luxembourg.

3<sup>rd</sup> Training School for Bioimage Analysts (TS11) offered by NEUBIAS. More information [here](#).

**February 19 - 21, 2019**, Berlin, Germany.

11<sup>th</sup> European Short Course on "Time-resolved Microscopy and Correlation Spectroscopy", offered by PicoQuant, Berlin, Germany. More information [here](#).

**May 13 – 17, 2019**, EMBL, Heidelberg, Germany

Workshop. Fundamentals of Widefield and Confocal Microscopy and Imaging. More information [here](#).

**May 19 – 24, 2019**, EMBL Heidelberg, Germany

EMBL Course – Advanced Fluorescence Imaging Techniques. More information [here](#).

**June 4 – 7, 2019**, Brno, Czech Republic.

Conference. 19th international ELMI meeting. More information [here](#).

**June 9 – 15, 2019**, Amsterdam University, The Netherlands.

FEBS advanced course “Functional imaging of nuclear organisation and signaling”. More information [here](#).

**October 1 – 4, 2019**, Engelberg, Switzerland.

Symposium on “3D microscopy”. Co-organized by MIC member Dimitri Vanhecke and administered by the Swiss Society for Optics and Microscopy (SSOM). Further information see [here](#).

**Next MIC Commission meeting**

The next **MIC Commission meeting** will be held on Thursday, February 14, 2019.

Location: Institute of Anatomy, Seminar room, Bühelstrasse 26, 3012 Bern. This is a quarterly meeting of the MIC Commission members. Meeting dates are listed [here](#).

Previous MIC newsletters are available to you for download [here](#).

