Microscopy Imaging Center (MIC)

UNIVERSITÄT BERN

Faculty of Medicine VetSuisse Faculty Faculty of Science

Microscopy Imaging Center

MIC Newsletter 11-12/2017

Bern, 9 January 2018

MIC Symposium 2018

On **December 8, 2017**, the traditional MIC Symposium took place in the Langhans Auditorium of the Institute of Pathology, University of Bern. This year, record high 150 participants from the University of Bern, whole Switzerland, Italy and Germany met to discuss recent advances and challenges in the area of big data in light and electron microscopy. Six scientific talks of Swiss and international scientists and two company presentations informed the participants about problems, strategies for solving the problems and the achieved results regarding big data in the field of microscopy. The lunch break was intensely used as a platform for discussion and networking. Active participation of company representatives allowed participants to obtain latest information on technology development at first hand. The feedback questionnaire attested a very positive perception of the MIC Symposium with best grades for the quality of the presentations, for which we thank all the speakers and the scientific committee formed by our MIC members Olivier Pertz and Benoît Zuber. The running title for the next symposium will be **From Organoids to Organisms -** targeting the topic of multiscale imaging. It will be held under the auspices of our MIC members Fabian Blank and Olivier Guenat and will take place on November 30, 2018.

Swiss Society for Optics and Microscopy (SSOM)

On December 13, 2017, the general assembly of the <u>SSOM</u> took place near Neuchâtel. 35 SSOM members representing the society's sections Optics, Nanotechnology and Microscopy and the working group Biomedical Photonics reported about past activities and discussed future developments of the society. The MIC light microscopy manager, Yury Belyaev, and Beat Haenni, attended this meeting as representatives of the MIC. At this SSOM assembly, a new section was created for the Swiss Microscopy and Imaging Core Facility Network, formerly organized as <u>Swiss Biolmaging</u>. Thus, in the future, the Swiss Biolmaging activities will be integrated under the umbrella of the SSOM. This change in organization will give the Swiss Microscopy and Imaging Core Facilities more political weight since SSOM is officially acknowledged by the <u>Swiss Academy of Sciences</u>.

Data Management Plan (DMP)

Since October 2017, the <u>Swiss National Science Foundation (SNSF) requests a data management plan</u> (DMP) for applications. To support Principal Investigators (PI) in creating such plans, <u>Science IT Support</u> (ScITS) organizes workshops before submission deadlines. In the workshops guidelines, available options, best practices and available resources like repositories and storage solutions (and their prices) are given. Further, there is the possibility to discuss with the heads of system services (ID), Open Access (UB), ScITS and other PI colleagues. The objective is that participants draft their current DMP in the workshops. See below for next courses.

m M

PD Dr. Ruth Lyck (PhD) MIC Coordinator Theodor Kocher Institut Freiestrasse 1, CH-3000 Bern 9
 Phone
 +41 31 631 41 54

 Fax
 +41 31 631 37 99

 ruth.lyck@tki.unibe.ch
 www.mic.unibe.ch

New MIC Commission Members

From 2018, Dr. Ilya Pobelov will act as the representative for the Departement of Chemistry and Biochemistry at the MIC. Ilya Pobelov is a specialist in atomic force microscopy (AFM) and will strengthen the MIC expertise in this area.

Dr. Sarah Robinson from the Institute of Plant Sciences (IPS) stepped down from the MIC commission. Pauline Jullien takes over her position as representative for the IPS.

We welcome our new members!

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

January 15-16, 2018

<u>Training: FRET microscopy.</u> Förster resonance energy transfer (FRET) is a mechanism of non-radiative energy transfer between two chromophores located at nanometer range. This is a powerful technique widely used in biology for measuring molecular interactions. The participants of the training will learn the basics of FRET and the main methods of quantitative FRET measurement. Further information and registration <u>here</u>.

January 2018

Courses and Workshops on digital skills offered by ScITS. See the list of courses and registration here.

February 6, 2018

Olympus "Lunch & Learn". Topic: Live cell imaging. More information here.

February 9, 2018

<u>Training: Imaris, basics and advanced</u>. <u>Imaris</u> is a commercial scientific software that provides all the necessary functionality for data management, visualization, analysis, segmentation and interpretation of 3D and 4D microscopy datasets. More information and registration <u>here</u>.

February 15, 2018

Workshop: SNSF Data Management Plans offered by ScITS. Course is only for principal investigators. More information here or write email to ScITS.

March 15 - 16, 2018

Journey to Paris to visit the <u>Nikon Imaging Center at the Institut Curie</u> exclusively for PhD students of the Cutting Edge Microscopy PhD program. Registration deadline will be extended until January 16, 2018. There are still some places available. Please register via e-mail to <u>Ruth Lyck</u>.

March 27, 2018

Olympus "Lunch & Learn". Topic: Choose the right objective. More information here.

April 10, 2018

Olympus "Lunch & Learn". Topic: Clearing technologies for large volume imaging. More information here.

Trainings, Workshops, Demonstrations - further recommended events

January 27 – February 2, 2018, Szeged, Hungary

The <u>2nd Annual meeting of NEUBIAS</u>, gathering the whole Bioimage Analysis Community into a multifaceted event, offers two Training schools, a Working Meeting (Taggathon) and a Large Symposium dedicated to Open Tools in BioImage Analysis. The event will be organized and hosted by Dr. Peter Horvath, Principal Investigator at the Biological Research Center (BRC) of the Hungarian Academy of Science, Szeged.

March 6 – 8, 2018, Berlin, Germany

10th European Short Course on "**Time-resolved Microscopy and Correlation Spectroscopy.** The course is intended for individuals wishing an in-depth introduction to the principles of time-resolved fluorescence microscopy and its applications to the Life Sciences. The event lasts three days and includes lectures in the morning and practical sessions in the afternoon. For further information and registration see <u>here</u>.

March 19 – 20, 2018, Geneva

Workshop on **light sheet microscopy** at the Wyss Center at Campus Biotech in Geneva. Further information and registration <u>here</u>.

March 20-22, 2018, Essen, Germany

The second UltraMicroscope User Meeting will take place at the "Haus der Technik" in Essen, 20-22 March 2018. Participants are cordially invited to join in with all the active and prospective UltraMicroscope users in a forum on latest developments in light sheet microscopy. This event aims at fostering the exchange of ideas, experience and views on this emerging and very active research field. The meeting will combine scientific talks and discussions with practical demonstrations and workshops. An international group of speakers will provide the backbone for the meeting. Please find detailed information <u>here</u>.

Next MIC Commission meeting

The next **MIC Commission meeting** will be <u>on Thursday February 8, at 1:15 pm</u>. Location: Institute of Anatomy, Seminar room, Bühlstrasse 26, 3012 Bern. This is a meeting of the MIC Commission members taking place 4x per year. Meeting dates are listed <u>here</u>.

Previous MIC newsletters

<u>01/2017;</u> <u>02/2017;</u> <u>03-04/2017;</u> <u>05-06/2017;</u> <u>07-08/2017;</u> <u>09-10/2017</u>.