

Microscopy Imaging Center (MIC)

UNIVERSITÄT BERN

Faculty of Medicine Vetsuisse Faculty Faculty of Science

**Microscopy Imaging Center** 

MIC Newsletter November/ December 2019

Bern, 31st of January 2020

## MIC Symposium 2019

On November 29, 2019, the traditional MIC Symposium on the hot topic *Machine Learning in Imaging* took place. The scientific committee formed by Inti Zlobek, Raphael Sznitman, Mauricio Reyes and Guillaume Witz prepared a well-balanced and highly informative program which attracted more than 230 participants from Switzerland, Germany, Italy, and Ireland. The symposium started with a welcome address by David Spreng, the dean of the Vetsuisse Faculty, and Britta Engelhardt, the president of the MIC. Then, seven scientific presentations of Swiss and internationally renowned scientists and three short talks from company representatives covered most recent achievements in the areas of machine learning applied to imaging modalities such as ultrasound, electron microscopy and light microscopy. The lunch break provided an excellent possibility for active discussions and productive networking. The participation of representatives of more than ten companies gave the MIC symposium additional value through latest information on technology development. 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.

## Booking system for microscopes - Open Iris replaces MICBOOK

From January 6<sup>th</sup>, 2020, the microscope reservation system MICBOOK has been replaced by Open Iris (OI). MIC members Fabian Blank, Yury Belyaev, Guillaume Witz, Sandra Frank and Ruth Lyck held administrator rights for the Microscopy Imaging Center. All MIC instruments have been entered into OI and all microscope contact persons have been assigned administrator rights for their instruments. In general, the tasks of the provider administrators are the entry of new instruments (category "scheduled"), the entry of price categories and the assignment of instrument administrators. The tasks of the instrument administrators are the assignment of users, information of their users about instrument issues, the adjustment of the instrument and booking settings, the information of the provider administrators about price categories and the readout of instrument usage. The MIC team is in contact with the developer of OI. Please communicate concerns and problems to the MIC administration for discussions and requests to the developer.

#### Textbook on the workflow of bioimage data analysis

Bioimage analysis is a powerful method to quantify properties of biological systems. Many software tools are available, but how to combine various implemented algorithms to address biological questions remains challenging. Targeting this demand, the network of European bioimage analysis (<a href="neubias">neubias</a>) has released the textbook "Bioimage Data Analysis Workflows". Here, representative examples of bioimage analysis workflows fill the gap between the computer science solutions and the life scientists' practice. The <a href="online open access">online open access</a> version is available cost-free and can assist learning practical workflows step by step.



## Highlights and important dates of the MIC in 2020

MIC commission meetings: February 27, 2020

May 14, 2020 August 27, 2020 December 10, 2020

MIC Research Day: July 8, 2020

MIC Summer School:

Swiss Core Facility Day

MIC Symposium:

July 8 – 10, 2020

September 2, 2020

November 27, 2020

Subject 2020: 3D Electron Microscopy

## 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 or guests to the MIC coordinator for publication on the MIC homepage and the MIC newsletter!

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

## February 21, 2020

MIC Training: Writing your own ImageJ/Fiji Macros. More information here

## April 21, 2020

MIC Training: Imaris: Basics and advanced. More information here

# Trainings, Workshops, Demonstrations

### - further events in Switzerland and abroad

# February 13, 2020, Campus Irchel, Zurich, Switzerland

<u>FEBS3+LS2 annual meeting 2020</u>, Smart Microscopy: Machine Learning Applied to Life Sciences, more information see <a href="here.">here.</a>

## February 29 - March 6, 2020, Bordeaux, France

4th conference of the Network of European Biolmage Analysts (NEUBIAS). More information here.

# March 2 - 13, 2020, Paris, France

Principles and Applications of Fluorescence Microscopy, EMBL, More information here.

# May 24 – 29, 2020, Heidelberg, Germany

EMBL Course – Advanced Fluorescence Imaging Techniques, More information here.

## August 23 - 28, 2020, Copenhagen, Denmark

EMC 2020, CALL FOR OPEN SCIENCE ABSTRACTS, More information here.

# Previous MIC newsletters are available to you for download here.

