

MIC Newsletter  
03-04/2017

Faculty of Medicine  
VetSuisse Faculty  
Faculty of Science

Microscopy Imaging Center

Bern, 29 April 2017

## New Equipment

A new [Digital Light Sheet \(DLS\)](#) add-on module (Professor Dr. Nadia Mercader, Institute of Anatomy) has been installed on the [SP8 microscope at the Institute of Cell Biology](#) and will be available to MIC users in the near future. This money-saving joint configuration from the Medical Faculty and the Phil.-Nat. Faculty demonstrates the added value of the interfaculty MIC structure.

## SNF – Refunds of core facility fees

The SNF has published an article entitled "[Billing of costs for the use of internal university infrastructure](#)" in which eligible and non-eligible costs of infrastructure use are defined. For your funding request to the SNF we highly recommend to carefully estimate microscope needs and to indicate costs accordingly with reference to the MIC internet homepage ([www.mic.unibe.ch](http://www.mic.unibe.ch)). You may also want to add the [MIC user fee table](#).

## Mini Symposium: "Image analysis in microscopy"

On April 5, 2017, the MIC organized a half-day mini symposium entitled '**Image analysis in microscopy**'. It was the first event of this kind, aiming to bring together researchers from the Universities of Bern and Fribourg interested in image processing as well as experts from outside. At the beginning of the meeting, Dr Arne Seitz, EPFL, presented the [COST Action "NEUBIAS, network of european bioimage analysts"](#) and invited everyone interested to join. In the following two sessions 6 international and Swiss speakers from Heidelberg, Konstanz, Munich, Martigny and the University of Bern talked about the usage of state-of-the art image processing methods and software. The third session was designated to the presentation of image analysis software available at the MIC.

This mini-symposium was very well attended with more than 40 colleagues from the Universities of Bern and Fribourg. The lively discussions in the coffee break and at the end reflected the importance of the topic and the overall feedback from the audience was entirely positive. According to requests from the participants we will organize workshops for [ilastik](#), [KNIME](#) and [FIJI macros](#) in the following months.

## Deconvolution using the Huygens Remote Manager – available for you

Deconvolution is a well-accepted and established method of quantitative image processing which can be applied to most of the imaging modalities. One recommended software is [Huygens Remote Manager \(HRM\)](#), a web-based interface to Huygens deconvolution from [Scientific Volume Imaging B.V. \(SVI\)](#).

Thanks to a collaboration with SVI, the MIC has organized a long term loan of the HRM server with graphical processing unit acceleration. This service is available free of charge to everybody at the University of Bern until the end of 2017. During the past months, Dr Yury Belyaev presented main deconvolution applications and usage of HRM at various MIC institutes. For your personal account please register [here](#) and contact Dr [Yury Belyaev](#) for further information.



**Trainings, Workshops, Demonstrations – upcoming events organized by the MIC****May 2 – 4, 2017**

Demonstration. Super resolution microscope from General Electrics (GE) [OMX-SR](#) University of Lausanne. For further information, please contact Dr. [Yury Belyaev](#).

**May 9 – 10, 2017**

Introduction. Digital Light Sheet microscope from Leica: [SP8 DLS](#). Institutes of Cell Biology and of Anatomy, University of Bern. Limited slots available, please contact Professor Dr. [Nadia Mercader](#).

**June 1 - 14, 2017**

Demonstration. Confocal microscope from Zeiss: [LSM 800](#). Institute of Anatomy, University of Bern Further information, please contact Dr. [Yury Belyaev](#).

**June 28, 2017 (afternoon)**

MIC Research Day. Members of the MIC present their projects. Registration [here](#).

**June 28 – 30, 2017**

MIC Summer School, compulsory for PhD students registered to the [PhD specialization Cutting Edge Microscopy](#). For further information please contact PD Dr. [Marlene Wolf](#).

June 28, MIC Research Day. Registration via the MIC Webpage [here](#).

June 29, CEM Summer School 2017 PhD student day - "Kick-Off event". Registration via [KSL 433758](#).

June 30, Workshop. Preparing images for publication and presentation. Registration via [KSL 433659](#).

**June 30, 2017**

Workshop. Preparing images for publications and presentations (0.5 ECTS).

Dr. Dimitri Vanhecke, University of Fribourg, will provide insights into scientifically correct image preparation for publications and presentations. Further information is available on the MIC webpage ([Workshops](#)). Registration via [KSL 433659](#).

**August 21 – 22, 2017**

Workshop. Conventional fluorescence microscopy, laser scanning microscopy and digital image processing (1.0 ECTS). PD Dr. Fabian Blank. Further information is available [here](#).

**September 16, 2017 (from 4 pm)**

Nacht der Forschung. MIC members are requested to provide a short demonstration of their microscopes and research (animated power point or movie). In addition, we will organize a colorful panel of activities. Members of the Cutting Edge Microscopy PhD specialization will be involved.

**Trainings, Workshops, Demonstrations - recommended external events**

June 6 and 19 – 23, 2017. Copenhagen, Denmark.

[Image Analysis](#). Offered by the [Core Facility for Integrated Microscopy \(CFIM\)](#) of the University of Copenhagen in collaboration with [NEUBIAS](#).

September 13 – 15, 2017. Berlin, Germany.

[23. International Workshop on "Single Molecule Spectroscopy and Super-resolution Microscopy in the Life Sciences"](#). Organized by [PicoQuant](#), Berlin, Germany.

June 11 – 16, 2017. Amsterdam, The Netherlands.

[FEBS Advanced Course "Functional imaging of cellular signals"](#). Organized by the [Federation of European Biochemical Societies \(FEBS\)](#) in collaboration with the [van Leeuwenhoek Centre for Advanced Microscopy \(LCAM\)](#) in Amsterdam.

**Next MIC Commission meeting**

MIC Commission members meet on Thursday May 4, 2017, at 1:15 pm.

Location: Institute of Anatomy, Seminar room, Bühlerstrasse 26, 3012 Bern. This is an internal meeting of the MIC Commission members taking place 4x per year.

**Past MIC newsletters**

[MIC newsletter 01/2017](#); [MIC newsletter 02/2017](#)

