

MIAP Basic Imaging Techniques Workshop

The Life Imaging Center (LIC) hosts more than 20 microscope systems. For this reason, most modern microscopic techniques can be performed in the facility. The LIC has a major focus on live cell imaging of all kind of cells, organisms and culture systems used in cell signaling research, developmental biology and neurobiology.

To provide the best experience and teaching to over 250 users of the facility, the LIC offers various microscopy workshops throughout the year. This basic workshop is not limited to facility users and is equally suited for life science students, *Ph.D.* students, staff scientists and postdocs. The 3-day basic workshop covers basic methods of imaging techniques on widefield and confocal systems and image analysis with specialized software.

November 21st – 23rd 2018

Life Imaging Center (LIC), Center for Biological Systems Analysis (ZBSA)
Albert-Ludwigs University Freiburg
Habsburgerstr. 49, 79104 Freiburg im Breisgau

Organization: Microscopy and Image Analysis Platform (MIAP), University of Freiburg
Life Imaging Center (LIC), University of Freiburg

Teachers: Roland Nitschke (LIC, MIAP)
Iris Bierschenk (LIC), Elitsa Bodurova (LIC), Sabine Haxelmans (LIC),
Angela Naumann (LIC), Tobias Wernet (MIAP), Martin Zeeb (MIAP)

Day 1: November 21st, 08:30 – 18:00	
08:30 – 09:00	Welcome & General Workshop Introduction
09:00 – 10:00	Block A: Basics in Microscopy
10:00 – 10:15	Coffee Break
10:15 – 12:30	Practical Part: Widefield Systems (Diatomeen, Live Cell, DIC)
12:30 – 13:15	LUNCH BREAK
13:15 – 14:15	Block B: Sample Preparation
14:15 – 16:15	Practical Part: Widefield Systems (Fluorescent Beads, Fixed Cells)
16:15 – 16:30	Coffee Break
16:30 – 17:00	Hands-On Session: Analysis with ZEN blue
17:00 – 18:00	Data Analysis

Day 2: November 22nd, 08:30 – 18:00	
08:30 – 10:00	Block C: Imaging Technology (CCD Camera, Pinhole, PSF, ...)
10:00 – 10:15	Coffee Break
10:15 – 12:30	Practical Part: LSM Systems (Beads, Fixed Fluorescent Cells)
12:30 – 13:15	LUNCH BREAK
13:15 – 14:15	Block D: Image Acquisition (Dyes, Spectral Recording, Filter, FRAP)
14:15 – 16:15	Practical Part: LSM Systems (Live Cells, Dronpa)
16:15 – 16:30	Coffee Break
16:30 – 17:00	Hands-On Session: Analysis with ZEN black
17:00 – 18:00	Data Analysis

Day 3: November 23rd, 08:30 – 18:00	
08:30 – 10:30	Practical Part: LSM Systems (Live Cells, Dronpa)
10:30 – 10:45	Coffee Break
10:45 – 12:30	Block E: Image Analysis (Deconvolution, Huygens, Imaris)
12:30 – 13:15	LUNCH BREAK
13:15 – 16:00	Data Analysis, Preparation of Presentation
16:00 – 16:15	Coffee Break
16:15 – 17:15	Participant's Presentations
17:15 – 18:00	Discussion, Feedback and Evaluation

- This is a preliminary announcement / agenda, which is subject to changes.
- For more information, please contact MIAP: <https://www.miap.eu> info@miap.eu

