



MIAP Advanced 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 technique workshops throughout the year. This advanced workshop is equally suited for life science students, *Ph.D.* (students), staff scientists and postdocs and is not limited to facility users. The 3-day advanced workshop covers sophisticated methods (TIRF, 2P, Airyscan, ablation, ratio imaging, photomanipulation) of imaging techniques on widefield and confocal systems and image analysis with specialized software.

December 5th – 7th 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), Angela Naumann (LIC), Tobias Wernet (MIAP), Martin Zeeb (MIAP)

Day 1: December 5th, 08:30 – 18:00	
08:30 – 09:00	Welcome & General Workshop Introduction
09:00 – 10:30	Block A: TIRF, Spectral, 2P, Non-Descanned, Ratio Dyes
10:30 – 10:45	Coffee Break
10:45 – 12:00	Block B: Airyscan, Superresolution
12:00 – 12:45	LUNCH BREAK
12:45 – 13:30	Remote Demonstration of Calcium Ratio Imaging and Spectral Imaging
13:30 – 15:30	Practical Part: Confocal Systems + Widefield Systems
15:30 – 15:45	Coffee Break
15:45 – 18:00	Practical Part: Confocal Systems + Widefield Systems

Day 2: December 6th, 08:30 – 18:00	
08:30 – 10:00	Block C: Live Cell Labeling, Ratio Analysis
10:00 – 10:15	Coffee Break
10:15 – 11:00	Block D: Deconvolution
11:00 – 12:00	Software Demonstration
12:00 – 12:45	LUNCH BREAK
12:45 – 14:45	Practical Part: Confocal Systems + Widefield Systems
14:45 – 15:00	Coffee Break
15:00 – 17:00	Practical Part: Confocal Systems + Widefield Systems
17:00 – 18:00	Data Analysis

Day 3: December 7th, 08:30 – 17:00	
08:30 – 09:15	Block E: Pitfalls in Handling Different File Formats
09:15 – 09:30	Coffee Break
09:30 – 12:00	Data Analysis, Preparation of Presentation
12:00 – 12:45	LUNCH BREAK
12:45 – 15:00	Data Analysis, Preparation of Presentation
15:00 – 15:15	Coffee Break
15:15 – 16:15	Participant's Presentations
16:15 – 17:00	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

