

2026 MIC Course in Microscopy Part I and II

This course is intended for participants who wish to expand their knowledge of the fundamental principles of microscopy (Part I), progress into more advanced confocal imaging applications (Part II), and get an introduction to image analysis using various software platforms. All the imaging systems and software introduced in the course are available at MIC, and the aim is to equip participants with a deeper conceptual understanding and practical skills to design and perform imaging experiments with greater precision, as well as to more easily evaluate which imaging systems are most appropriate for their specific research questions.

When: 14.-16. April 2026 (Part I) and 20.-22. April (Part II)

Where: Mainly 6th floor BBB, Jonas Lies vei 91, 5009 Bergen

Max 12 participants (minimum 10 participants required; otherwise, the course will be postponed).

At the microscope sessions: Participants will be divided into groups of either 6 or 3 (active training), and you will either be in group Blue A or Green B. The groups are colour coded in the program, and the participants must be present for two and a half days each week (Part I and Part II). **Full course = 5 days.**

Credits: PhD-students may obtain 1 credit point, applied for individually after the course.

Registration deadline 23.03.2026.

Please register here: <https://skjemaker.app.uib.no/view.php?id=20870343>

It is possible to register to only Part I. Attending only Part II however, requires previous participation in the MIC Basic Microscopy course (2023). In case of capacity restrictions, priority will be given to those attending both Part I and II.

Price: 4500,- (Part I *and* II), 2500,- (Part I *or* II).

PART I: Basic microscopy

Day 1 (Tuesday 14. April)		Day 2 (Wednesday 15. April)		Day 3 (Thursday 16. April)	
0900-0930	Welcome	0900-1000	Basics of confocal microscopy (H)	0900-1030	Active learning (Stellaris/Nikon Eclipse) A
0930-1030	Basics of microscopy (E)	1000-1010	Break	1030-1045	Break
1030-1045	Break	1010-1110	A digital image (H)	1045-1215	Active learning (Stellaris/Nikon Eclipse) A
1045-1145	Basic live cell imaging, sample preparation, fluorescent proteins (E)	1110-1120	Break	1215-1245	Lunch
1145-1230	Lunch	1120-1200	Intro to image analysis software QuPath (H)	1245-1315	Data management (H)
1230-1330	Examples and planning of imaging experiments (Henriette)	1200-1230	Lunch	1315-1345	A taste of TEM (E)
1330-1345	Break	1230 -1430	Presenting the microscope (scanning confocal/spinning disk confocal) Group A/B	1345-1400	Break
1345-1515	Presenting the microscope (fluorescence microscope /slide scanner) Group A/B	1430-1445	Break	1400-1530	Active learning (Stellaris/Nikon Eclipse) B
1530-1700	Presenting the microscope (fluorescence microscope/ slide scanner) Group B/A	1445-1645	Presenting the microscope (scanning confocal/spinning disk confocal) Group B/A	1530-1545	Break
				1545-1715	Active learning (Stellaris/Nikon Eclipse) B

*All presentations

H: Hege A Dale

E: Endy Spriet

Part II: Advanced confocal microscopy and image analysis

Day 4 (Monday 20. April)		Day 5 (Tuesday 21. April)		Day 6 (Wednesday 22. April)	
0900-1000	Introduction to image analysis.	0900-1100	Active learning: Nikon Eclipse spinning disk/ Leica Stellaris confocal B	0900-1100	Aivia demo (pixel classifier)/Fiji Active learning. Group A/B
1000-1015	Break			1100-1115	Break (Snack)
1015-1100	Image analysis – important considerations in experiment planning.	1100-1115	Break (snacks)	1115-1315	Aivia demo (pixel classifier)/Fiji Active learning. Group B/A
1100-1200	Group work: Planning two individual imaging experiments, live and fixed cells.	1115-1315	Active learning: Nikon Eclipse spinning disk/ Leica Stellaris confocal B	1315-1415	Lunch (pizza) and evaluation
1200-1230	Lunch	1315-1345	Lunch		
1230-1430	Active learning: Nikon Eclipse spinning disk/ Leica Stellaris confocal A	1345-1445	Introduction to image analysis software Fiji/ImageJ (E)		
1430-1445	Break	1445-1500	Break		
1445-1645	Active learning: Nikon Eclipse spinning disk/ Leica Stellaris confocal A	1500-1545	Introduction to image analysis software Aivia (H)		
		1545-1600	Break		
		1600-1645	Demo IncuCyte - high throughput imaging and analysis (E)		