

# 14<sup>th</sup> Course on Optical Microscopy Imaging for Biosciences

20-24 March , 2023, i3S, Porto, Portugal

	Monday 20	Tuesday 21	Wednesday 22	Thursday 23	Friday 24
09:00	Reception				
09:30	Light proprieties and image formation (Henkjan Gersen)	Widefield Fluorescence microscopy (Sylvie Le Guyader)	Image flowcitometry (Maria Lazaro)	Biolmage Analysis - principles and tools (Paula Sampaio and Rocco D'Antuono)	Questions and projects discussion
09:45					
10:00					
10:15		Confocal microscopy (Rocco D'Antuono)	Live Cell imaging and analysis of molecular dynamics (Paula Sampaio)		
10:30	The Light Microscope (Paula Sampaio)				
10:45					Lightsheet Microscopy (Jaques Paysan)
11:00	Coffee break	Coffee break	Coffee break	Coffee break	
11:15					
11:30	Critical concepts in light microscopy (Sylvie Le Guyader)	Multiphoton microscopy and other optical sectioning methods (Rocco D'Antuono)	Super-Resolution Microscopy (Simão Coelho)	AI in microscopy: seeing deeper, faster and smarter (Alejandro Tupin)	Coffee break
11:45					
12:00					Kinase signalling and asymmetric cell division in cell fate decisions in the fly (Jens Januschke) i3S Friday Seminar
12:15	Cell sample preparation (Maria Lazaro)	Fluorescence Lifetime imaging (FLIM) (Luis Alvarez)	Quality Assessment and Reproducibility (Maria Azevedo)	Democratizing AI Biolmage Model Zoo (Simão Coelho)	
12:30					
12:45					
13:00	Lunch	Lunch	Lunch	Lunch	Lunch
13:15					
13:30					
13:45					
14:00	Microscopy Labs: Hands-on and demos sessions	Microscopy Labs: Hands-on and demos sessions	Microscopy Labs: Hands-on and demos sessions	Microscopy Labs: Hands-on and demos sessions	Image analysis Labs: Data analysis
14:15					
14:30					
14:45					
15:00					
15:15					
15:30					
15:45					
16:00	Break	Break	Break	Break	Break
16:15					
16:30	Microscopy Labs: Hands-on and demos sessions	Microscopy Labs: Hands-on and demos sessions	Microscopy Labs: Hands-on and demos sessions	Microscopy Labs: Hands-on and demos sessions	Image analysis Labs: Data analysis
16:45					
17:00					
17:15					
17:30					
17:45					
18:00					
18:15					
18:30					