



Cellular microscopy and image analysis

Theoretical-practical course

Giulia Guarguaglini, Patrizia Lavia, Lia Asteriti, Vincenzo Costanzo, Federica Polverino
IBPM laboratories - c/o BBCD Department, via degli Apuli site

Day 1 - 21/06/2022

9:30-12:15 Theoretical session. Principles of dynamic imaging, applications and analyses.

Aula Tatò (Via dei Sardi 70, II floor)

9:30 Pietro Cirigliano, Nikon Europe BV

Tailoring microscopy options to biological investigations: live imaging applications
Questions and answers

10:15 Mario Guarracino, CNR Istituto di calcolo e reti ad alte prestazioni (ICAR) and University of Cassino

Machine learning and AI-based analyses in bioimaging applications
Questions and answers

11:00 Break

11:15 Giacomo Cozzi, Nikon Europe BV

NIS Elements: a multipurpose software platform
Questions and answers

12:00 Giulia Guarguaglini, CNR Institute of Molecular Biology and Pathology
A short introduction to the practical demonstration

12:15 Break

14:30-17:00 Practical session 1. Imaging live cells on the microscope – practical demonstration: the set up

(for space and safety reasons hand-on participation will be limited to 5 students, Via degli Apuli 4, microscopy lab - II floor - Meet link for the others).

Day 2- 22/06/2022

9:30-12:00 Practical session 2. Automated analysis of the time-lapse experiment

(Entire audience on Meet).

Questions and conclusions

