

INSTITUT PASTEUR COURSE - EDUCATION CENTER

# Microscopy

## PRINCIPLES AND APPLICATIONS OF FLUORESCENCE MICROSCOPY

Institut Pasteur, Paris, March 2-13, 2020

Fluorescence microscopy has revolutionized researchers' ability to monitor cellular structures and dynamics. Over the last decades, the spectrum of applications of fluorescence microscopy has been constantly broadened by novel combinations of optics principles supported by the rapid evolution of hardware technologies.

This yearly course seeks to elucidate the fundamental principles underlying conventional as well as cutting-edge fluorescence microscopy techniques in order to enable the students to choose the most appropriate tools for their research and prepare them to readily understand upcoming microscopy developments.

### This course will cover:

- **Basic optics and fluorescence principles** underlying traditional and **super-resolution microscopy**
- **Applications** of fluorescence-based microscopy methods to studying living cells
- **Hands-on experience** constructing basic optics configurations used in microscopy
- Hands-on experience using **state-of-the-art imaging** equipment provided by microscope vendors.

The course is taught in English, and is dedicated to Master II and PhD students from all disciplines with a quantitative biological background and a strong motivation for learning established and emerging microscopy methods. International students are encouraged to apply.

**Online registration and program:**  
[www.pasteur.fr/en/pafm](http://www.pasteur.fr/en/pafm)

### Co-directors:

Jost Enninga  
Gael Moneron  
Jean-Yves Tinevez

**Head of lab. practicals:** Florian Ruckerl

### Practical information:

#### Deadline for application:

November 30, 2019

**Attendees:** 18 students max

**Contact:** [microscopy.course@pasteur.fr](mailto:microscopy.course@pasteur.fr)

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