



School of Medicine and Surgery  
Department of Clinical and Biological Sciences  
University of Torino, Italy



Elective Didactic Activity (Free Webinars)

**9th Workshop of  
Advanced Microscopy Techniques for Biomedical Applications**

**22/05/2020**

**15:30 – 17:30 - Prof. Saverio Francesco Retta (University of Torino)**

Advanced Fluorescence Microscopy Techniques: Basic principles, "F" techniques (FRET, FRAP, FLIP), Total Internal Reflection Fluorescence Microscopy (TIRFM)

**25/05/2020**

**09:00 – 10:15 - Dr. Alessandro Cometta (Carl Zeiss Microscopy, Milano)**

Conventional fluorescence microscopy with structured light (Apotome), Confocal Laser Scanning Microscopy (CLSM), Multiphoton Microscopy (MPM), Light Sheet Fluorescence Microscopy (LSFM), Super-Resolution Microscopy (SR-SIM - PALM - STORM - STED - GSD)

**10:30 – 11:45 - Dr. Francesco Biancardi (Carl Zeiss Microscopy, Milano)**

Move beyond the limiting boundaries of a single microscopy technique:  
Correlative Light-Electron Microscopy (CLEM)

**12:00 – 13:00 - Dr. Soren Prag (Carl Zeiss Microscopy, Berlin)**

The Smart Microscope for Automated High-Throughput Live Cell Imaging

**26/05/2020**

**09:00 – 10:15 - Dr. Enrica Boda (NICO, Torino)**

Oligodendroglia heterogeneity in physiology and pathology: a confocal study *in vivo* and *in vitro*

**10:30 – 11:45 - Dr. Valentina Cerrato (NICO, Torino)**

*In vivo* clonal analyses to study the ontogenesis of cerebellar astrocytes:  
from confocal microscopy to automatic segmentation and 3D mapping

**11:50 – 13:00 - Dr. Elisa De Luca (Center for Biomolecular Nanotechnologies, Lecce)**

Nanosopic fluorescent imaging: breaking the diffraction barrier with SR microscopy