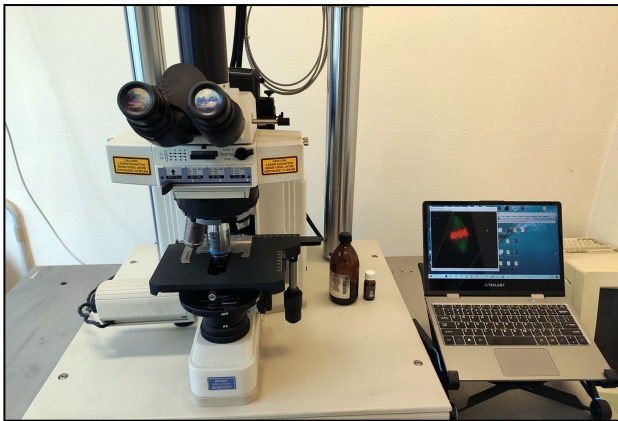
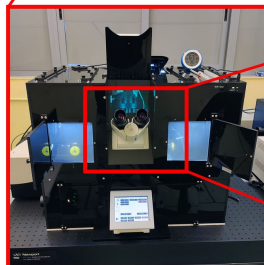
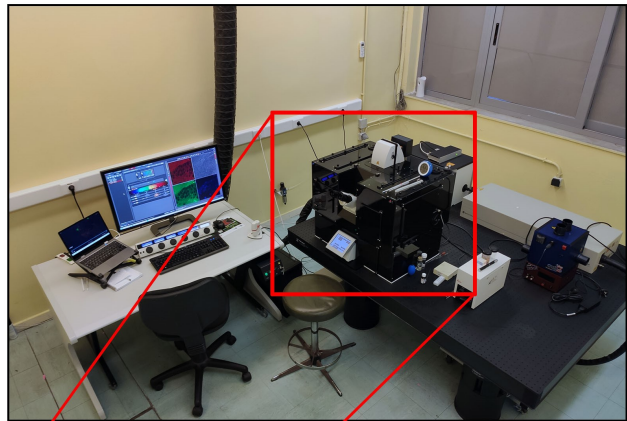


The Light Microscopy Unit of the Institute of Biosciences and Applications of NCSR "Demokritos" has been operating since July 2016 with a new generation, modern equipment, serving the imaging needs of both the research laboratories of the Institute and other Institutes of NCSR "D", as well as external Research centers and Universities

Nikon E600



Leica TCS SP8 MP



Equipment:

- A Leica TCS SP8 MP multiphoton confocal microscope with Spectra Physics Mai Tai infrared laser source and fully motorized (3-axis motorized stage) microscope stage. The system is accompanied by chamber that enable tight control of virtually all environmental variables(humidity, temperature, CO₂, O₂, N₂)
- A Nikon E600 upright optical microscope

Services:

Available services include a wide range of application of optical microscopy:

- Multi-Channel Fluorescence Microscopy, covering UV, Visible and Infrared Spectrum
- Multi-color 3D Imaging
- Live Cell Imaging
- 2-Photon Microscopy
- Second Harmonic imaging
- Förster Resonance Energy Transfer (FRET) to monitor molecular interactions in live or fixed specimens
- Fluorescence Recovery After Photobleaching (FRAP)
- Spectral unmixing of fluorescent dyes
- Cell/tissue Colocalization analysis
- Calcium Imaging
- Differential Interference Contrast (DIC) microscopy (known as Nomarski microscopy)
- Image processing and analysis (with specialized software programs such as ImageJ / Fiji and Imaris (Bitplane))

Staff:

- Dimitris Kletsas, Research Director, Director of the Institute of Biosciences and Applications, Administrative and Scientific Responsible
- Vassiliki Labropoulou, Senior Researcher
- Haris Pratsinis, Senior Researcher
- Marina Sagnou, Associate Researcher
- Alexandros Athanasopoulos, Research Assistant

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