Advanced Light Microscopy

The Advanced Light Microscopy Core @The Jungers Center offers researchers at OHSU access to a wide variety of high-end light microscopes and, equally important, expert advice and guidance with modern technologies in fluorescence microscopy.

Mission
We are here to help the biomedical research community at OHSU take advantage of current methods in fluorescence microscopy. We train users on instruments best suited for their applications and sample preparations and support them in their efforts to quantify and analyze the acquired digital images. Our line-up of instrumentation and expertise covers a wide spectrum of applications, including imaging at the highest resolution possible and capturing time-lapse images of living cells and small model organisms.

Services
Take advantage of our full assistance – rely on our experience to get you the images you need efficiently, saving you time and money. Or opt to get trained one-on-one on our instruments using your own sample – once proficient, you can schedule time for independent instrument use and take advantage of discounted pricing at off-hours.

Microscopes
• Super-Resolution Setup for Structured Illumination Microscopy and Single Molecule Localization Techniques (Zeiss Elyra PS.1)
• Laser Scanning Confocal Microscopes (Zeiss LSM 780 and Olympus FV1000)
• Multiphoton Laser Scanning Confocal Microscope (Zeiss LSM 7MP)
• Spinning Disk Confocal Microscope (Yokogawa CSU W1 on Nikon TiE)
• Image Restoration by Deconvolution Microscope (API CoreDV)
• Standard Fluorescence Microscope with Structured Illumination (Zeiss ApoTome)
• IncuCyte ZOOM Incubator Microscope for long-term live cell imaging
• Fluorescence Stereomicroscope (Zeiss AxioZoom)

Image Analysis and Visualization
We have several high-end workstations with image analysis and visualization software to work with your multi-dimensional data. Explore new ways of analyzing and visualizing your images in 3D!