

Advanced Module Description:

An introduction into Super-Resolution Structured Illumination Microscopy (SR-SIM)

This module will give an introduction into Super-Resolution Structured Illumination Microscopy (SR-SIM) as a technology to break the diffraction barrier of laser based fluorescent microscopy. This module will include high-resolution image acquisition from fixed cell material as well as live-cell imaging of neuroblastoma cells harboring genetically engineered fluorescently-tagged organelles. In addition, an introduction to IMARIS, a scientific image analysis software that provides a unique toolset for visualization, analysis, segmentation and interpretation of 3D and 4D microscopy datasets will be given.