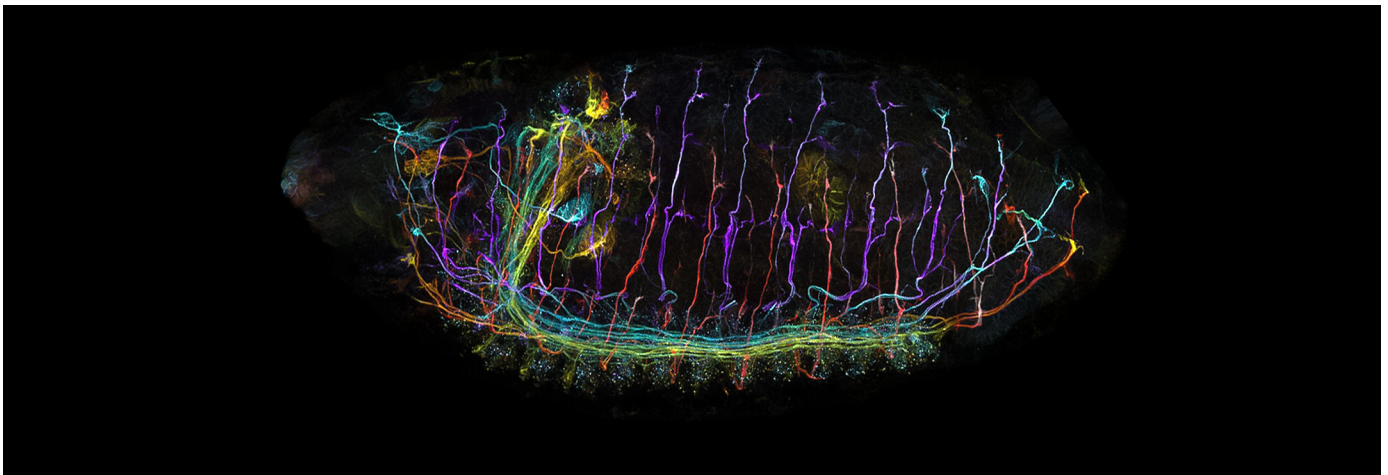


Your first Confocal experience

ZEISS LSM 900 Essential



Drosophila melanogaster CNS and PNS depth-coded projection. Sample Courtesy of J.Sellin, LIMES, Bonn, Germany

Confocal microscopy has become an essential tool in biomedical research. By utilizing a pinhole to eliminate out-of-focus signals, confocal microscopy allows optical sectioning in thick biological samples and enables researchers to capture higher-resolution and higher-contrast images. The ability to acquire multiple 2D images at different Z positions enables the reconstruction and visualization of 3D structures. The ZEISS LSM 900 is a highly versatile confocal microscope with market-leading sensitivity and powerful software tools, while the ZEISS Predictive Service lets you focus on your research without worrying about the maintenance issue.

The ZEISS LSM 900 Essential

The ZEISS LSM 900 Essential package is designed to focus on the core task of confocal microscopes: acquiring high-resolution and high-contrast three-dimensional images of cells, tissues, embryos, and organoids. This package includes carefully selected hardware and software components to meet the essential needs for image acquisition, visualization, and analysis for life sciences researchers.

Applications

- Fixed sample imaging
- Multichannel fluorescence imaging
- 3D imaging

Highlights

- Highest Sensitivity: The compact light path with a minimum of optical elements makes LSM 900 the most sensitive confocal on the market. The specially designed main dichroic beam splitter, with a small incident angle, achieves outstanding laser impressions. The patented “VSD” offers efficient and flexible spectral separation.
- Fast Linear Scanning: It is an essential prerequisite for quantitative confocal imaging. The LSM 900 is equipped with patented linear scanners, which deliver a high scanning duty cycle and uniform pixel dwell time across the scanned area.
- Predictive Service: To minimize system downtime, real-time system monitoring software tracks and analyzes performance parameters to improve remote diagnosis.

ZEISS LSM 900 Essential

The Package Components

Microscope

- Axio Observer 7
- Mechanical stage 75 × 50
- Mot. Condenser LD 0.55

Light source / Detectors

- Laser: 405, 488, 561, 633
- Colibri 5 RGB-UV with Filter sets 90 HE LED
- 2x MA-PMT

Objectives

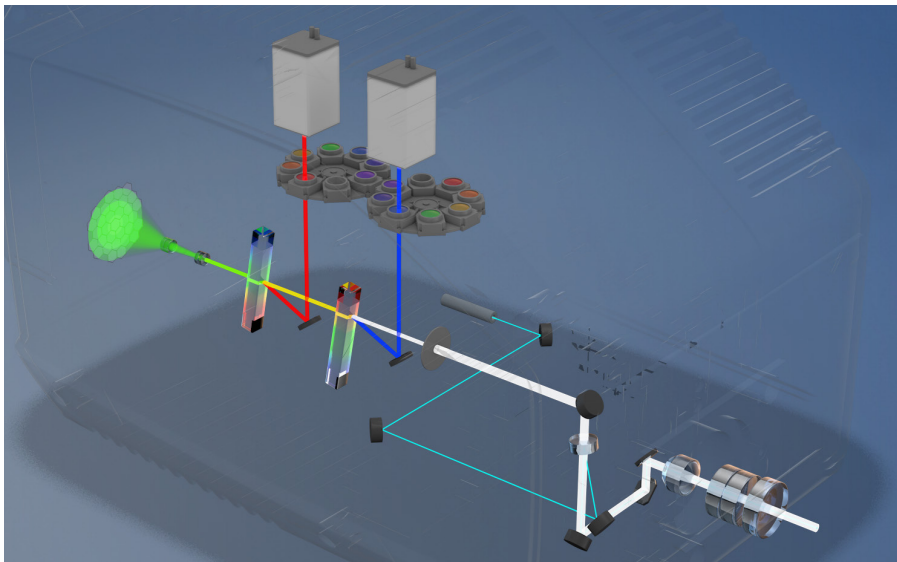
- Plan-Apochromat 10x/0.3
- Plan-Apochromat 20x/0.5
- Plan-Apochromat 63x 1.4 Oil

Workstation / Monitor

- Microscopy Workstation Z2 G5 with 64 GB RAM and NVIDIA Quadro P1000 4 GB
- Monitor TFT 27" HP E27u G4

ZEN software modules

- Newest ZEN license
- ZEN Toolkit Advanced Acquisition: acquire and process multi-dimensional images with intuitive tools
- ZEN Toolkit 2D: Use advanced processing and image analysis for image data
- ZEN Toolkit 3D: Visualize and analyze 3D image stacks



LSM 900 beam path



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zeiss.ly/lsm-900-airyscan-2



Seeing beyond