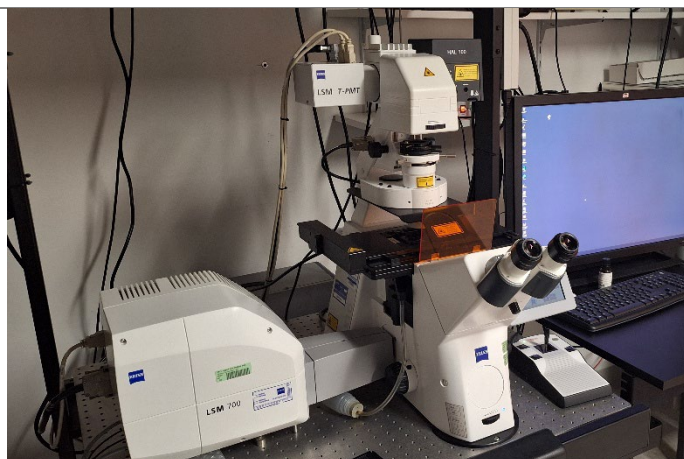


Technical Specifications

Zeiss LSM 700



(Last updated: January 2026)

Inverse point scanning confocal microscope with 2 PMT channels. Variable dichroic crystal configuration also allowing (slow) spectral imaging), transmitted light PMT and motorized stage. Widefield illumination: halogen (transmitted) and CoolLed pE-2 LED (reflected). ZEN 2012 acquisition software including "tiling & stitching" macro for larger overview imaging.

Stand

Zeiss Axio Observer.Z1, inverse, fully motorized

Objectives

- EC Plan-Neofluar 10x/0.3
- Plan-Apochromat 20x/0.8
- LD LCI Plan-Apochromat 25x/0.8 Imm Corr (oil, glycerol, water)
- Plan-Apochromat 40x/1.3 Oil DIC
- Plan-Apochromat 63x/1.4 Oil DIC
- LD C-Apochromat 40x/1.1 W Corr (working distance 0.62 mm)

Lasers

Four solid state laser diodes:

- 405 nm (5 mW)
- 488 nm (10 mW)
- 555 nm (10 mW)
- 639 nm (5 mW)

Widefield Illumination

- CoolLED, pE-2 (365/470/520-650 nm)
- Halogen lamp 100 W

Filters

Channel 1	Channel 2
SP 490	LP 490
SP 555	LP 560
SP 640	LP 640
BP 490 – 555	BP 490 – 635
BP 420 – 480	

Detectors

- CH1/2: single-channel PMTs (scan resolution up to 2048 x 2048)
- CHD: T-PMT (transmitted light)

XYZ-Stage

- Märzhäuser Scanning Stage Step D130x100; hold slides, dishes and plates

Software

- Zeiss ZEN 2012 SP5 running on Windows 10 (64-bit)
- Tiles & positions package for stitching and multi-positioning options