

Laser scanning confocal microscope Zeiss LSM 800

Location:

CELLIM, building A2, room 1.15

Booking alias:

LSM800-A2

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Reservations:
<https://booking.ceitec.cz/PlanningBoard.html>
Overview:

Inverted microscope Zeiss Axio Observer.Z1 with confocal unit LSM 800 and incubation chamber for live imaging with controlled CO₂ and temperature. Microscope is equipped with four solid state lasers, three GaAsP PMT detectors and one T-PMT detector for transmission light detection. Widefield imaging is possible using Hamamatsu ORCA-Fusion digital sCMOS camera. Microscope is equipped with Definite Focus.2 to keep sample in focus during long time-lapse experiments.

Specifications:
Objectives

Plan-Neofluar 10x / 0.30 AIR

Plan-Neofluar 20x / 0.50 AIR

Plan-Neofluar 25x / 0.80 MIM

Plan-Neofluar 40x / 0.75 AIR

Plan-Apochromat 40x / 1.20 W

Plan-Apochromat 63x / 1.40 OIL

(on demand: C-Apochromat 63x / 1.20W)

Transmitted light techniques

Brightfield

Differential interference contrast

Phase contrast

Fluorescence light source

HXP 120V

Filters

DAPI (F-set 49), GFP (F-set 38He), Cy3 (F-set 63He),

Cy5 (F-set 50)

Lasers

405 nm, 488 nm, 561 nm, 640 nm

Camera

 monochromatic camera ORCA-Fusion digital sCMOS,
 C14440-20UP, 2304 x 2304 pixels, 6.5 x 6.5 μm size

Software

Zen Blue

More information:

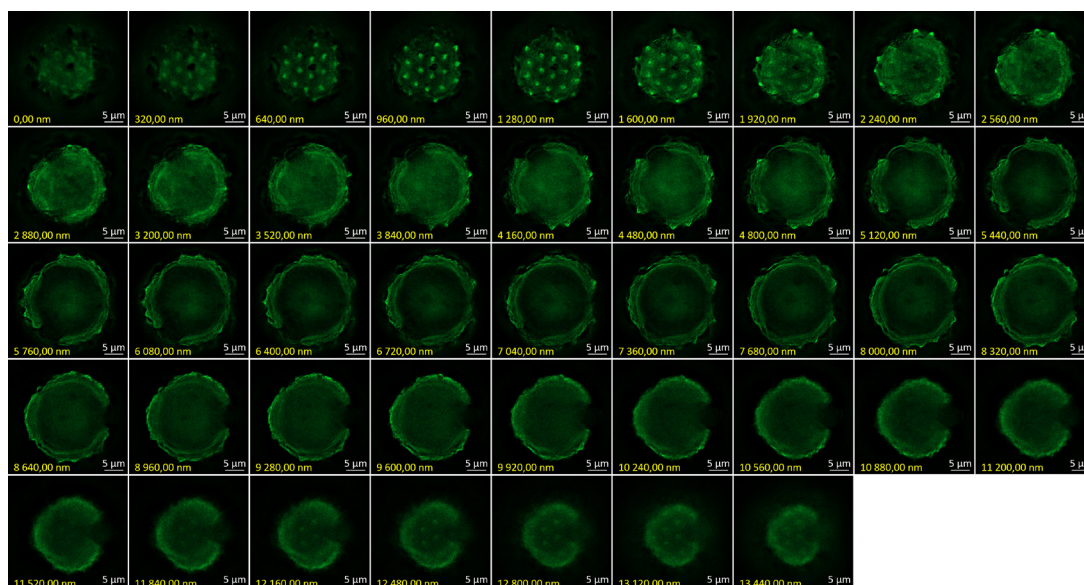


SCAN ME

Manual:



SCAN ME

Example:


◀ Z-stacks of pollen of *Bellis perennis*. Objective: C-Apochromat 63x/1.20W. Individual images were obtained using ZEN deconvolution.

▶ Pollen of *Bellis perennis*. This final image was obtained using ZEN deconvolution and maximum intensity projection.

