

Upright fluorescence microscope Zeiss AxioImager. Z2-ZEN

Location:

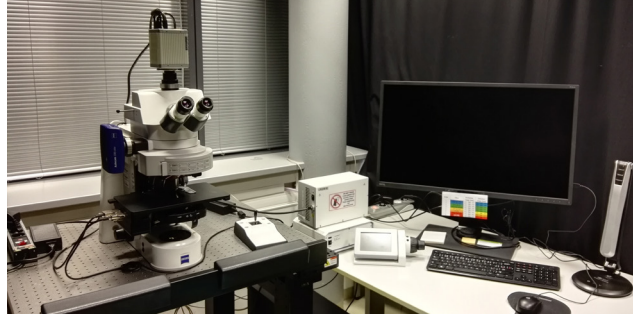
CELLIM, building A2, room 1.15

Booking alias:

AxImager-A2

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More information:



Reservations:

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

Overview:

Fully motorized widefield upright microscope Zeiss AxioImager.Z2 with two cameras (color and monochromatic) and many filters for fluorescence.

Specifications:

Objectives

N-Achroplan 10x / 0.30 OIL

N-Achroplan 20x / 0.45 AIR

N-Achroplan 40x / 0.65 AIR

Plan-Apochromat 40x / 1.30 OIL

Plan-Apochromat 63x / 1.40 OIL

Plan-Apochromat 100x / 1.40 OIL

Transmitted light techniques

Brightfield

Differential interference contrast

Phase contrast

Darkfield

Fluorescence light source

LED white light SOLA (350–680 nm)

Filters

DAPI (F46-000), CFP (F36-544), GFP (F46-002), Oregon Green (F36-720),

YFP (F46-003), PI (F36-740), Texas Red (F36-504), Cy5 (F46-006)

Cameras

monochromatic camera Hamamatsu ORCA Flash 4.0 LT, sCMOS sensor, 2048 x 2048 pixels, 6.5 x 6.5 μm size

color camera AxioCam 208, CMOS

3840 x 2160 pixels, 1.85 x 1.85 μm size

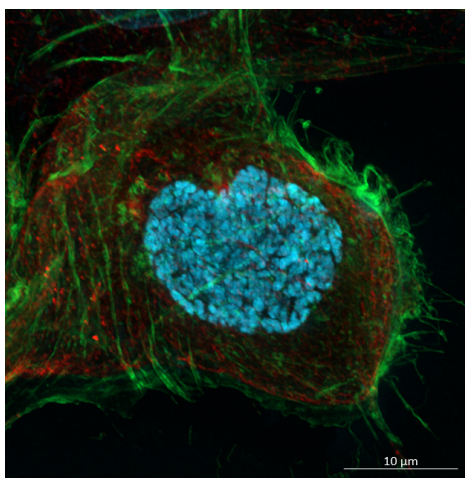
Software

Zen Blue

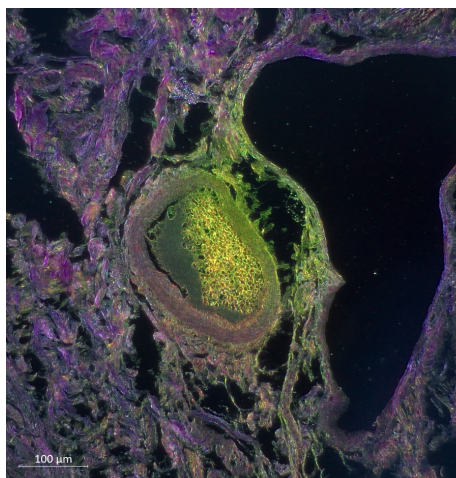
Manual:



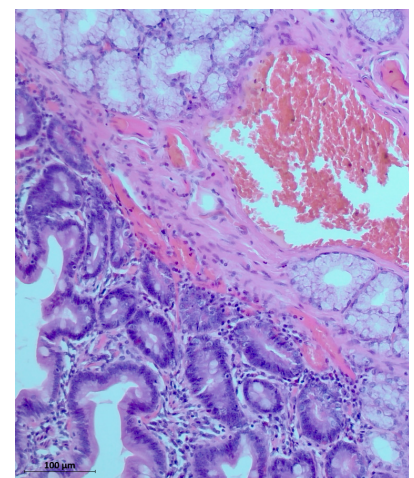
Examples:



Actin filaments and microtubules in mammalian cells.
 Red Alexa Fluor 568: microtubules, Green Phalloidin
 Alexa 488: actin filaments, Blue Hoechst: DNA.
 Objective: Plan-Apochromat 100x/1.4 Oil.
 Final image was obtained using ZEN deconvolution.



Histological section - darkfield.
 Objective: N-Achroplan 10x / 0.30 Oil.



Histological section - brightfield.
 Objective: N-Achroplan 10x / 0.30 Oil.