INVERTED SPINNING DISK CONFOCAL MICROSCOPE
LIGHTSHEET MICROSCOPE

ZEISS LIGHTSHEET Z.1

Location: EMB L4 Zebrafish Facility

Applications:
• Developmental Biology – Embryogenesis and morphogenesis (e.g. zebrafish, Drosophila, C-elegans)
• Organogenesis and Cell Dynamics
• 3D cell culture
• Structural features of large (mm-sized) specimen (early mouse-embryo)

Specifications:
• Muti-view, dual-side illumination
Lightsheet Z.1 with pivot scan (for 3D sample imaging)
• Detection zoom: 0.36x – 2.5x, continuous
• Field of view: 60um to 2.8mm based on 5x detection optics, 0.7x zoom. For sample positioning, zoom at 0.36x, FOV > 5mm.
• 4-axis movement: x, y, z and rot.
• IR chamber camera for transmission sample positioning
• Detection optics: 20x/1.0
• Illumination optics (dual side): 10x/0.2 (2 pcs)
• Detection optics: 5x/0.16
• Illumination optics (dual side): 5x/0.1 (2 pcs)
• Laser lines: 445nm, 25mW, 488nm, 30mW, 515nm, 20mW, 561nm, 20mW
• Emission filters (for single/dual channel): CFP-YFP, CFP-mCherry, GFP-mCherry, YFP-mCherry
• Detection module “PCO.Edge” (with Cooling) – 3.7 megapixels, 30fps at 1000x1000pixels (2 pcs)
• Temperature and CO2 control for incubation during live sample imaging

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<td>Light Sheet Microscope</td>
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Latest as of 1 June 2020