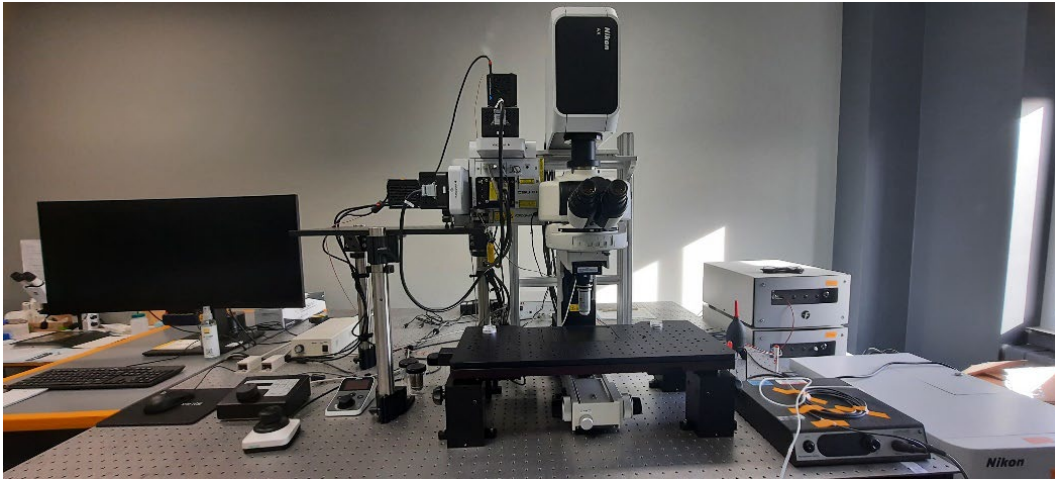


Specification & Optical Configuration

Dual Upright Nikon Yokogawa CSU-X1 Spinning Disc and Nikon AX-R Confocal System



What is it?

The dual upright Nikon Yokogawa CSU-X1 spinning disc and the Nikon AX-R (point-scanning confocal) is an imaging platform primarily designed for intravital microscopy. The system is optimised for imaging fast and deep into live lungs, breast, flank, skin, and the brain. It also permits the imaging of cleared organs and tissue sections.

Where is it?

Pavilion F, Room-329

Objectives

Air objective: Plan Apo 10x/0.45 NA, 4mm working distance

Water dipping objective: LWD 16x/0.80 NA, 3.0mm working distance

Oil dipping objective: Plan Fluor 40x/1.30 NA, 0.24mm working distance

Nikon Yokogawa CSU-X1 spinning disc confocal

Camera

2 Photometrix PRIME BSI EXPRESS sCMOS cameras (2048x2048, 95fps at 11bits/43fps at 16-bits, 6.5 μ m pixel), allow 2-channel simultaneous imaging

Lasers

The confocal unit is quipped with 4 laser lines: 405nm, 488nm, 561nm, 640nm for 4-color fluorescence imaging in the range of 350nm-750nm.

Emission filter sets

ET455/50m, DAPI-ET Emission filter, 25mm diameter

ET525/36m Emission filter, 25mm diameter

ET605/52m Emission filter, 25mm diameter

59004M FITC/TRITC DUAL BP FLTR, 25mm diameter

69000M DAPI/FITC/TRITC TRPL BP FLTR 25mm diameter

89101m ET Quad Emission Filter for DAPI/FITC/TRITC/CY5, 25mm diameter

The Nikon AX-R (point-scanning confocal)

Lasers

The point scanner is equipped with 5 laser lines (405nm, 488nm, 561nm, 640nm and 730nm) for 5-color fluorescence imaging (350nm-750nm).

Filters/Detectors

AX FILTER 405/488/561/640/730

A1/C2 447/57 EMISSION SET FOR 405

AX DUX-VB 640SP

DUX-VB4 Detector for NIR with 2 Tunable GaAsP and 1 Filter-Based GaAsP and 1 Filter-Based High-Sensitivity PMT