

Spinning Disk 3D FRAP

Objective Lens

Magnification / NA	Immersion media	Lens type	Phase contrast	DIC	Working distance	Coverglass thickness
10x / 0.30	Air	Plan Fluor DLL	Ph1	X	16 mm	0.17 mm
20x / 0.45	Air	CFI S Plan Fluor ELWD	Ph1	X	8.2 - 6.9 mm	0 - 2.0 mm (coverslip thickness correction ring)
20X / 0.75	Air	Plan Apo Lambda	X	DIC N2	1.0 mm	0.17 mm
40x / 1.30	Oil	CFI Plan Fluor	X	DIC N2	0.2 mm	0.17 mm
60x / 1.40	Oil	CFI Plan Apo Lambda	X	DIC N2	0.13 mm	0.17 mm

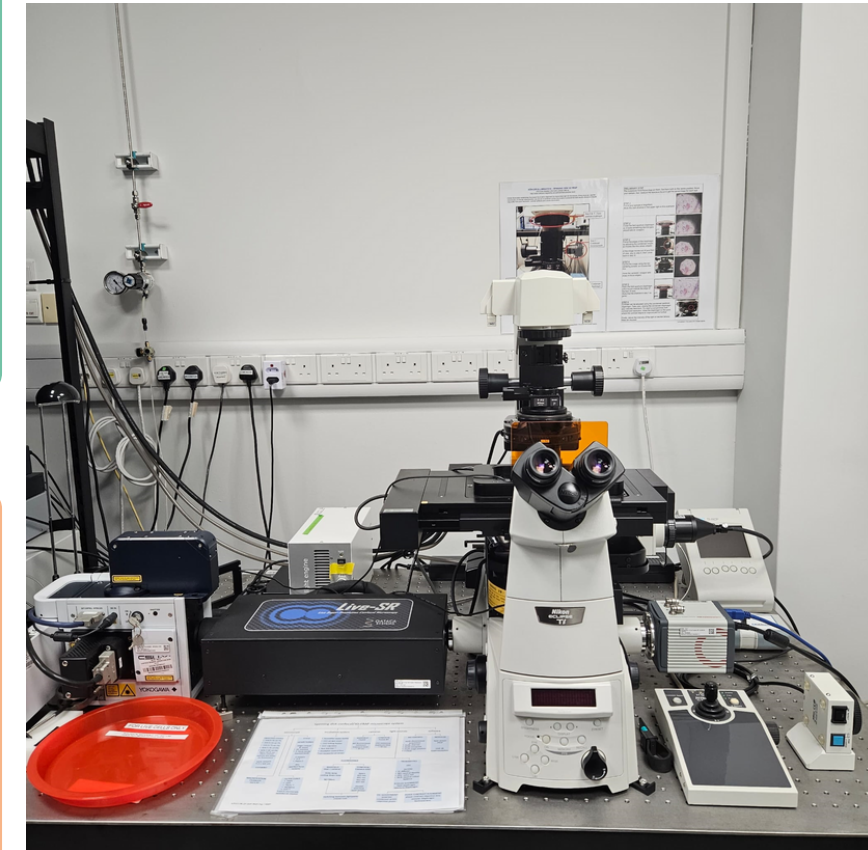
FL Filter Wheel

Channel	Excitation	Dichroic	Emission (for widefield)	Emission filter wheel (for confocal/FRAP)	Notes*
DAPI	381.5 – 392.5 nm	409 nm	417-477 nm	X	
GFP	446-486 nm	495 nm	500-550 nm	X	
TRITC*	532-554 nm	562 nm	573-613 nm	X	Installed upon request
mCherry	542-582 nm	593 nm	603.5-678.5 nm	X	
Cy5*	608-648 nm	660 nm	672-712 nm	X	Installed upon request

Light sources

Transmitted / brightfield	monoLED (Cairn Research)			
Widefield fluorescence	X-Cite 120PC Q			
Lasers	Wavelength	Power	Confocal	FRAP
	405 nm	100mW	Yes	photoactivation only
	491 nm	100 mW	Yes	Yes
	561 nm	100 mW	Yes	Yes
	642 nm	110 mW	Yes	Yes

Cameras	Widefield	Hamamatsu ORCA Flash4.0 v2
	Spinning disk	Photometrics Evolve EMCCD
Microscope body	Nikon Eclipse Ti-E inverted with motorised stage, piezo Z & PFS2	
Sample formats	Adaptors for slide, chambered coverslip (LabTek II & ibidi) & 35 mm dish	
Incubator	Live Cell Instruments	37 deg C / range = 0-45 deg C
Software	MetaMorph Premier 7.10.4	



Functions

Spinning Disk confocal (fast speed), Live Cell Imaging, Structured Illumination Microscopy (SIM) Super-Resolution