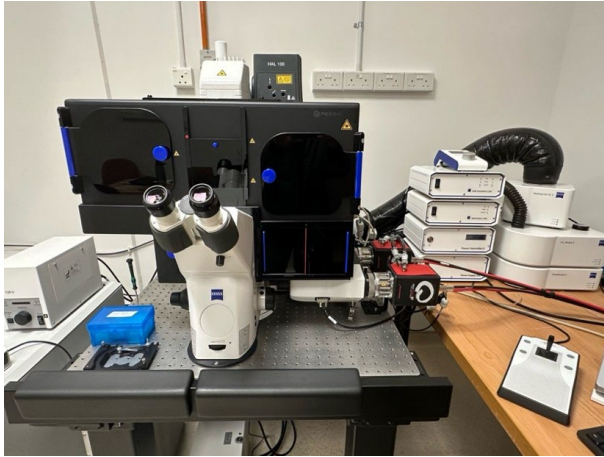


Zeiss Elyra 7

Software: Zen 3.1 | Location: SBS 03n-24



The Elyra 7 system offers a versatile range of microscopy techniques to meet diverse experimental needs, balancing resolution, speed, and sensitivity. Key features include:

- SIM Apotome – Fast optical sectioning
- Lattice SIM – Super-resolution imaging
- SIM² image reconstruction – Achieve resolution excellence down to 60 nm
- SMLM techniques (PALM, dSTORM, PAINT) – Lateral localization precision of 10–20 nm
- TIRF imaging – High-contrast visualization of structures near the cell membrane
- Live-cell imaging – Capture dynamics at up to 255 fps

SPECIFICATIONS

- Microscope body
- Axio Observer 7
- Environmental Chamber for temperature and CO₂ control

Filters

- Filter Set 77 HE (Ex TBP 483+564+642, Em TBP 526+601+688)
- Filter Set 25 HE (Ex TBP 405+495+575, Em TBP 460+530+625)

Light Source

- Halogen lamp for transmitted light
- HXP 120 illuminator for reflected light

Lasers

- Solid state diode lasers 405nm, 488nm, 561nm, 642nm

MICROSCOPY EQUIPMENT SPECIFICATIONS

Objectives

Name	Magnification	NA	Immersion	WD (mm)	Application
Plan- Neofluar	10x	0.3	Air	5.2	Apotome
Plan- Apochromat	20x	0.8	Air	0.55	Apotome
Plan- Apochromat	40x	1.4	Oil	0.13	Apotome
C-Apochromat	40x	1.2	water	0.28	Lattice SIM
Plan- Apochromat	63x	1.4	Oil	0.19	Lattice SIM
Plan- Apochromat	63x	1.46	Oil	0.19	SMLM, TIRF, HILO

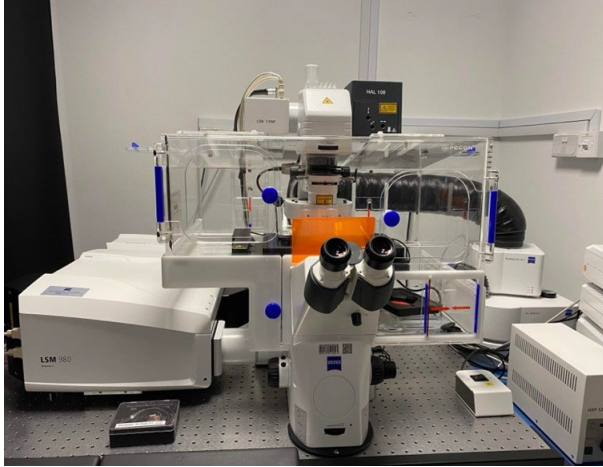
Camera

Orca Fusion BT CMOS cameras (2x)

- QE: up to 95%
- Pixel Size: 6.5 μm x 6.5 μm
- Effective number of pixels: 2304 x 2304

Zeiss LSM 980 with Airyscan 2 Confocal Microscope

Software: Zen 3.4 | Location: SBS 02S-71



The LSM 980 Airyscan 2 is an ideal platform for fast, gentle, super-resolution imaging. It is built on a fully motorized Axio Observer 7 inverted microscope stand with Z-piezo, environmental chamber with temperature control and uses the ZEN Blue 3.4 software for acquisition and analysis. It is equipped with a 32 channel GaAsP detector, 2 PMTs and an Airyscan 2 detector. The multiplex mode can perform parallel pixel acquisition, which can accelerate acquisition speed, up to 8x faster than normal confocal imaging.

SPECIFICATIONS

Microscope body

- Axio Observer 7
- Environmental Chamber for temperature control

Objectives

- EC Plan-NeoFluar 2.5x/0.085
- Plan-Apochromat 10x/0.45
- Plan-Apochromat 25x/0.8
- Plan-Apochromat 40x/1.30 Oil
- Plan-Apochromat 63x/1.40 Oil
- Plan-Apochromat 100x/1.46 Oil

Light Source

- Halogen lamp for transmitted light
- HXP 120 illuminator for reflected light

Lasers

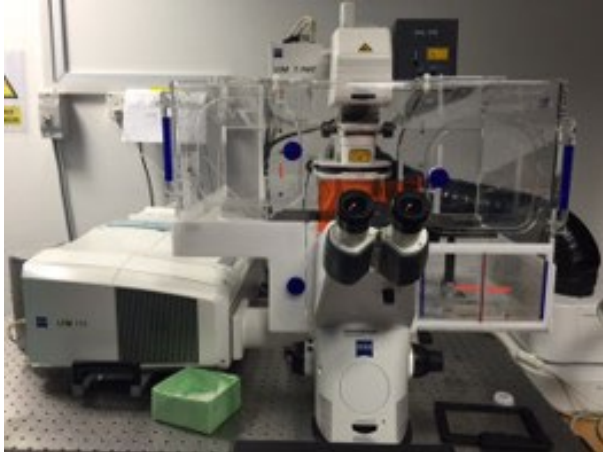
- Diode Laser 405nm, 445nm, 488nm, 514nm, 639nm
- DPSS laser 561nm, 594nm

Detectors

- 32 channel GaAsP detector
- 2 standard PMTs
- Airyscan 2 detector

Zeiss LSM710 Confocal Microscope

Software: Zen 2.1 (black) | Location: SBS 02S-71



The Zeiss LSM710 system is an inverted point-scanning microscope that is ideal for research in cell and molecular biology. It provides great sensitivity and low background noise during image acquisition. With the Airyscan detector, one can achieve 1.7x higher resolution in all three spatial dimensions. It is suitable for 3D optical sectioning/z-sectioning, co-localization studies, live cell imaging, photoactivation or photobleaching experiments such as Fluorescence Recovery After Photobleaching (FRAP) and Förster Resonance Energy Transfer (FRET).

SPECIFICATIONS

Microscope body

- Axio Observer.Z1
- Environmental Chamber for temperature control

Objectives

- EC Plan-NeoFluar 10x/0.30
- EC Plan-NeoFluar 20x/0.50
- EC Plan-NeoFluar 40x/1.30 Oil DIC
- Plan-Apochromat 63x/1.40 Oil DIC
- EC Plan-NeoFluar 100x/1.3 Oil

Light Source

- Halogen lamp for transmitted light
- X-Cite 120 illuminator for reflected light

Lasers

- Argon (458,488,514nm)
- HeNe 633nm
- DPSS 561nm
- Diode 405nm

MICROSCOPY EQUIPMENT SPECIFICATIONS

Filter Sets

Filter set	Excitation	Emission
Zeiss Filter set 38 (GFP)	BP 470/40	BP 525/50
Zeiss Filter set 43 (dsRed)	BP 550/25	BP 605/70
Zeiss Filter set 49 (DAPI)	G365nm	BP 445/50

Detectors

- 2 standard PMTs
- Airyscan detector

Zeiss Laser TIRF3 Microscope

Software: Zen blue | Location: SBS 02S-71



The Zeiss Laser TIRF3 system is well suited for visualization of structures or molecular processes at or near cell membranes via the Total Internal Reflection Fluorescence (TIRF) principle. When properly configured, this imaging technique can result in narrow imaging depths of less than 100 nm from a glass-specimen interface. Single molecule dynamic processes in cell-free systems may also be observed.

SPECIFICATIONS

Microscope Body

- Axio Observer.Z1

Objectives

- EC Plan-NeoFluar 10x/0.30
- alpha-Plan Apochromat 100x/1.46 Oil DIC

Light Source

- Halogen lamp for transmitted light
- HXP120 for reflected light
- Solid state laser 488nm and 561nm

Filter Sets

Filter set	Excitation	Emission
Zeiss Filter set 52	BP 488/10	BP 525/50
Zeiss Filter set 74	DBP 480/30	DBP 525/31
Zeiss Filter set 86	BP 556/25	BP 630/98

Camera

EMCCD Evolve 512

Lightsheet Z.1

Software: Zen 2014 SP1 (black edition) | Location: SBS 02S-71



The Zeiss Lightsheet imaging system enables you to obtain optical sections of large samples, with virtually no phototoxicity or bleaching and with high temporal resolution and very fast rates.

This system is suitable for performing:

- Fluorescence imaging of spatio-temporal patterns within cells during embryogenesis of model organisms such as Zebrafish and *Drosophila melanogaster*.
- Fast imaging of cellular dynamics in embryos and small organisms like cell migration, cardiac development, blood flow, calcium imaging etc.
- Live imaging of 3D cell cultures, spheroids, cysts, tissue and organotypic cultures.
- Imaging of optically cleared specimens

SPECIFICATIONS

Microscope Body

- Lightsheet Z.1

Objectives

- Lightsheet Z.1 10x/0.2 (illumination)
- W Plan-Apochromat 40x/1.0
- W Plan-Apochromat 63x/1.0

Light Source

- Solid state laser 405nm, 488nm and 561nm

Detectors

- CCD camera

Zeiss Axioscan Z.1

Software: Zen 3.9 | Location: SBS 02S-71



The Axioscan.Z1 is a high throughput brightfield and fluorescence slide scanner. It is designed for automated imaging, capable of handling up to 100 slides at 1 time. The system is equipped with a range of objectives including 5x/0.25, 10x/0.45, 20x/0.8 and 40x/0.95 objectives. It features 5 different fluorescence excitation and emission filters for multiplex imaging of fluorescent labelled samples. Furthermore, it is capable of performing colour imaging, making it suitable for histological sample analysis.

SPECIFICATIONS

Microscope Body

- Axioscan Z.1

Objectives

- Fluar 2.5x/0.12
- Fluar 5x/0.25
- Plan Aplanachromat 10x/0.45
- Plan Aplanachromat 20x/0.8
- Plan Aplanachromat 40x/0.95

Excitation Filters	Beamsplitter	Emission Filters
G365	FT395	BP 445/50
BP 470/40	FT495	BP 529/50
BP 545/25	FT570	BP 505/70
BP 587/25	FT605	BP 647/70
BP 640/30	FT660	BP 690/50

Fluorescent Light Source

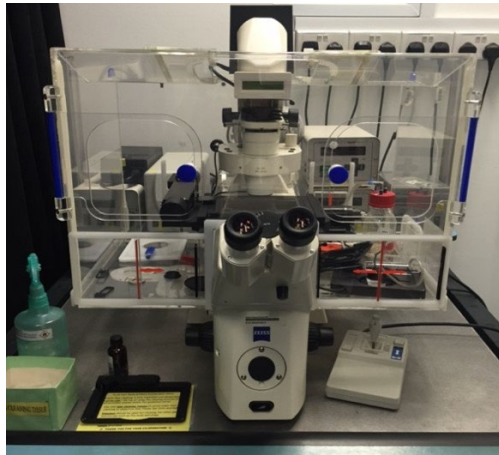
- HXP 120V

Cameras

- Hamamatsu Orca Flash 4.0 V2 sCMOS
- Hitachi HV-F202SCL 3 CCD progressive scan colour camera

Zeiss Live Cell Observer

Software: Axiovision 4.8 software | Location: SBS 02S-71



The Zeiss Live Cell Observer system is an inverted widefield fluorescence microscope. It is equipped with a temperature-controlled incubation system suitable for live cell time-lapse imaging experiments.

SPECIFICATIONS

Microscope body

- Axiovert 200M

Objectives

- Plan-Neofluar 10x/0.3
- Plan-Neofluar 20x/0.5
- LD Plan-NeoFluar 40x/0.6
- Plan-Apochromat 63x/1.4 Oil DIC
- α -Plan Apochromat 100x/1.45 Oil

Light Source

- halogen lamp for transmitted light
- X-cite 120 illuminator for reflected light

Filter sets

Filter set	Excitation	Emission
Zeiss Filter set DAPI	G365nm	BP 445/50
Zeiss Filter set GFP	BP 470/40	BP 525/50
Zeiss Filter set TRITC	BP 550/25	BP 605/70
Zeiss filter set Cy5	BP 640/30	BP 690/50

Detector

- CCD camera

Zeiss Live Cell Observer II

Location: SBS 02S-71



The Zeiss Live Cell Observer system is a state-of-the art inverted widefield fluorescence microscope. It is equipped with a temperature-controlled CO₂ incubation system for live cell time-lapse imaging experiments. Suitable for tile and multi-position imaging.

SPECIFICATIONS

Microscope Body

- Axio Observer.Z1
- Environmental Chamber for temperature control

Objectives

- EC Plan-NeoFluar 10x/0.30
- EC Plan-NeoFluar 20x/0.50
- EC Plan-NeoFluar 40x/0.75
- Plan-Apochromat 63x/1.40 Oil DIC
- Plan-Apochromat 100x/1.4 Oil

Light Source

- Halogen lamp for transmitted light
- X-Cite 120 illuminator for reflected light

Filter Sets

Filter set	Excitation	Emission
Zeiss Filter set 38 (GFP)	BP 470/40	BP 525/50
Zeiss Filter set 43 (dsRed)	BP550/25	BP 605/70
Zeiss Filter set 49 (DAPI)	G365nm	BP 445/50
Zeiss filter set 50 (Cy5)	BP 640/30	BP 690/50

Camera

- Zeiss AxioCam 503 Mono
- Zeiss AxioCam ICc1 (color camera)

Zeiss StereoLumar V12

Location: SBS 02S-71



Zeiss Stereo Lumar V12 is a fully automated stereoscope with fluorescence capabilities. It allows imaging of whole small animals (e.g. Zebrafish and *c. elegans*), as well as cell cultures in petri dishes. Magnifications range is equivalent to ~1-12x, with variable zoom.

SPECIFICATIONS

Microscope Body

- Zeiss Lumar.V12 stereoscope body

Objectives

- Neo Lumar S 0.8x

Light Source

- Transmitted and reflected light source
- HBO100 fluorescence arc lamp

Filter Sets

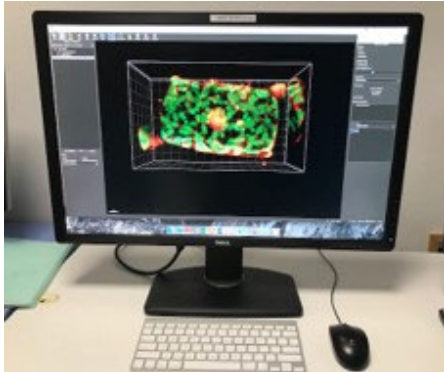
- Zeiss Filter set 38 (GFP)
- Zeiss Filter set 20 (Rhodamine)
- Zeiss Filter set 01 (UV)

Cameras

- Zeiss AxioCam MRm
- Zeiss AxioCam MRc

IMARIS

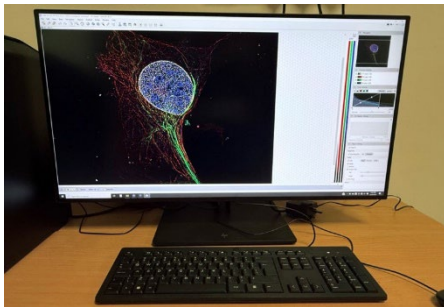
Location: SBS 02S-71



The IMARIS single full software is installed on this workstation. This program allows the visualisation, analysis and interpretation of microscopy data. With IMARIS, you can perform automated spots and surface detection, cell segmentation, motion tracking, co-localisation and cell lineage studies etc.

ARIVIS PRO

Location: SBS 03n-24



Arivis Pro is a powerful imaging software for visualizing, analyzing, and processing large-scale 2D, 3D, and 4D microscopy data. It enables advanced image analysis, segmentation, and quantification with high precision, making it ideal for handling massive datasets effortlessly.