

National Centre for Cell Science

Bio-Imaging Facility

Requisition form for external users

Date of Indent _____

Name of the Indentor :

Concerned Faculty/Scientist :

Laboratory Address :

Contact no. :

E-mail ID :

Proposed date and time :

Specification: Protocol :
(Excitation, Emission, & Dye)

Sample details :
(Species, Tissue type & Thickness)

(Signature of the Indentor)

Date:

(PI/HoD of the Indentor)

Date:

(For facility use only)

Tentative Date :

Date of work done :

No. of Slide done :

Microscope Used : Leica TCS SP5 / Zeiss LSM 880/TF CX7 LZR/
Olympus FV3000 / Olympus Spin SR10

Amount to be charged :

(Technical Staff)

(Facility In-charge)

Due acknowledgement to be given to Bio-Imaging Facility, NCCS, in the research publication emerging out of the work carried out at this facility.

Contact us @ 020-25708265 /8260 or bioimaging@nccs.res.in

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Information about Confocal Microscope usage for external users

Microscopes Available @ NCCS

1. Leica TCS SP5 II Confocal Microscope
2. Zeiss LSM 880 with AiryScan and Elyra P1 - High Resolution system
3. Thermo Scientific CellInsight CX7 LZR High Content Screening System
4. Olympus FV3000 Confocal Microscope
5. Olympus Spin SR 10 Microscope

Leica SP5 II is a high-end Broadband Confocal Laser Scanning Microscope with 4 cooled spectral PMTs and unique AOBS, technology equipped with CO₂ incubator, fully motorized, automated and computer controlled Microscope Leica DMI 6000. The Lasers are Blue Diode Laser 405nm, Ar Laser with 458nm, 488nm, 476nm, 496nm, 514nm lines, DPSS 561nm, HeNe 594nm and HeNe 633nm with Scanning Stage and incubation chamber for live cell experiments.

Zeiss LSM880 Airy Scan and ELYRA P.1 comprises of Axio Observer 7 microscope with Airyscan and Elyra P.1 technology on the LSM 880. Airyscan is a 32-channel GaAsP-PMT area detector that collects a pinhole-plane image at every scan position. Each detector element functions as a single, very small pinhole. ELYRA P.1 localizes small structures and even single molecules achieving resolutions of 20nm laterally and 50nm axially.

Thermo Cellinsight CX7 LZR High Content System is a fast, laser-based, automated cellular imaging and analysis platform for quantitative microscopy and phenotypic screening. It is a 7-channel, laser-based illumination system with Software and laser-based autofocus for consistent scan times. It also has an onstage incubator for live cell imaging. It is highly compatible with standard microplates (6, 24, 48, 96, 384, 1536 wells). It is loaded with HCS Studio software for integrated data collection and analysis.

Olympus FV3000 is a high speed spectral confocal microscope and can attain high resolution, nearly 140nm or better (XY) and 350nm in Z direction for at least two colours simultaneously with OSR (Olympus Super resolution- software based). The system has 4 detectors- 2 PMT detectors and 2 High sensitivity detectors (GaAsP) with possibility of 8 to 16 channels and dedicated transmitted light detector for DIC imaging.

Olympus Spin SR 10 is a Spinning disc confocal microscope equipped with YOKOGAWA W1-SoRa scan-unit. It can attain high resolution minimum 250 nm (XY) and 800 nm in Z. Super-resolution mode gives XY resolution of 120nm and Z of 540nm approximately. ZDC option (Z Drift Compensators) avoids minor vibrations during live imaging and retains the same focus position in real time for long term time lapse imaging. It is equipped with a fully motorized XY stage inverted microscope with anti-vibration platform. The system has 2 high-speed cameras for simultaneous imaging of atleast two dyes.

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- The **Charges** for Leica TCS SP5 / Zeiss LSM 880/TF CX7 LZR/ Olympus FV3000/ Olympus Spin SR 10 microscopes are **Rs. 2000 per hour + 18 % GST for academic users and Rs. 3000 per hour + 18 % GST for non-academic users.**

You can pay as cash / Cheque /DD at our accounts section. User will be charged according to the microscope usage time. User can bring DVD for collecting data/ images.

Outsiders will be allowed to use NCCS Microscopy facility maximum of two hours per week per microscope. To book the slots contact us (@ bioimaging@nccs.res.in or 020-25708265 / 8260) before 11 AM on previous Friday.

Location: Bio-Imaging Facility, New building, NCCS. User can enquire about the direction in NCCS Reception / security gate.