

Ion Channel Assay System

Make: MCS

Model: MCS Patch server

Application: Measurement of ion channel currents

- Operational Conditions: **Operational**
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.): **Room temperature whole-cell recordings of ion channel currents from heterologous or native mammalian cell lines.**

- Location: BT 222

- Contact details of FIC and Staff/Student:

Dr. Anamika Bhargava, Associate Professor

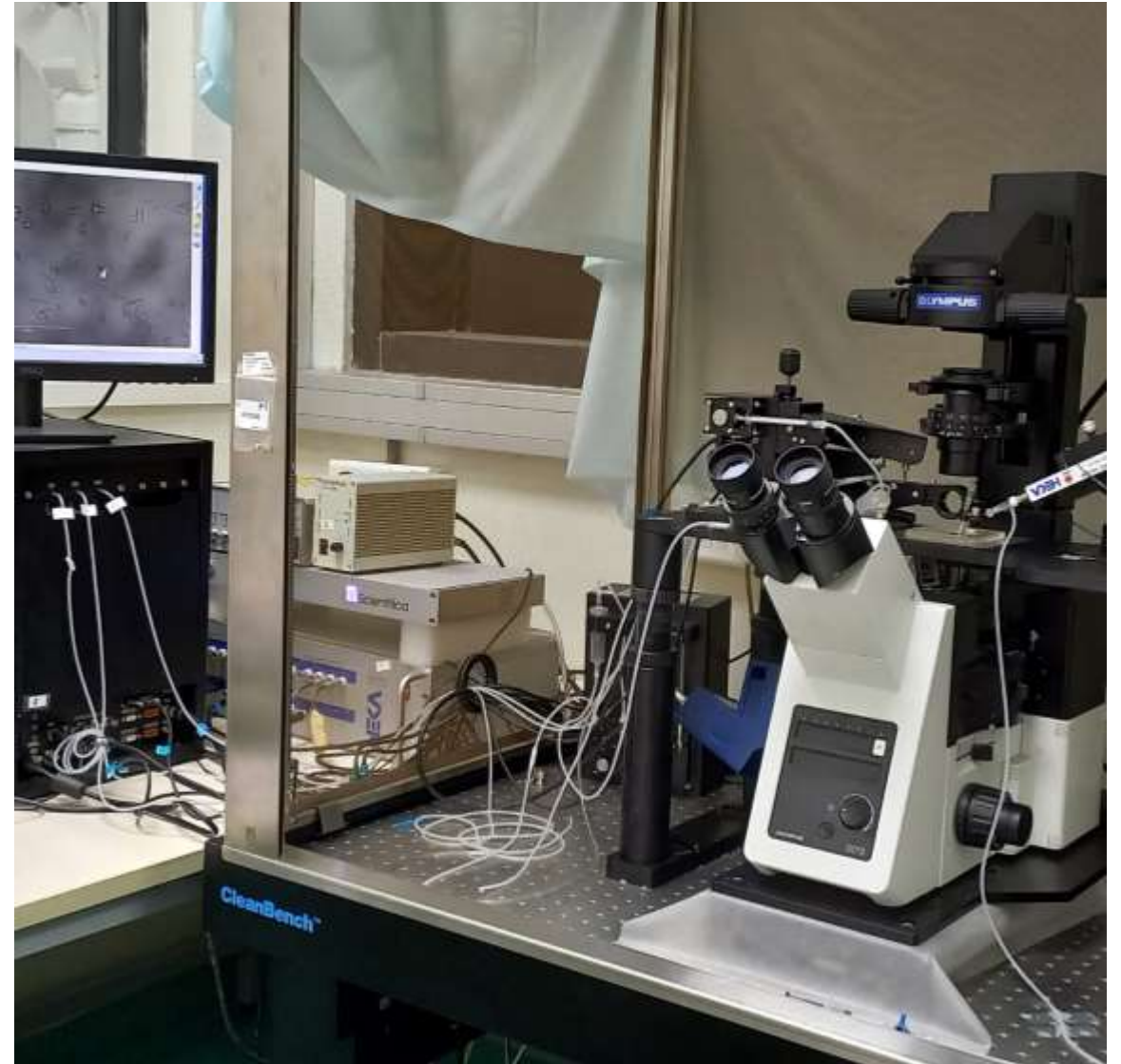
Dept. of Biotechnology, IIT Hyderabad

Or

Mr Ankush Sharma, PhD student

- Email

abhargava@bt.iith.ac.in, bo21resch11004@iith.ac.in



BD FACS Melody TM Cell Sorter

Make: Beckton- Dickson

Model: 662750

Application: To sort the cells and analyze apoptosis, cell cycle

- Operational Conditions: Needs repair of the main circuit board (MCB)
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.)

Any kind of suspension cells can be analyzed and sorted

- Location: BT 119
- Contact details of FIC and Staff/Student:
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IIT Hyderabad
- Email and phone number (whoever is willing to share)
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Oligo Synthesizer

Make: Bio Automation Corp.

Model: MerMade- 192E

Application: To Synthesize ssDNA

- Operational Conditions: Needs setting up of accessories
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.)

User-specific

- Location: BT 012
- Contact details of FIC and Staff/Student:
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CD Polarimeter

Make: JASCO

Model: J-1500

Application:

To investigate optical activity of biomolecules

- Operational Conditions: Operational
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.): Any chemical/bio-molecules in solution state; High salt concentration should be avoided
- Location: BT 219
- Contact details of FIC and Staff/Student:

Dr. Thenmalarchelvi Rathinavelan, Associate Professor

Mr Uttam Das

Dept. of Biotechnology, IIT Hyderabad
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Microscale Thermophoresis

Make: NanoTemper Technologies

Model: NT115

Application:

For measuring biomolecular interactions

- Operational Conditions: Operational
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.):
Fluorescently labeled Biomolecules in solution state.

- Location: BT 119

- Contact details of FIC and Staff/Student:

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Octet K2 (Bio-layer Interferometry)

Make: ForteBio Inc.

Model: ----

Application:

Kinetics of macromolecular and ligands binding studies

- Operational Conditions: Operational
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.): Analyze and quantify interactions between a set of molecules, Binding Kinetics, Room temperature. User need to buy consumables, Biosensors and labelling kit, etc..
- Location: BT 119
- Contact details of FIC and Staff/Student:
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Dept. of Biotechnology, IIT Hyderabad
- Email and phone number (whoever is willing to share)
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Mosquito Robotic Liquid Handling System

Make: TTP Lab Tech Ltd

Model: ----

Application:

Robot for macromolecules crystallization setup

- Operational Conditions: Operational
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.): Liquid dispensing system for macromolecules crystallization. User need to buy consumables, nanolitre tips and 96 well plates etc.
- Location: BT 119
- Contact details of FIC and Staff/Student:
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Fast Protein Liquid Chromatography

Make: GE Healthcare

Model: AKTA pure 25 M2

Application: Protein purification

- Operational Conditions: Partially operational; expected to be fully functional in a month's time
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.): Protein sample (solution)
- Location: JICA Lab; BT
- Contact details of FIC and Staff/Student:
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HPLC

Make: Shimadzu Pte Ltd

Model: CBM 20a

Application:

Separation of molecules

- Operational Conditions: Requires a bath sonicator for sample preparation.
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.)

Any organic compound for analytical separation

- Location: BT 119
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Isothermal Titration Calorimeter

Make: Waters Ges.m.b.H

Model: ----

Application:

Binding studies

- Operational Conditions: Operational, but need to repair the wash module and replace the injecting syringe
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.): Binding affinity and Thermodynamics of binding, 10oC to 25oC
- Location: BT 119
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Bench-Top UltraCentrifuge Optimax Max-XD

Make: Beckman coulter

Model: Optima Max-XP

Application:
Separation

- Operational Conditions: Operational. Small rotor non-functional. Service required.
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.) : Non-corrosive, non-infectious samples in solution.
- Location: BT 220
- Contact details of FIC and Staff/Student:
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- Email and phone number (whoever is willing to share)
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Fast Protein Liquid Chromatography

Make: GE WIPRO

Model: Akta Purifier 100

Application:

Protein separation

- Operational Conditions: Operational
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.)

Soluble protein sample for separation

- Location: BT 219
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Spectramax-Microplate Reader

Make: Molecular Devices

Model: Spectra Max M5e

Application: Microplate reader for absorbance and fluorescence

- Operational Conditions: Down. Unstable laser. Sample holder shaker defective.
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.): Non-corrosive, non-infectious samples only.
- Location: BT 220
- Contact details of FIC and Staff/Student:
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Fast Protein Liquid Chromatography

Make: GE Healthcare Biosciences Ltd

Model: Akta Purifier 100

Application:

Protein separation

- Operational Conditions: Operational
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.)

User-specific

- Location: BT 012
- Contact details of FIC and Staff/Student:
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Fast Protein Liquid Chromatography

Make: Bio-Rad

Model: Biological ABR7-3

Application:

Protein Separation

- Operational Conditions: Operational but liquid pumping is suboptimal
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.): Protein purification
- Location: BT 224
- Contact details of FIC and Staff/Student:
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Avanti Refrigerated Centrifuge

Make: Beckman Coulter

Model: Avanti

Application:
Separation

- Operational Conditions: Operational
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.)

Any type of biological sample

- Location: BT 117
- Contact details of FIC and Staff/Student:
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Cell Analyzer

Make: Applied Biosystems

Model: -----

Application:

Quantify fluorescent markers in cell

- Operational Conditions:
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.)
- Location: BT 012
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Floor Model Superspeed Centrifuge

Make: Thermo electron led GMBH

Model: Sorvall LYNX 400

Application:

Separation

- Operational Conditions: Operational
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.): cell separations, 4oC to 20oC
- Location: BT 224
- Contact details of FIC and Staff/Student:
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Upright Fluorescence Microscope

Make: Leica

Model: DM2500

Application:

Bright field and fluorophore microscopy

- Operational Conditions: Operational.
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.): Basic microscope for Non-infectious cells and Non-corrosive samples only.
- Location: BT 219
- Contact details of FIC and Staff/Student:
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Real Time PCR

Make: Life Technologies Hordings Ltd

Model: -----

Application:

Measures gene copy number

- Operational Conditions:

Needs 3 KVA UPS

- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.)

For infectious samples in BSL-II

- Location: BT 013
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Multimode Plate Reader

Make: Perkin Elmer Singapore Pte Ltd

Model: Enspire

Application:

Measures fluorescent tag interaction

- Operational Conditions: Operational
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.)

User-specific

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Cell Imaging System

Make: Life Technologies

Model: Evosfl Auto

Application:

Cell imaging

- Operational Conditions: Operational
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.)

Fluorescently labelled animal cells

- Location: BT 221
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Computer Nodes

Make: Fujitsu

Model: Primergy RX300S7

Application:

Computational Work

- Operational Conditions: Operational
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.)

Data Storage space (External) and Required software

- Location: Academic Block, A 006
- Contact details of FIC and Staff/Student:

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Water Purification System

Make: Merck

Model: Millipore Ultra Pure

Application:

To get high quality water

- Operational Conditions: Operational
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.)

Ultrapure water

- Location: BT 117
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Syngene G Box - XR5

Make: Syngene

Model: Gbox - XRS

Application:

Gel imaging of Proteins & Nucleic acids

- Operational Conditions: Operational
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.)

DNA visualization Agarose gel

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Molecular Imager Chemidoc XRST System

Make: Bio-Rad Pacific Limited

Model: Universal Hood II

Application: Chemiluminescence, fluorescence, and colorimetric imaging

- Operational Conditions: Operational
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.)

User-Specific

- Location: BT 012
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Isoelectric Focusing Unit

Make: GE Healthcare

Model: ----

Application:

Separation

- Operational Conditions:
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.)

- Location: BT 117

- Contact details of FIC and Staff/Student:

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Cyclone Phosphor Scanner

Make: Perkin Elmer Singapore Pte Ltd

Model: ----

Application:

Imaging of electrophoresis gels & blots

- Operational Conditions: Not operational
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.)

User-Specific

- Location: BT 117
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Ultra Speed Centrifuge

Make: Thermo electron Led Gmbh

Model: Sorvall WX Ultraserie

Application:
Separation

- Operational Conditions: Operational
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.)

User-specific

- Location: BT 319
- Contact details of FIC and Staff/Student:
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Multimode Plate Reader

Make: Biotek Instruments Inc.

Model: Synergy H1 Microplate reader

Application:

Microplate reader for absorbance and fluorescence

- Operational Conditions: Operational
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.)

Any sample with fluorescence/absorbance

- Location: BT 221
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Nucleic Acid Purification System

Make: Cytiva

Model: AKTA pure 25 M2

Application: Nucleic Acid Separation

- Operational Conditions: Operational
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.): Nucleic Acid purification and separation
- Location: BT007
- Contact details of FIC and Staff/Student:
Dr. Ashish Misra, Assistant Professor , Dept. of Biotechnology, IIT Hyderabad
- ashishmisra@bt.iith.ac.in



High-end Fluorescence microscope

Make: Leica

Model: DMI8 S

Application: Live Cell Imaging and TIRF module for Single-Molecule Imaging

- Operational Conditions: Operational
- Specify the range/type of samples that can be studied, or whichever is relevant (loads, temperature range etc.): Biological specimens
- Location: BT119
- Contact details of FIC and Staff/Student:

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