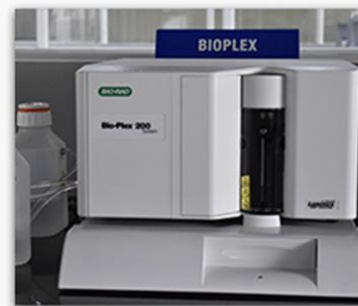


Genomics Facility | Proteomics Facility | Molecular Platforms | Bio-Imaging Facility



Genomics Facility – Next Seq 500



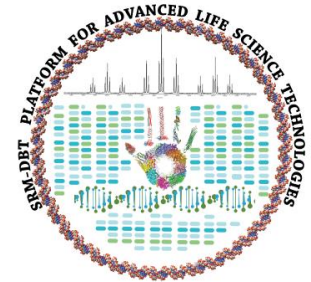
Genomics Facility



Services Offered:

- Whole Genome Sequencing
- Whole Exome sequencing
- Targeted resequencing
- Metagenomics
- Whole RNA / Transcriptome sequencing
- Ribosome profiling
- DNA methylation sequencing
- ChIP - Sequencing

Proteomics Facility – Nano LC MS/MS

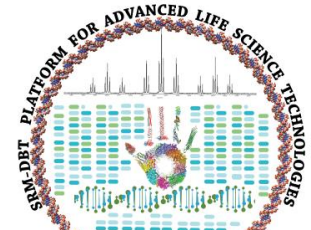


UHR-QqTOF mass spectrometer

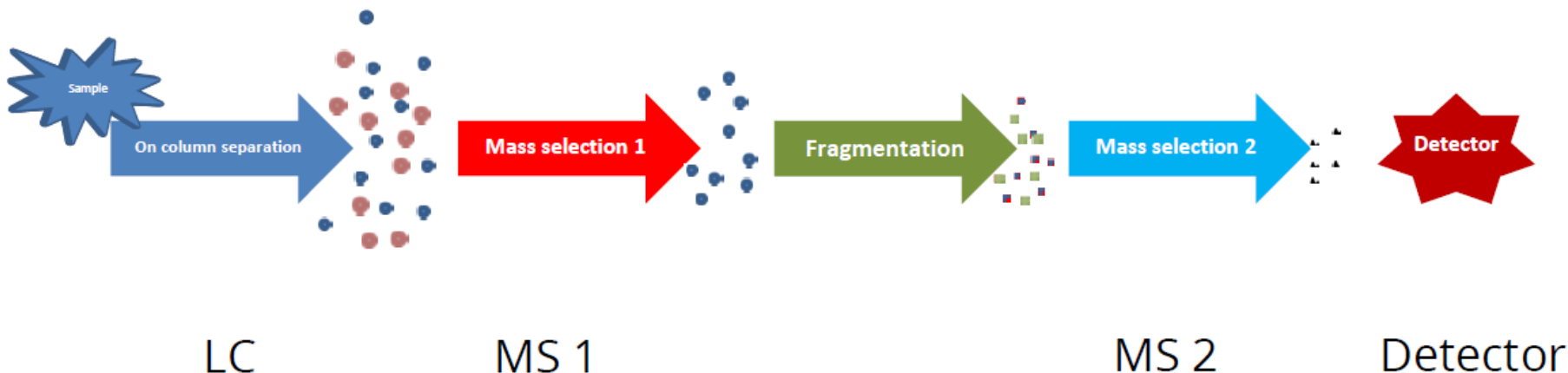
Full-Sensitivity Resolution (FSR) about 40,000

Nano LC – 1750 PSI

Proteomics Facility – Nano LC MS/MS



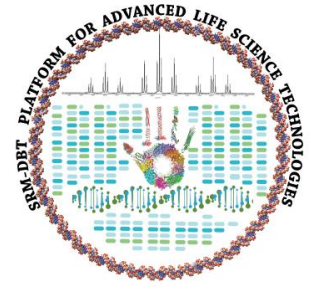
Compound detection by LC-MS/MS



Services Offered:

- Accurate mass measurement with elemental composition for molecular and fragment ions
- In solution digestion, analysis and identification of proteins using Mascot
- In gel digestion, analysis and identification of proteins using Mascot

Molecular Platforms – qPCR & dPCR



qPCR



dPCR



Molecular Platforms – qPCR & dPCR



Services Offered:

- Genotyping/Allelic Discrimination
- Genetically Modified Organism (GMO) Detection
- Gene Expression Analysis
- Molecular Oncology (Detection of hotspot and fusion mutations)
- Pathogen detection
- Liquid biopsy
- Copy number variation (CNV)
- Rare sequence detection
- Rare mutation detection
- Gene expression and miRNA analysis

Molecular Platforms – Bioplex 200





Molecular Platforms - Microarray

Dual Colour Laser : Green ; Red

Compatible Dyes : Cyanine 3 and Cyanine 5
Alexa 647, 555, and 660



Services Offered :

- DNA Microarrays
- CGH & CGH+SNP Microarrays
- CNV Microarrays
- DNA Methylation Microarrays
- Chip-on-chip Microarrays
- Exon Microarrays
- RNA Microarrays
- miRNA Microarrays
- Custom Microarrays

Bio-Imaging Facility

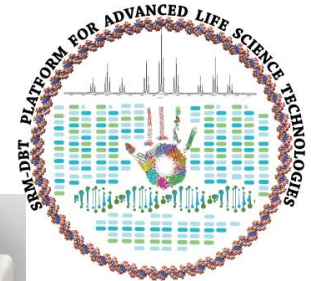


Fluorescent Microscope and Cryostat

Services Offered:

- Slide preparation
- Slide staining
- Localization experiments
- Immunohistochemistry
- Immunocytochemistry
- Analysis

Other Equipments



Bio - Analyzer



Focused Ultrasonicator



Fluorescence Spectrophotometer



UV-Vis Spectrophotometer

'Specific Pathogen Free' Animal Facility



- Established in collaboration with Department of Biotechnology, Govt. of India
- Facility is spread around 2500 sq. ft., designed and built in accordance with CPCSEA specifications
- Class 100000 clean room facility with HVAC with 20 – 30 air changes per hour
- Separate AHUs for animal rooms to avoid cross contamination
- Individually Ventilated Cage (IVC) system with HEPA filter
- Three level pressure gradient system
- All the animal rooms are provided with biosafety cabinets and dynamic pass boxes to avoid contamination
- Rodent isoflurane anaesthesia system
- Perkin Elmer In vivo imaging system