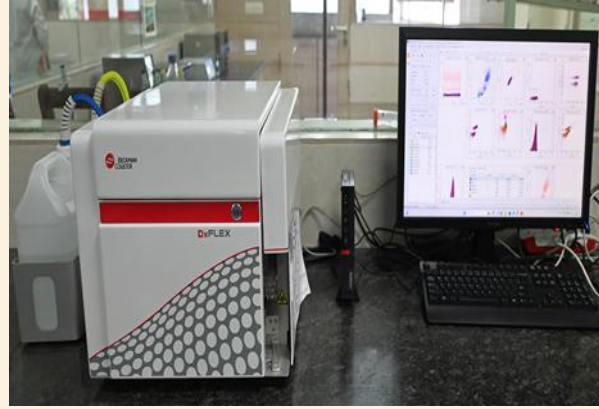


Cell Biology Laboratory

The Cell Biology Laboratory is designed for advanced *in vitro* research using mammalian cell culture models. The laboratory supports studies related to cancer biology, regenerative medicine, biomaterials, immunology, and drug screening.

Techniques Available-

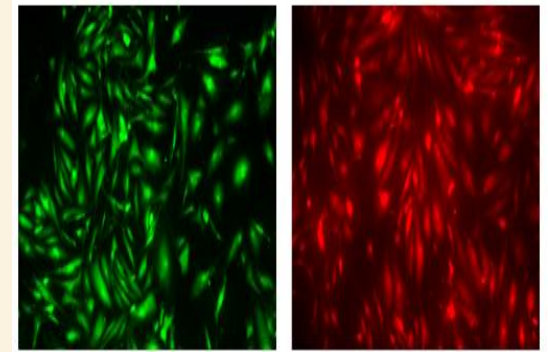
- ✦ Cell biocompatibility
- ✦ Immunophenotyping
- ✦ Cell proliferation
- ✦ Apoptosis
- ✦ Cell cycle analysis
- ✦ Wound healing assay
- ✦ Cytotoxicity studies
- ✦ Availability of 38 different cell lines



Six colour Flow-cytometer



Inverted Microscope



Mammalian Cell lines



Cell Culture Laboratory



The laboratory



HPLC (High-Performance Liquid Chromatography)

Drug Discovery Laboratory

Overview

The laboratory supports pharmaceutical research through advanced analytical techniques used for formulation development and drug delivery systems, herbal drug standardization, Phytochemicals and nanotechnology.

Technologies Available

- ✚ Nanotechnology
- ✚ Herbal extraction
- ✚ Herbal fingerprinting
- ✚ Drug release studies
- ✚ Pharmaceutical analysis
- ✚ Quality assurance
- ✚ Stability studies

AAS (Atomic Absorption Spectroscopy)



Dissolution Apparatus



HPTLC (High-Performance Thin-Layer Chromatography)



Microbiology Laboratory

Overview

Centre provides advanced facilities for the isolation, cultivation, identification, and characterization of microorganisms from clinical, environmental, food, and pharmaceutical samples. The laboratory supports research in antimicrobial resistance (AMR), antimicrobial susceptibility testing microbial screening.

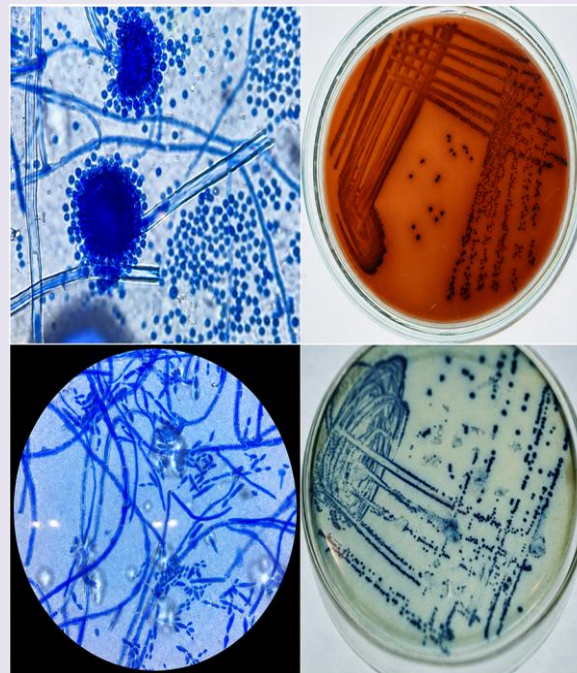
Research Focus

- ✦ Antimicrobial resistance
- ✦ Minimum Inhibitory concentration
- ✦ Minimum Bactericidal Concentration
- ✦ Clinical microbiology
- ✦ Environmental microbiology
- ✦ Anaerobic culture facility
- ✦ Mycology
- ✦ Availability of Different Bacterial & fungal Strains (20)

Microscope



Anaerobic & Fungal cultures



Digital Colony Counter



Anaerobic Culture Facility



Laboratory Overview



Molecular biology Laboratory

The research focus of the laboratory is genetic risk assessment, diagnostics and monitoring of Cancers; Epigenetic regulation of genes, disease associated genetic polymorphism; biomarker assessment and application of exosomes in diagnosis and treatment of diseases.

Technologies Available

- ✚ Gene expression
- ✚ RT-PCR
- ✚ RFLP
- ✚ ELISA
- ✚ Epigenetics
- ✚ miRNA analysis
- ✚ Exosome research
- ✚ Ct-DNA & biomarkers
- ✚ Comet assay

RT-PCR



Gel-Doc System



ELISA Reader & Washer



High-speed Cool Centrifuge



Molecular Biology Facility

