Central Instrumentation Facility (CIF), at University of Delhi South Campus is a state of the art laboratory facility set up to meet the growing demands of various research departments and broader scientific community

The facility provides high quality service, innovative solutions and cutting-edge technologies in the areas of:



# **GENOMICS**

**Genetic Analyzer:** Applied Biosystems 3730 (48 capillaries) and 3130XL (16 capillaries), offers high throughput and superior quality data.

**Real-Time PCR:** Applied Biosystems 7900HT, is acknowledged as the gold standard in realtime PCR technology. Helps reduce run time, measures gene expression level, performs SNP genotyping, increases lab throughput and flexibility.

# **PROTEOMICS**

**Exactive Series Mass Spectrometers (LC-MS):** The Exactive Plus, an instrument with an API source with S-lens ion optics technology for LC-MS high-throughput applications. It offers an inject flatapole and octapole for ion transfer and collision cell for all-ion-fragmentation. The Exactive Plus is equipped with Orbitrap mass analyzer.

**AB SCIEX 4800 Plus TOF/TOF and LC MALDI:** The next generation time-of-flight MS/MS system, providing highest level of protein coverage, throughput and confidence in quantitative proteomic analysis.

**ACQUITY UPLC (Ultra High Performance Liquid Chromatography):** Offers higher efficiencies with wide range of linear velocities, flow rates and backpressures. Includes Acquity UPLC micro columns, VanGuard pre-column and BEH columns.



**CD Spectrophotometer:** Offers a true 'chiro-optical spectroscopy workbench' enabling highest signal-to-noise ratio. User friendly and innovative Spectra Manager software processes data effortlessly.



## **IMAGING**

**CONFOCAL MICROSCOPY:** Leica TCS SP5 (AOBS- Acousto Optical Beam Splitter based) allows examination of specimens with clarity and resolution that far exceeds conventional epifluorescence microscopy.

**LASER DISSECTION MICROSCOPY:** It is a technology of dissection on a microscopic scale with the help of a laser. Zeiss AXIO OBSERVER with PALM laser beam attachment is a fully automated system which can harvest the cells of interest by cutting them from microscopic regions of tissue.

## MICROBIAL IDENTIFICATION

**Biolog System:** Omnilog and Microlog identifies over 1900 species of microorganisms .it utilizes the new GENIII redox chemistry for wide rage of gram+ve and gram –ve bacteria.

## **CELL BIOLOGY**

**Fluorescence Activated Cell Sorter:** BD FACS Calibur system combines unique dual-laser technology and powerful software to provide the high throughput for a wide range of clinical and research applications.



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