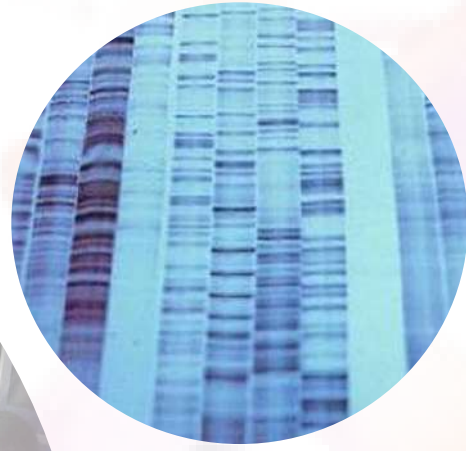




CLINBIOCARE TECHNOLOGY

YOU HAVE AN IDEA; WE HAVE A STRATEGY

“One Stop Solution for All Your Biotechnology Needs !!!”



Proteomics



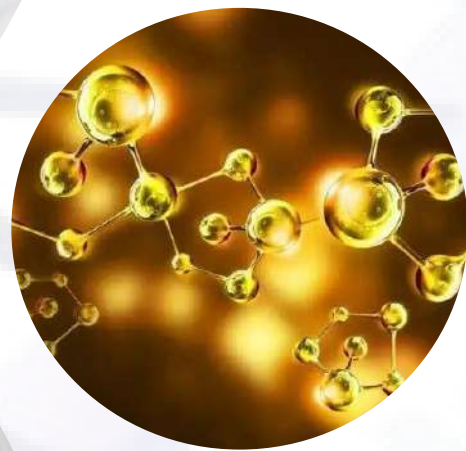
Genomics



Cell Culture



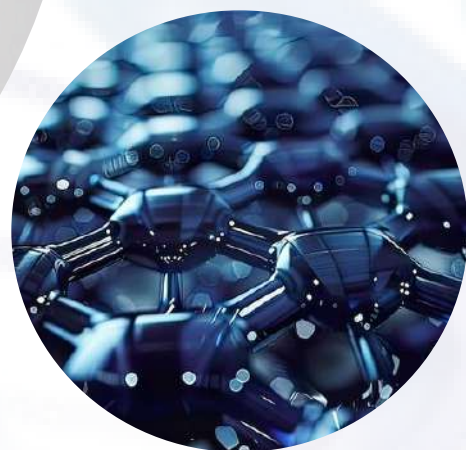
Microbiology



Phytochemistry



Bioinformatics



Nanotechnology

+91 98848 75192

info@clinbiocaretechnology.com

www.clinbiocaretechnology.com

“Learning gives creativity, Creativity leads to thinking, Thinking provides knowledge, Knowledge makes you great.”

Dr. APJ. Abdul Kalam



**Dr. Ananthi Sivagnanam,
Founder and CEO**



**Dr. T. Balasankar,
Managing Director**

- **Dr. Ananthi Sivagnanam** graduated in Microbiology and received her PhD in the field of Biomedical Sciences from Madurai Kamaraj University under the mentorship of Prof. K. Dharmalingam.
- In recognition of her excellence, she was selected for the prestigious Postdoctoral Fellowship award from IITM and performed Cancer Biology and Cancer Biomarker Studies under the mentorship of Prof. S. Mahalingam.
- Further to her credit, she was awarded the distinguished DBT BioCARE R&D grant for Oral Cancer Biomarker Discovery and Validation. As another career milestone, she served as a faculty member at the premier Adyar Cancer Institute, Chennai (CIWIA).
- **Dr. T. Balasankar** graduated in Microbiology & did his PhD in Plant Proteomics at M. S. University.
- He worked closely with distinguished Biopharma, Pharma & CRO's throughout INDIA.
- He represented Bruker Daltonics, GE Healthcare & Beckman Coulter in various International Conferences and Meetings.
- After 20 years of commendable experience in the field of Biotechnology and Biomedical Sciences, the aspiring couple have stepped into providing valuable research & services in biotechnology-related domains. Not only research and service, they also provide intellectual training programs for the Biotech students, which will help in their Career Progress.

Choosing a promising research partner & service provider in the Biotechnology field is becoming a Herculean task nowadays.

MISSION

- To assist the scientific community in addressing their Multiomics analysis needs.
- To optimize and implement advanced Omics experimental and Computational techniques to support basic and Clinical research needs.
- To collaborate with Scientists and Researchers on projects of exceptional merit.

VISION

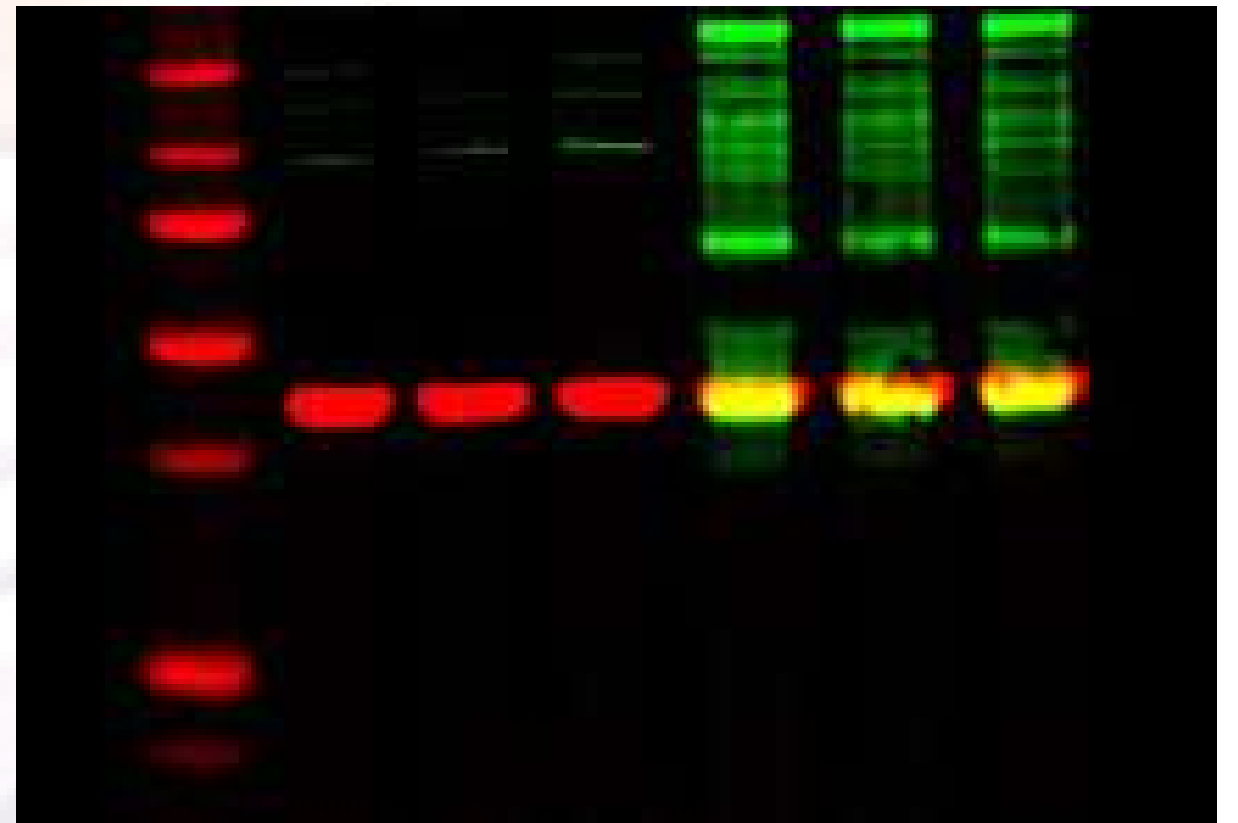
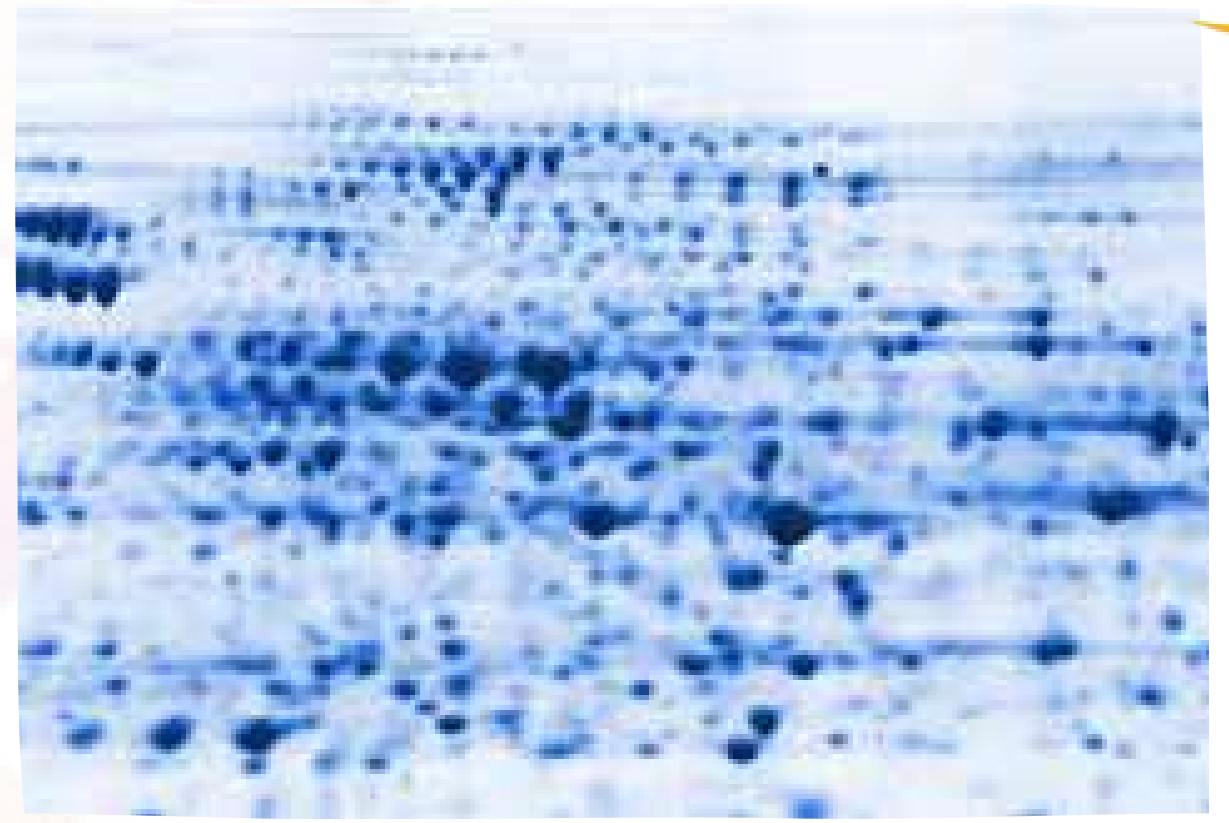
- To apply our Scientific strategy and methodology with a strong focus on cultivating research needs and applications.
- We're committed to educating Students and Researchers in the field of Proteomics, Genomics, Cancer Biology, Microbiology, Plant Biotechnology, Nanotechnology and other various analysis platforms. We give our support from the initial experimental design to the publication process.
- To provide advanced platforms to Rural students and enable them to get complete exposure to the Current trends in the Biotechnology field.

“We are not just service provider rather your supporting hands to overcome all your hurdles in scientific experiments and troubleshooting”



PROTEOMICS

- ◆ Protein Extraction & Estimation
 - Wide range of Clinical Samples
 - Microbial & Insect Samples
 - Plant & Animal Samples
 - Environmental & Aquatic Samples
- ◆ SDS PAGE Analysis
- ◆ 2-Dimensional Gel Electrophoresis
- ◆ Quantitative 2D-DIGE analysis
- ◆ Gel Staining
 - CBB & Silver
 - Cy2, Cy3, Cy5 & Sypro RUBY
 - PTM staining
- ◆ ProQ Emerald, ProQ Diamond
- ◆ Image Analysis with Statistical Significance
- ◆ In-Gel Trypsin Digestion
- ◆ Peptide Elution
- ◆ Tandem Mass Spec Analysis
- ◆ Validation Analysis
 - ELISA-Based Analysis
 - Western Blot (Multiplex)



MICROBIOLOGY

- ◆ Microbial Isolation & Characterization from Various Sources
 - Bacteria, Actinomycetes
 - Fungi, Beneficial Microbes
- ◆ Antimicrobial Assays
 - Well Diffusion Method
 - MIC & MBC
- ◆ Bacterial Consortium Studies
- ◆ Probiotic Research studies
- ◆ Microbes in Agriculture
- ◆ Environment and Bioremediation
- ◆ Microbial Resistance Gene Analysis
- ◆ Microbial Proteomics & Genomics

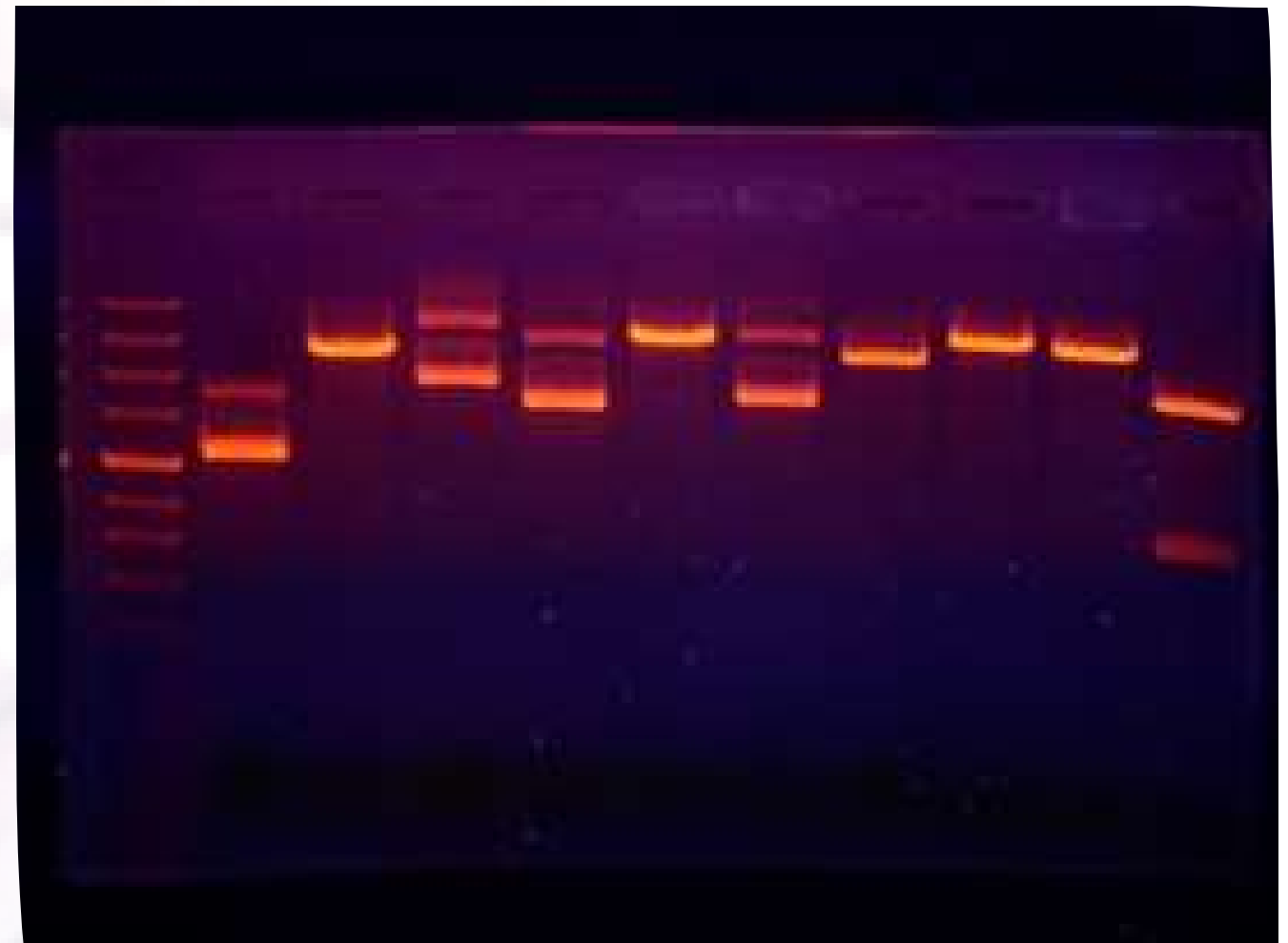
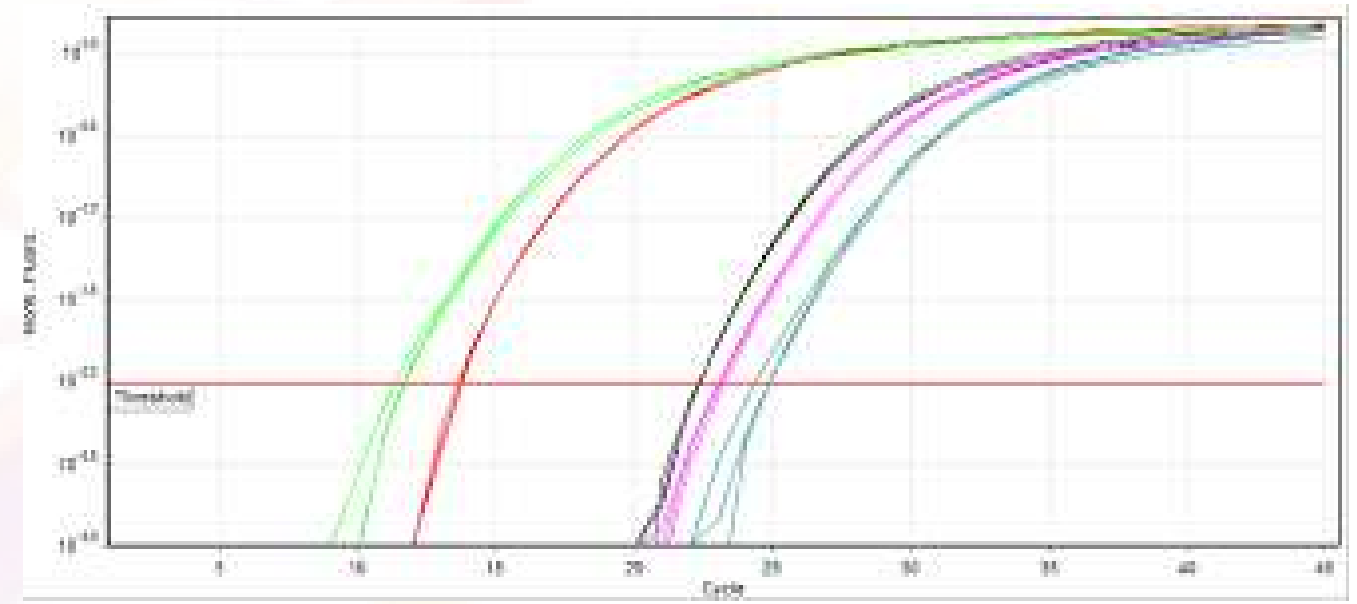


“Our service includes a thorough discussion & counseling of your projects, to offer you the optimal service for your needs.”



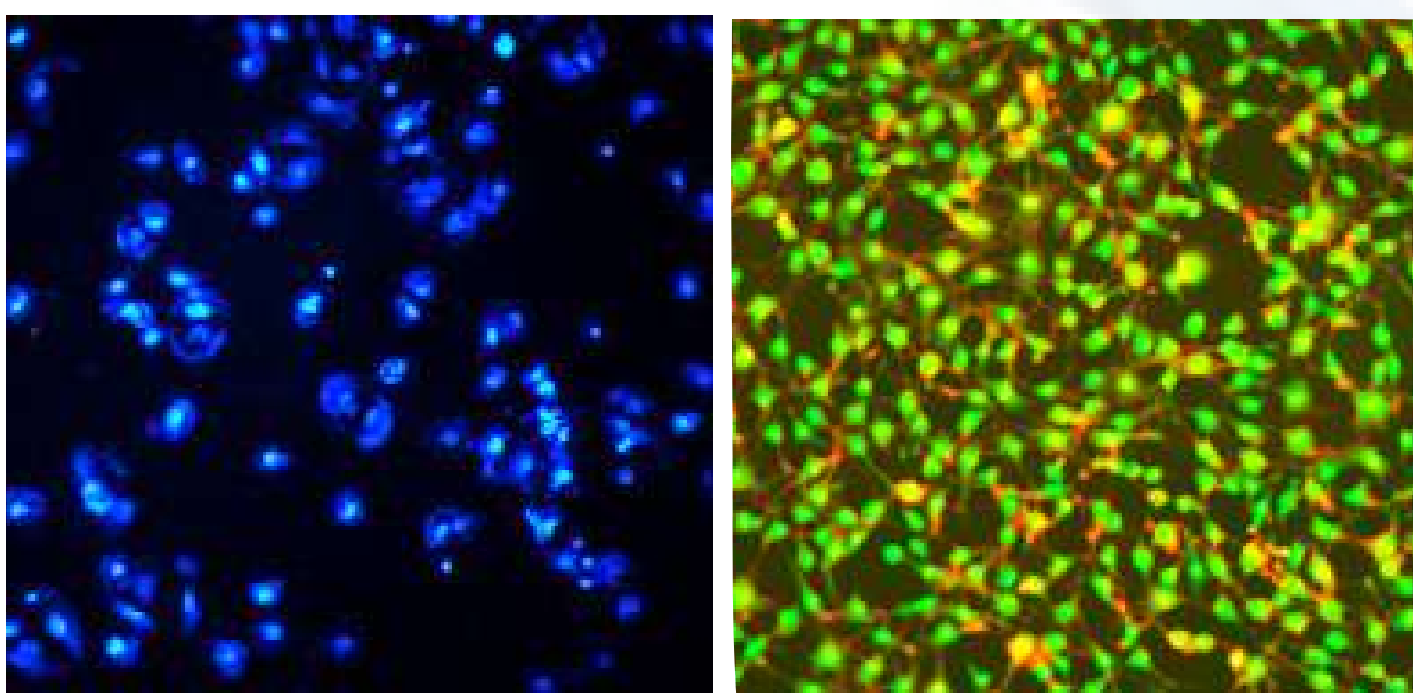
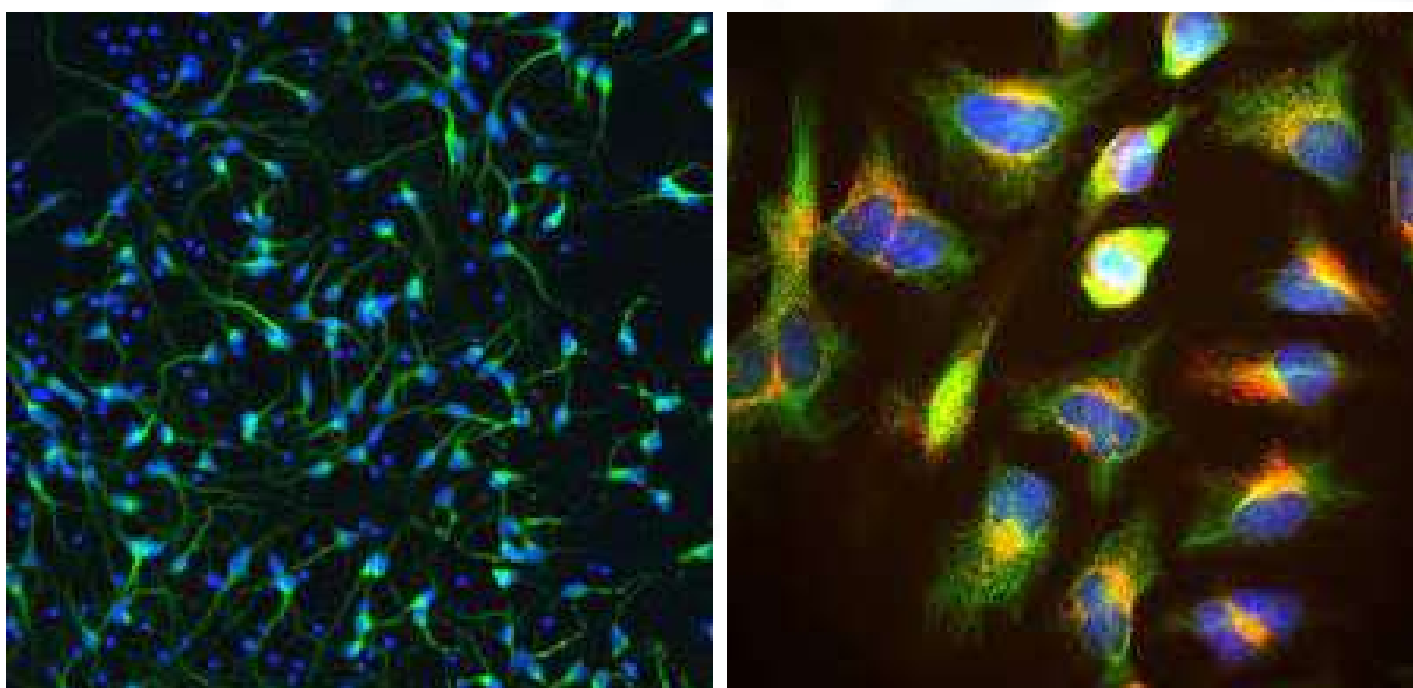
GENOMICS

- ◆ DNA/RNA Extraction
 - Body Fluids/Tissues
 - Plant & Animal Samples
- ◆ 16s and 18s rRNA Sequencing
- ◆ Mutational Analysis
- ◆ PCR-Based Analysis
- ◆ Quantitative Real-Time PCR
- ◆ Gene Expression Analysis
- ◆ Microbial Pathogenesis
- ◆ Microbial Virulent Gene Detection
- ◆ Single Nucleotide Polymorphism Detection
- ◆ Viral Load Quantitative Analysis
- ◆ Cancer Marker Panel Analysis
- ◆ miRNA/mRNA Profiling
- ◆ qRT-PCR Based Validation Analysis
- ◆ Agarose Gel Electrophoresis



CELL-BASED ASSAYS

- ◆ Cytotoxicity Assay (MTT)
- ◆ Cell Morphological Analysis
 - Trypan Blue Staining
 - Giemsa Staining
 - Crystal Violet Staining
- ◆ Fluorescent Staining Assays
 - Apoptosis — AO/EtBr
 - Nuclear Staining-DAPI
 - Mitochondrial Membrane Potential Assay (MMP)
 - ROS Generation Assay
- ◆ DNA Fragmentation Assay
- ◆ Scratch Assay (Cell Migration Assay)



RESEARCH DOMAINS @ CBT

Cancer Biology

- Therapeutic Potential of Plant Bioactive Compounds
- *In vitro* Cell-Based Assays
- Cancer Tissue Protein Profiling-“Novel Markers”
- Cancer Biomarker Discovery & Validation

Human Diseases

- Serum/Plasma/Body Fluid/Tissue-Molecular Markers
- Exome Sequencing & mRNA/miRNA Profiling
- Host - Pathogen Interaction Studies
- Signaling Pathways & Disease Progression

Microbiology

- Microbial Identification (16s rRNA Sequencing)
- Bacterial & Fungal Protein Profiling
- Probiotics & Its Significance
- Gene Studies on Virulence & Resistance

Immunology

- Cytokine Profiling & Chemokine Profiling
- Infectious Disease Studies
- Disease Pathogenesis
- Immune Biomarker studies

Plant Bio-technology

- Plant Profiling
- Chloroplast, Leaves, Seeds, Flower, etc
- Molecular Markers in Plant Diseases
- Gene Expression Studies

Phyto-chemistry

- Plant Extraction
- Secondary Metabolites Screening
- Phytochemical Quantification
- Therapeutic Efficacy Analysis






Bio-informatics

- *In Silico* Drug Prediction
 - Molecular Docking, MD Simulation
- GO, KEGG (Pathway Analysis)
- Protein Interaction Prediction




Marine Biotechnology

- Proteomic Profiling
 - Bivalve muscle, Fish, Shrimp & Seaweed
 - Marine Bioactive Compounds & Efficacy
 - Therapeutic Potential
- 

Bio-remediation

- Isolation of Extremely Tolerant Species
- Identifying their Biological Importance
- Analyzing their Significance
- Industrial Applications


Nano Technology

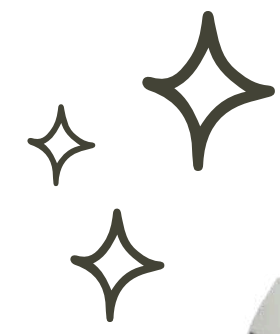
- Nanoparticles Synthesis & Characterization
 - UV-Vis, SEM-EDX, TEM, XRD, FTIR, DLS
 - Functional implications (*In vitro* & *In vivo*)
- 

Vermiculture

- Vermicompost & Plant Growth Analysis
- Microbiome of Earthworms
- Proteomic Profiling
 - Earthworm & Coelomic Fluid

Reproductive Biology

- Semen Proteomics
 - Egg Proteomics
 - Embryo Proteomics
 - Amniotic Tissue Proteomics
- 

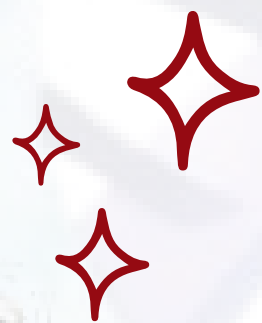
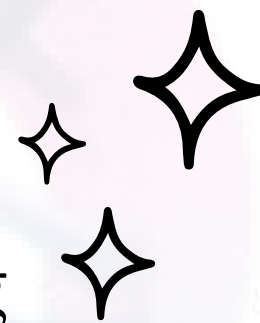


Chemidoc MP (Bio-Rad)

- Western Blotting - Quantitative Analysis of Protein Expression
- Multiplex Fluorescence Imaging
- Detection of Multiple Targets
- Protein-Ligand Interaction
- Colorimetric Gel Imaging
- Nucleic Acid Gel Imaging
- Nucleic Acid Quantification
- PCR Product Analysis
- Cell Imaging

Isoelectric Focusing Unit (GE Healthcare)

- Performs the initial Isoelectric Focusing step in 2D Gel Electrophoresis, separating proteins based on their Isoelectric points
- High-voltage systems (up to 10,000 V)



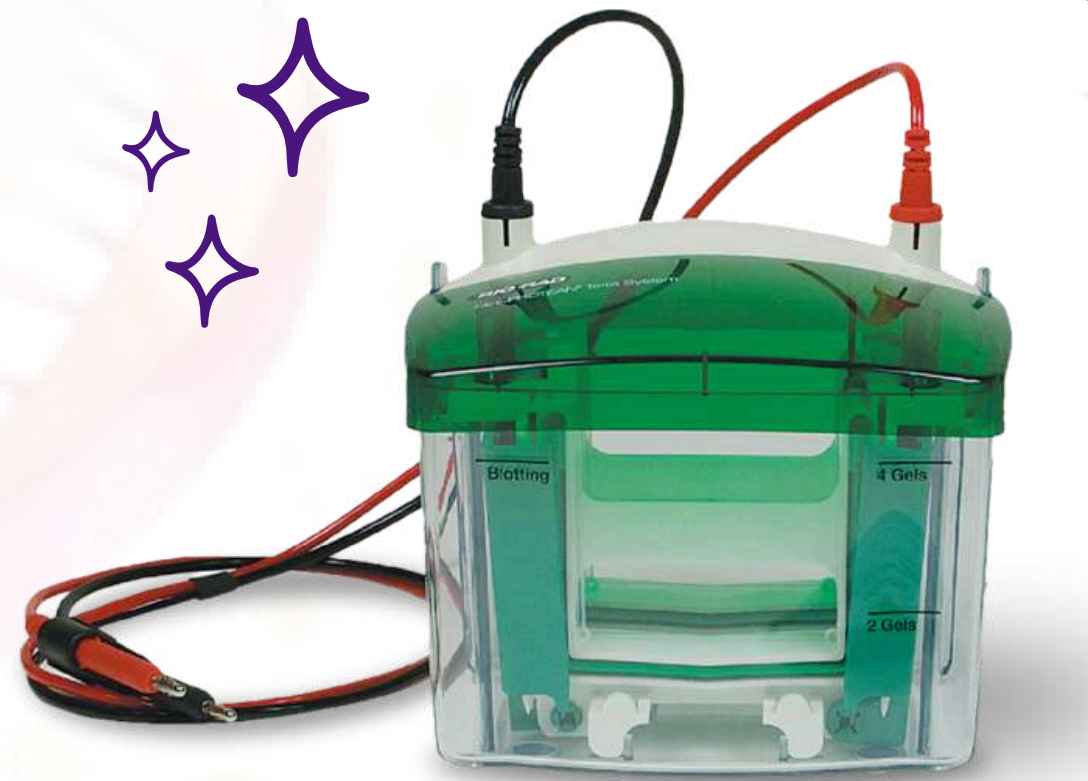
2D Gel Electrophoresis System (GE Healthcare)

- Differential Protein Expression Analysis
- Biomarker Discovery
- Post-Translation Modification analysis
- Comparative Gel Studies



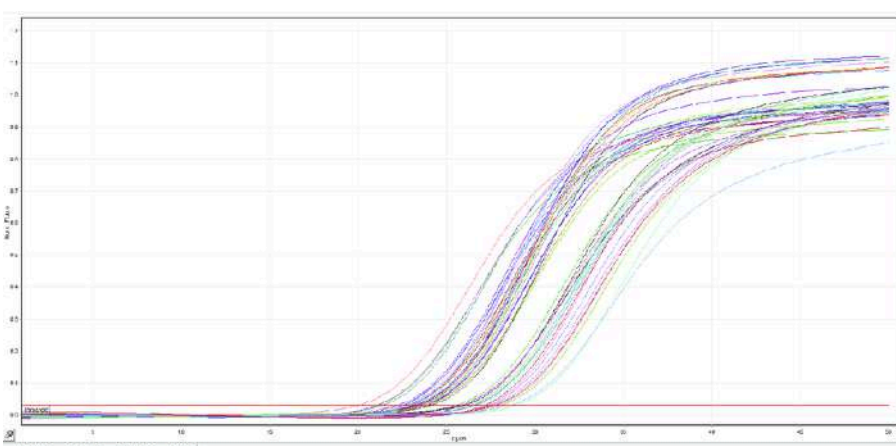
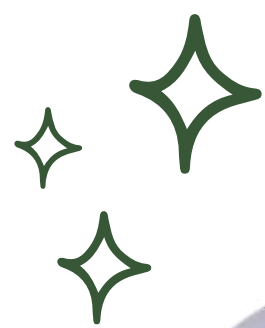
SDS PAGE Unit (Bio-Rad)

- Separating Total Protein Based on Molecular Weight
- Comparative Study
 - Diseased vs Healthy individual
 - Treated vs Untreated



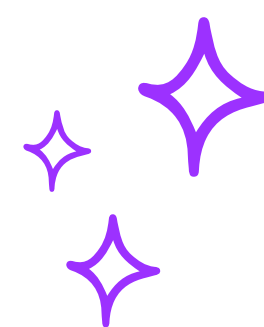
Rotor-Gene Q 5plex (HRM) Platform - RT-PCR (Qiagen)

- Gene Expression Analysis
- Pathogen Detection
- DNA Methylation Analysis
- Genotyping & Gene Scanning
- Viral Quantification
- mRNA & miRNA Expression Analysis
- Mutational Analysis
- SNP Detection (Single Nucleotide Polymorphism)



Thermal Cycler T100 Gradient PCR (Bio-Rad)

- Gene Amplification
- Cloning Gene of Interest
- Gradient PCR Optimization
- DNA Fingerprinting
- Pathogen Detection
- Genetically Modified Organism Detection
- Adulteration Detection



Refrigerated Max Speed centrifuge (Beckman Coulter)



- Fixed Angle & Swinging Bucket Rotors with Adaptors (50 ml, 15 ml, 1.5 ml, 2ml tubes & microtiter plates)
- DNA & RNA Precipitation
- Cell Pelleting
- Protein Purification
- Enzyme Separations
- Cells & Organelles Separation
- Plasma & Whole Blood Sample Processing

Milli-Q unit (Merck Millipore)

- Type - 1 Water
 - Ultrapure Water 18.2 MΩ-cm
- Type - 3 water
- Advanced Water Purification System
 - Molecular Biology
 - Analytical Works
 - Cell Culture
 - Proteomics
 - Reagent Preparation



CO₂ Incubator (Borg)

- Mammalian Cell Culture
 - Range of Cancer Cell Lines
- *In vitro* Cancer Studies

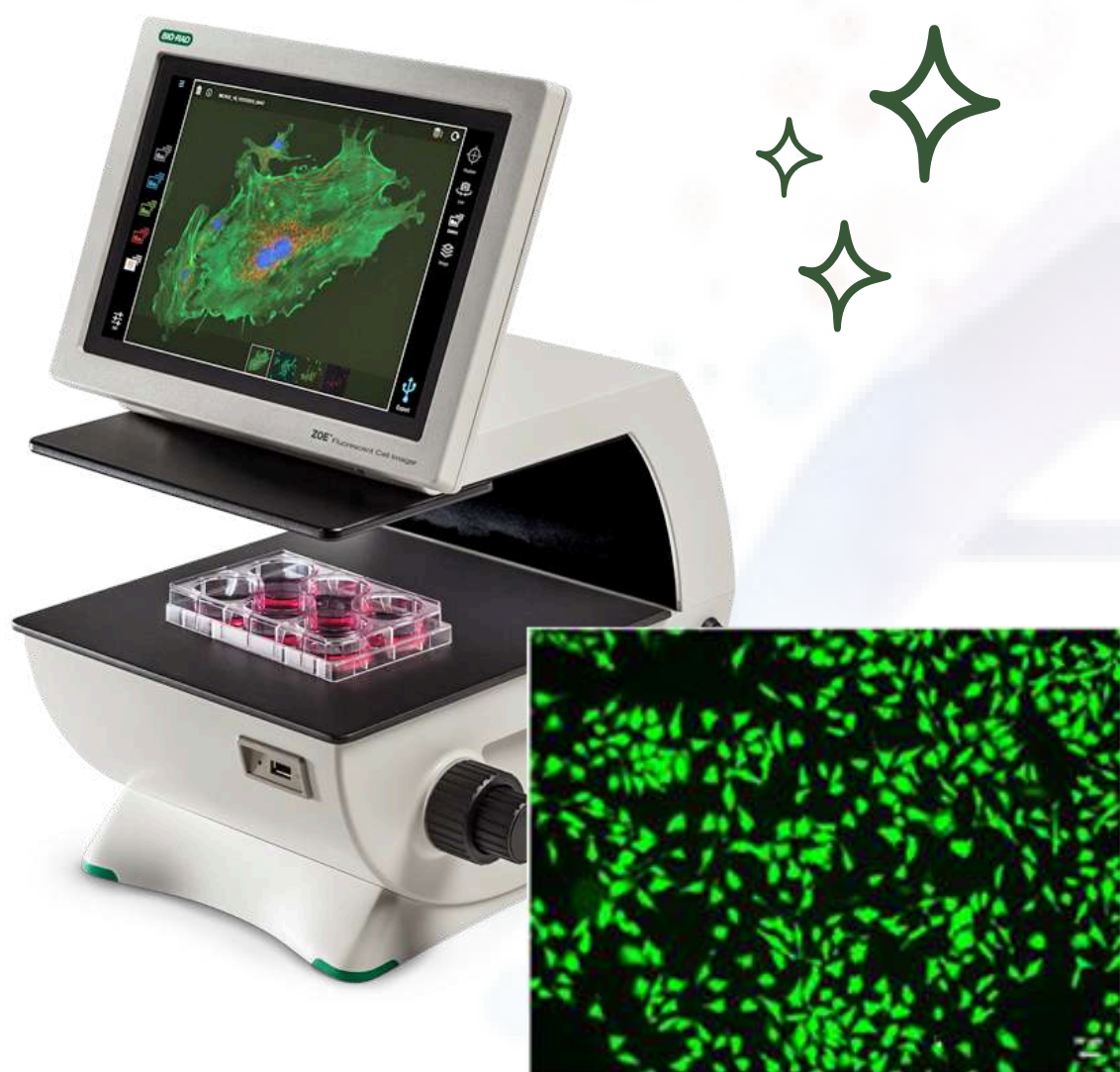
V-730 UV-Visible Spectrophotometer (Jasco)

- Pharmaceutical Analysis (Drug concentration)
- Nanoparticle Identification
- Environmental Testing
- Food & Beverage Quality Control
- DNA/RNA Quantification
- Protein Quantification
- Enzyme Kinetics Analysis
- Water Analysis
- Dye Degradation Analysis



Fluorescence Microscope (Bio-Rad)

- Cell visualization
 - Confluency, Proliferation Monitoring
- Cancer Research - Analyzing Tumor Cells and Treatment Responses
- Protein Colocalization in Cells
- Gene Expression Studies
- Transfection Screening
- FISH
- Immunocytochemistry
- *In Situ* Hybridization



ELISA Reader

- Colorimetric Assays
- Quantitative Protein Assay
- Antibody Titration
- Cytokine Profiling
- Cancer Biomarker Quantification
- Autoimmune Panel Screening





Shaking Incubator (Borg)

- Incubation of Microbes
- Small-scale Fermentation Studies for Biotechnology or Food Science.
- Shaking - To Provide Optimal Oxygenation

Inverted Trinocular Microscope

- Live Cell Observation
- Cell Viability Studies
- Cell Morphological Studies



Deep Freezer (-80) (Borg)

- Ultra-low Temperature Freezing
- Sterile, Secure Storage of Biological Samples
- Mammalian Cell Line Storage

Biosafety Cabinet BSL-2 B2

- Triple Protection: User, Product, & Environment
- Microbial Research
- Cell Culture Research



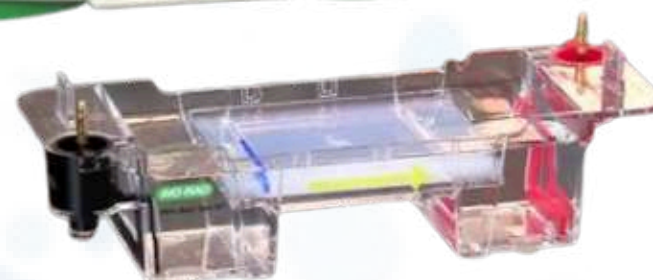
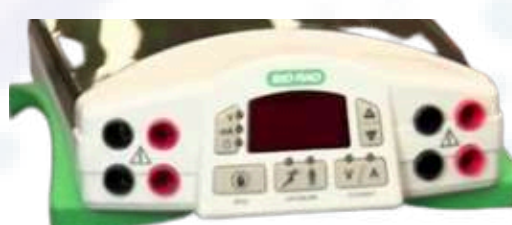


PRO656 - Probe Sonicator

- Disruption of Various Human, Animal & Plant Cell & Tissues
- Emulsification, Defoaming, Separation & Extraction
- Homogenization & Accelerating Chemical Reactions.

Other Facilities

- -20 Freezer (Celfrost)
- Microscope
- Water Bath
- pH Meter
- Non-Refrigerated Centrifuge
- Liquid Nitrogen Container
- Weighing Balance
- Magnetic Stirrer
- Heating Block
- Mini Spin
- Orbitol Vortex Shaker
- Image Scanner



**WHY
CBT**

- High quality data generation and analysis
- Cost effective with complete project support
- Centre for creating awareness and training for proteomics research
- Quick Turnaround
- Customized Experimental Design
- Excellent Technical Support

MENTORSHIP @ CBT



PhD Guidance



Hands-on Training



Workshops



Internships



Projects (mini/ major)



Scientific Writing

- **To connect the gap between academia and industry**
- **To improve the efficiency of the students in the current scientific world**
- **To educate them about the recent developments in the Biotech industry**
- **To break their inability into modern technology**

“Our training includes hands-on courses and brain storming sessions which eventually helps the students in getting deep understanding and thorough knowledge”



INTERNSHIP @ CBT



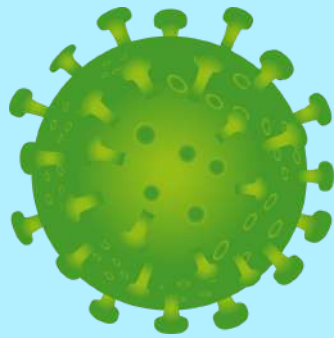
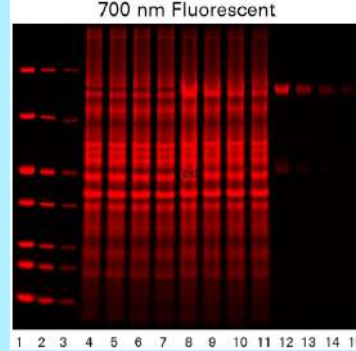

MICROBIOLOGY

- Basic Laboratory Techniques 
- Microbial Characterization
 - Clinical
 - Environmental
 - Food
- Unravelling the Potential of Probiotics 
- Medical Microbiology Studies 
- Bioremediation Studies 

GENOMICS

- PCR based studies 
- mRNA Gene Expression Analysis
- Cancer Genomics
- Clinical Genomics
- Transcriptional Genomics (RT-PCR)
- Microbial Gene Analysis 

PROTEOMICS

- Cancer Biomarker Discovery 
- Clinical Proteomics
- Gel Based Analysis 
- Microbial Proteomics
- Plant Proteomics
- Protein Profiling
- Protein Expression Analysis 
- Metaproteomics

INTERDISCIPLINARY

- Prediction to Validation
- Antigen-Antibody Interaction (ELISA)
- Molecular Docking to Antimicrobial Activity
- Phytocompound Extraction and Phytochemistry
- Proteogenomics Studies
- Nature's Cure- Phytochemistry & Antimicrobial Activity
- Molecular Biology Techniques
- Biomarker Validation Analysis using ELISA & qRT-PCR

Accommodation
and Food
Available upon
request

Our Promising Collaborators



**“One Stop solution for All Your
Biotechnology Needs !!!”**



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