

# Vision and Mission

In this workshop, students will be introduced to a comprehensive range of techniques, including:

- **ANALYTICAL METHODS**

Mastery of cutting edge analytical tools and methodologies

- **DATA INTERPRETATION**

Skills for effectively interpreting complex data sets

- **INNOVATIVE PROBLEM SOLVING**

Strategies for approaching and solving unique challenges

These techniques aim to equip students with the knowledge and skills necessary to excel in their respective fields.

## INAUGURAL ADDRESS

**PROF. M.KRISHNAN**

**HONOURABLE VICE  
CHANCELLOR**

## ORGANISING SECRETARY

**DR. JAYALAKSHMI KRISHNAN**

ASSISTANT PROFESSOR  
jayalakshmi@cutn.ac.in

## ORGANISING TEAM

**DR. S. VIDHUSHINI**

vidhushinisekar@gmail.com

**DR. M. PRADEEPA**

drpradeepabiotech@gmail.com

**Registration Link:**

**<https://forms.gle/FE9L1EtbhrB7WvCQ7>**



**CENTRAL UNIVERSITY OF TAMILNADU**

**SCHOOL OF INTEGRATIVE BIOLOGY**

**DEPARTMENT OF BIOTECHNOLOGY**

# One-Week Hands-on Workshop on Advanced Techniques in Biotechnology

**06/01/25**

**TO**

**11/01/25**

# Program Schedule

## PROF. S. KATHIRESAN

### PLANT GENOMICS AND METABOLIC REGULATION RESEARCH LAB

- Sensitivity test for plants against Kanamycin and Hygromycin
- Agrobacterium mediated transformation in plants using co-cultivation method
- Confirmation of genetic transformation

## DR. MEGANATHAN KANNAN

### BLOOD AND VASCULAR BIOLOGY RESEARCH LAB

- Platelet functional Analysis by Aggregometry
- Apoptotic analysis by Flow Cytometry
- Mutation screening by CSGE

## PROF. J. RAJESH BANU

### ENVIRONMENTAL BIOTECHNOLOGY AND BIOPROCESS RESEARCH LAB

- Green Synthesis of Nanoparticles and its characterization using FTIR
- VFA production by anaerobic fermentation and its Quantification using HPLC

## DR. JAYALAKSHMI KRISHNAN

### VECTOR BIOLOGY RESEARCH LAB

- Amplification of COI region from dengue vector using PCR
- Molecular investigation for the presence of virus in mosquitoes

## PROF. E. M. SHANKAR

### INFECTION AND INFLAMMATION RESEARCH LAB

- PBMCs (Peripheral Blood Mononuclear Cells) extractions for use in flow cytometry (FACS)
- Data Interpretation

## DR. RAJESH PARSANATHAN

### INTEGRATED BIOMED RESEARCH LAB

- Introduction to Network Pharmacology and its Applications
- Constructing Drug-Disease Interaction Networks
- Gene - Protein Interaction Mapping for Drug Target Identifications
- Pathway Enrichment Analysis in Network Pharmacology

## Eligibility

Final year Master students of Life Sciences and allied fields.

## Venue

HGK Block, Department of Biotechnology, Central University of Tamil Nadu, Thiruvarur 610 005

**DEADLINE: DECEMBER 20, 2024**

**\*REGISTRATION FEE: NIL**

**\*ACCOMMODATION AND FOOD WILL BE AVAILABLE WITH SEPARATE CHARGES**

Experiment,  
Innovate,  
Succeed:  
Biotechnology  
Bootcamp