



# MEENAKSHI

ACADEMY OF HIGHER EDUCATION & RESEARCH  
(DEEMED TO BE UNIVERSITY U/S 3 OF UGC ACT 1956)



MAHER

Advanced Research Centre for Health Sciences (MARCH)

## INTERNSHIP & PROJECT OPPORTUNITIES 2025-26

### BASIC DETAILS:

Duration	Cost	Training Details
1 Week	₹ 5,000/-	Any 1 Module
2 Weeks	₹ 10,000/-	Any 2 Modules
1 Month	₹ 15,000/-	Any 3 Modules

\* UG & PG Projects are also undertaken.

**For Details Contact : [crlmaher@maher.ac.in](mailto:crlmaher@maher.ac.in)**

### MODULES:

MAHER offers hands-on training for the internship students in the following techniques.

#### MODULE 1 : CELL CULTURE TECHNIQUES

Overview of Cell Culture Techniques, Biosafety precautions in Cell Culture Techniques, Cell Culture Maintenance without Contamination, Cryopreservation, Cell Revival, Cell Passaging, Cell Counting, MTT Cell Viability Assay, Fluorescent Imaging of Live/ Dead Cells, Pitfalls and Troubleshooting

#### MODULE 2 : MOLECULAR BIOLOGY

##### Polymerase Chain Reaction (PCR)

DNA Isolation, Primer Designing, DNA Quantitation, Gene Amplification, AGE, Imaging, Pitfalls and Troubleshooting

#### MODULE 3 : WESTERN BLOT AND ELISA

##### Western Blot Technique

Protein Isolation, Quantification, SDS-PAGE, Transblot, Western Blotting, Imaging, Data Analysis and Troubleshooting

##### ELISA

Direct ELISA , Indirect ELISA , Sandwich ELISA

#### MODULE 4 : IMMUNOFLUORESCENCE & IMMUNOHISTOCHEMISTRY

##### Immunofluorescence

Cell Fixation, Permeabilization, Blocking, Antibody Incubation & Vectashield Mounting; Fluorescent Imaging and Analysis

##### Immunohistochemistry

Deparaffinisation, Peroxide Blocking, Antigen Retrieval, Antibody Incubation, DAB Staining and Hematoxylin Counterstaining, DPX Mounting, Imaging, Analysis and Troubleshooting



No. 12, Vembuliamman Koil Street, West K.K. Nagar, Chennai - 600 078.

Phone: 044 - 23643955 / 56 / [www.maher.ac.in](http://www.maher.ac.in)

## MODULE 5 : ADVANCED MICROBIAL TECHNIQUES

Media Preparation & Sterilization, Serial Dilution & Spread Plate Method (Spreading), Streak Plate Method (Streaking), Biofilm Formation, Gram's staining, Growth Kinetics of Microbes, Antibiotic Sensitivity Test, Anti-Fungal Test, Minimum Inhibitory Concentration (MIC), Minimum Bactericidal Concentration (MBC), Minimum Fungicidal Test (MFC), Microbial Quality Analysis of Food and Water & Phytochemical Analysis (Qualitative and Quantitative) and Antioxidant Activities, Food Safety and Microbial Analysis.

## MODULE 6 : NANOENGINEERED THERAPEUTICS AND PRODUCT DEVELOPMENT

Green Synthesis of Metal and Metal Oxide Nanoparticles (Silver, Gold, Copper, Zinc, Selenium, Strontium etc.), Synthesis of Nanocomposites, Preparation of Herbal Formulation, Preparation of Nanohydrogels.

## MODULE 7 : NANOTHERAPEUTICS - IN VITRO STUDIES

Antimicrobial Activity - Agar Well Diffusion Technique, Antioxidant Activity - (DPPH Assay, H<sub>2</sub>O<sub>2</sub> Assay), Anti-inflammatory Activity - (Bovine Serum Albumin Denaturation Assay, Egg Albumin Denaturation Assay), Cytotoxic Effect - Brine Shrimp Lethality Assay (In Vivo Study)

## MODULE 8 : REAL - TIME PCR TECHNIQUE

RNA Isolation, cDNA Synthesis, Real Time PCR and Data Analysis

## PROJECT MODULES

Project Module 1: Cell line Based Studies

Project Module 2: Nanotechnology & Product Development - Synthesis, Characterization and Evaluation

Project Module 3: Microbial Studies

Project Module 4: Molecular Studies

Project Module 5: Pharmaceutical Studies

**\*CUSTOMIZED PROJECTS WILL ALSO BE CARRIED OUT\***

**\*COSTS BASED ON NATURE OF PROJECT AND DURATION\***

### PAYMENT DETAILS:

Payment shall be made via NEFT/IMPS transfer and the bank details for transaction are given below:

A/C NAME : MAHER – RESEARCH AND DEVELOPMENT

A/C TYPE : C.A A/C: 6371127986

IFSC CODE : IDIB000N122

BANK NAME AND ADDRESS : INDIAN BANK, NESAPAKKAM BRANCH, WEST K.K.NAGAR, CHENNAI – 600078.

SCAN TO PAY



### CONTACT DETAILS:

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