

### **Medical Biotechnology Training Program**

This program is designed for students and professionals seeking a foundational understanding of medical biotechnology, including hands-on training in molecular diagnostics, vaccine development, and therapeutic research.

Note: Below modules are designed keeping high end industrial professionals into consideration. Please refer individual protocols below for affordable prices.

**For Researcher Candidates** 

# Kindly review the fees outlined for the individual protocols listed in this module.

- Fee: 49000/-, Duration: 30 to 45 Days
- Basic techniques in pipetting and measurement
- Preparation of standard solutions and buffers
- DNA extraction from human blood
- DNA extraction from bacteria
- Plasmid DNA Extraction
- RNA extraction from tissue
- Protein extraction and quantification
- Spectrophotometric measurement of nucleic acids
- Designing primers for PCR
- Setting up a basic PCR reaction
- Normal PCR
- Reverse Transcriptase PCR
- Agarose gel Electrophoresis
- Extraction of DNA from Agarose Gels
- Screening and Isolation of Multidrug Resistant (MDR) Strains from wound infections
- Basic light microscopy handling and imaging
- Identification of isolated MDR strains

#### For Diagnostics Candidates

# Kindly review the fees outlined for the individual protocols listed in this module.

- Fee: 95000/-, Duration: 30 to 45 Days
- Preparation of clinical samples for analysis
- Handling and storing diagnostic reagents
- Setting up ELISA plate assays
- Conducting a rapid antigen test
- Calibrating and using a glucometer
- Basic staining techniques (e.g., Gram staining)
- Preparation and handling of diagnostic slides
- Blood sample collection and storage protocols
- Setting up immunoassay workflows
- Preparation of reagents for lateral flow assays
- Microscopic identification of pathogens
- Setting up qPCR reactions for diagnostics
- Basic protocols for flow cytometry sample preparation
- Loading and analyzing clinical samples on a microarray
- Maintenance of diagnostic lab equipment

#### **For Therapeutics Sector**

# Kindly review the fees outlined for the individual protocols listed in this module.

- Fee: 175000/-, Duration: 30 to 45 Days
- Preparation of sterile drug formulations
- Handling and administration of monoclonal antibodies
- Basic cell transfection protocols
- Preparation and sterilization of scaffolds for regenerative medicine
- Maintenance of viral vector stocks
- Setup and operation of bioreactors for cell therapy
- Preparation of lipid nanoparticles for mRNA delivery
- Handling and culturing of CAR-T cells
- Conducting a cytotoxicity assay
- In vitro drug efficacy testing protocols
- Collection and freezing of patient-derived cells
- Preparation of RNA for vaccine development
- Basic safety protocols for handling biologics
- Labeling and tracking of therapeutic samples
- Protocols for quality control of biologics

#### **For Healthcare Providers**

### Kindly review the fees outlined for the individual protocols listed in this module.

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- Fee: 175000/-, Duration: 30 to 45 Days
- Basic protocols for sample collection
- Preparation and administration of injectable drugs
- Using and calibrating diagnostic devices
- Sterile techniques for wound dressing
- Basic ECG monitoring setup
- Blood pressure measurement techniques
- Operation of basic lab instruments (e.g., centrifuge)
- Preparation of sterile surgical kits
- Handling of biohazard materials
- Basic aseptic techniques in clinical settings
- Patient data entry and management in EMR systems
- Vaccination protocols for healthcare workers
- Emergency sample transport protocols
- Collection and handling of nasopharyngeal swabs
- Maintaining sterile environments in healthcare facilities

#### **For Industry Professionals**

### Kindly review the fees outlined for the individual protocols listed in this module.

- Fee: 125000/-, Duration: 30 to 45 Days
- Preparation of batch records for biologics
- Cleaning and maintenance of GMP equipment
- Calibration of analytical instruments
- Standard operating procedures for quality control labs
- Basic bioprocess scaling up methods
- Preparation of sterile samples for QC
- Labeling and packaging protocols for medical products
- Sampling methods for raw materials
- Basic documentation for regulatory submissions
- Setup of stability studies for biotech products
- Handling sterile fermentation units
- Preparation and autoclaving of fermentation media
- Basic sterilization protocols for industrial labs
- Standard methods for contamination checks
- Tracking and storage of GMP materials

#### **For Academic Candidates**

### Kindly review the fees outlined for the individual protocols listed in this module.

- Fee: 25000/-, Duration: 30 to 45 Days
- Preparation of teaching materials for lab classes
- Basic lab safety protocols
- Handling and disposal of lab waste
- Preparation of chemical solutions for student experiments
- Calibration and use of pipettes
- Setting up simple DNA extraction experiments
- Preparation and visualization of gel electrophoresis
- Setting up basic microscopy training sessions
- Conducting simple bacterial culture experiments
- Preparation of agar plates for culturing
- Writing lab reports and analyzing data
- Introduction to molecular modeling tools
- Basic introduction to bioinformatics workflows
- Preparation of reagents for protein assays
- Facilitating workshops on data analysis software

#### For Policy and Regulation Professionals

Kindly review the fees outlined for the individual protocols listed in this module.

- Preparation of risk assessment forms
- Basic biosafety protocols in labs
- Conducting audits for regulatory compliance
- Designing forms for clinical trial data
- Standard methods for document validation
- Drafting protocols for ethical committees
- Regulatory submission requirements overview
- Preparation of biosafety reports
- Management of patient consent forms
- Tracking compliance using digital tools
- Training on Good Laboratory Practices (GLP)
- Maintaining records for inspection audits
- Development of workflow charts for approval
- Basics of patent application drafting

### Individual Protocols Under Medical Biotechnology Training Program

- 1. Overview of medical biotechnology and its applications | Fee: Contact for fee
- 2. Role of biotechnology in diagnostics and therapeutics | Fee: Contact for fee
- 3. Basics of molecular biology techniques in medical research | Fee: Contact for fee

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- 4. Applications of recombinant DNA technology in medicine | Fee: Contact for fee
- 5. Ethical considerations in medical biotechnology research | Fee: Contact for fee
- 6. Introduction to PCR-based diagnostics | Fee: Contact for fee
- 7. ELISA for disease detection and quantification | Fee: Contact for fee
- 8. Basic concepts of CRISPR for medical diagnostics | Fee: Contact for fee
- 9. RNA-based diagnostic approaches for infectious diseases | Fee: Contact for fee
- 10. Techniques for studying genetic mutations linked to diseases | Fee: Contact for fee
- 11. Understanding monoclonal antibody production | Fee: Contact for fee
- 12. Basics of vaccine development and production workflows | Fee: Contact for fee
- 13. Studying microbial pathogens for therapeutic targets | Fee: Contact for fee
- 14. Role of biopharmaceuticals in treating chronic diseases | Fee: Contact for fee
- 15. Gene therapy basics: potential and challenges | Fee: Contact for fee

### Please contact on +91-8977624748 for more details

Cant Come to Hyderabad? No Problem, You can do it in Virtual / Online Mode