

## Biotechnology Training Program

This Biotechnology Training Program offers a comprehensive introduction to key biotechnology concepts and hands-on experience in laboratory techniques. The program is designed to help participants understand the principles of biotechnology and its real-world applications.

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

### 10 Days

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

- DNA Extraction from blood
- Basic PCR Setup, Optimization and Troubleshooting
- PCR
- Amylase or Protease Enzyme Activity Assay
- Bacterial Screening, Isolation and Cultivation
- Agarose Gel Electrophoresis

### 20 Days

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

- Advanced PCR Techniques (Multiplex and Nested PCR)
- Restriction Digestion
- DNA Ligation
- Protein Purification Using Precipitation
- Transformation of Competent Cells - DH5 Alpha Cells

### 30 Days

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

- Advanced Gene Expression Analysis from E.coli
- SDS-PAGE for Protein Analysis
- Western Blotting
- Quantitative Real-Time PCR (qPCR)
- Introduction to CRISPR Gene Editing

## 45 Days

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

- CRISPR/Cas9 Genome Editing
- Bioinformatics for Sequence Analysis
- Cell Culture Techniques
- Flow Cytometry for Cell Analysis
- Protein Crystallization and X-ray Diffraction

## Individual Protocols Under Biotechnology Training Program

1. DNA Extraction from plant and animal tissues | **Fee: 8000 ( Rupees Eight Thousand )**
2. PCR Setup and troubleshooting techniques | **Fee: 8000 ( Rupees Eight Thousand )**
3. Assaying enzyme activity using spectrophotometry | **Fee: 4000 ( Rupees Four Thousand )**
4. Culturing and isolating bacteria using nutrient media | **Fee: 3000 ( Rupees Three Thousand )**
5. Separating DNA fragments by gel electrophoresis | **Fee: 2000 ( Rupees Two Thousand )**
6. Conducting advanced PCR methods like Reverse Transcriptase PCR | **Fee: 6000 ( Rupees Six Thousand )**
7. Digesting DNA with restriction enzymes and ligating DNA fragments | **Fee: 5000 ( Rupees Five Thousand )**
8. Purifying proteins using chromatographic techniques | **Fee: 15000 ( Rupees Fifteen Thousand )**
9. Transforming cells using heat shock or electroporation | **Fee: 18000 ( Rupees Eighteen Thousand )**
10. Culturing microbes using advanced fermentation techniques | **Fee: 25000 ( Rupees Twenty Five Thousand )**
11. Analyzing gene expression using qPCR | **Fee: 15000 ( Rupees Fifteen Thousand )**
12. Separating and analyzing proteins using SDS-PAGE | **Fee: 8000 ( Rupees Eight Thousand )**
13. Detecting proteins using Western blotting technique | **Fee: 12000 ( Rupees Twelve Thousand )**
14. Editing genes using the CRISPR/Cas9 system | **Fee: 150000 ( Rupees One Lakh Fifty Thousand )**
15. Analyzing DNA sequences using bioinformatics tools | **Fee: 3000 ( Rupees Three Thousand )**

**Thousand )**

16. Culturing mammalian cells under sterile conditions | **Fee: 55000 ( Rupees Fifty Five Thousand )**
17. Analyzing cell components using flow cytometry | **Fee: 75000 ( Rupees Seventy Five Thousand )**

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

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