EXPLORE OUR TRAINING PROGRAM FOR HIGHER EDUCATION

Industry Updated 100% Hands On Learning

Our training programmes are specifically created for the career advancement of students to assist them in learning about cutting-edge technologies and enhancing their abilities for food, pharma. biotechnology. pharmaceutical industry and research.

Our Program For

Advanced lab training can significantly strengthen your application to foreign universities, especially for Pharmacy, Biotech, Cosmetic Science, and other research-focused programs.

State of art Lab Facility	Industry Updated Learning	5000 Square Feets Lab Space

09891179928
WhatsApp

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Module 1: In-vitro Cell Culture

Unit 1: Preparation and Sterilization of Culture Media
Unit2: Sub-culturing (Passaging) of Adherent / Suspension Cells
Unit3: Microscopic Observation of Cell Morphology & Cell Counting
Unit4: Trypsinization and cryo Preservation of cells

Module 2: Drug Screening Assays

Unit 1: Drug Cytotoxicity Analysis
Unit 2: Trypan Blue Exclusion Assay
Unit 3: LDH Release Assay
Unit 4: Catalase Assay in Cells

Module 3: Drug Analysis by Flow Cytometry

Unit 1: Basics of Flow Cytometry in drug analysis
Unit 2: Cell counting by Flow Cytometer
Unit 3: SYBR Green or Propidium Iodide (PI) Cell Staining
Unit 4: Data Analysis

Module 4: Immunofluorescence Assay For Diagnosis

Unit 1: Basics and Calibration of FL-Microscopy
Unit2: SYBR® Green Staining for Microscopy
Unit3: Immunofluorescence Characterization
Unit4: Olympus FluoView FV1000 software

Module 5: Nucleic Acid Extraction (DNA & RNA) & Its Purity Analysis

Unit 1: DNA Extraction
Unit2: Quantitative & Qualitative Analysis of DNA Qualitative Analysis of DNA
Unit3: RNA Extraction
Unit4: RNA Quantification and Purity Check

Module 6: Stem Cell Extraction & Pluripotency Assay

Unit 1: Isolation of Stem Cells
Unit2: Subculture of cells and maintenance
Unit3: DNA Extraction & Quality check
Unit4: Pluripotency marker analysis - Nanog gene

Module 7: Gene Expression by Real Time PCR

Unit 1: Total RNA Extraction & First Standard cDNA Synthesis
Unit 2: Basics of Real Time PCR, Primer Design and Software
Unit 3: Real Time PCR Sample Run
Unit 4: Data Analysis and Reporting

Module 8: Genetic Engineering Technique

Unit 1: PCR amplification of gene of interest
Unit2: Digestion of Plasmid with restriction enzymes used for GOI
Unit3: Ligation of Plasmid Vector and Digested PCR Product
Unit4: Transformation into Competent Cells

Module 9: Microbiology and Bio-Process
Unit 1: Isolation and Culturing of Microorganisms
Unit 2: Bacterial Growth Curve & cell count
Unit 3: Production of biomass & measurement
Unit 4: Cell Harvesting & Product Recovery

Module 10: Optimization & Partial Purification
Unit 1: Fed-Batch Fermentation Simulation
Unit 2: Enzyme Activity Assay
Unit 3: Determination of Specific Growth Rate (μ) and Yield Coefficient
Unit 4: Partial Purification

Module 11: Protein Liquid Chromatography (FPLC)
Unit 1: Basics of Protein Liquid Chromatography & Buffer Preparation
Unit 2: Fast Protein Liquid Chromatography - Affinity, Ion Exchange and Size Exclusion
Unit 3: Run of Protein Sample in Protein Chromatography System
Unit 4: Data Analysis & Software handling

Module 12: Protein Analysis
Unit 1: Protein Estimation Assay
Unit 2: Analysis of Protein by SDS-PAGE
Unit 3: Zymography
Unit 4: Protein / Enzyme Activity Assay

Module 13: ELISA & Western Blot
Unit 1: ELISA-based binding studies
Unit 2: SDS-PAGE Electrophoresis for Western Blot
Unit 3: Transfer on PVDF or Nitrocellulose Membrane
Unit 4: Blocking, Antibodies and Detection

Module 14: Quality Analysis of Pharma Products by HPLC
Unit 1: Principle of HPLC, Parts, Detectors and Application
Unit2: Sample and Standard Preparation of Pharma Product
Unit3: Chromatographic Conditions and Sample run
Unit4: Data Analysis & Reporting

Module 15: Analysis by Gas Chromatography
Unit 1: Principle of GC, Parts, Detectors and Application
Unit 2: Sample and Standard Preparation of Pharma Product
Unit 3: Chromatographic Conditions and Sample run
Unit 4: Data Analysis & Reporting

Module 16: Herbal Extraction & Analytical Procedures
Unit 1: Soxhlet Extraction, Drying the solvent by Vacuum Rotary Evaporator
Unit 2: Qualitative assay of Herbals - Assay
Unit 3: Quantitative assay
Unit 4: Size Exclusion Column Chromatography

TRAINING FEE

INR 50,000 /- & INR 10,000/- extra for research Paper along with the Training (Optional)

DURATION

3 Months

ADVANTAGE OF TRAINING PROGRAM

- **You will cover all major techniques of biological sciences and chemistry like; In-vitro cell culture, Flow Cytometry, Immunofluorescence Assay, Advance Microscopy, ELISA, PCR & Real Time PCR, Genetic Engineering, Protein Production, Protein Purification by FPLC, Protein Analysis, HPLC & Gas Chromatography**

- **Hands on experience on these technique will enhance your chance to get part time or full time job in Bio-pharma Production, Biotechnology Research Lab, Pharma Industry, Diagnostic Lab, Cosmetics, Food Labs etc. (Verify the use of technique with AI)**

- **Chances to get a Good Scholarship and admission in reputed university.**

- **Research paper will be an additional academic advantage.**

GENERAL INFORMATION

- We have not included the basic experiment like; chemical preparation, normality, molarity, buffers, electrophoresis, media preparation, pH, sterilisation etc.
- You will **use bioinformatics tool** during your experiments.
- **All basic test** are **automatically incorporated in our training**.
- You will **get certificate** after completion of training program.

About Us

We aim to provide the highest quality services to our clients, considering our performance, consistency, safety, and value. To achieve this, we are continually improving processes, products, and services, meeting and exceeding customer satisfaction at all times.

- Lab Services
- Research
- Testing
- Products

Why Choose Us?

We have a dedicated team of chemists, biotechnologists, analysts, engineers, and specialists to assist in our technological solutions and product development.

Contact Us: 09891179928 www. allelelifesciences.com