



Industry Ready Training Life Science

Our Benefit :



Get Certificate



On Time Training



**100 % Hands on
learning**



 +91-9891179928 (WhatsApp Only)

 allelelifesciences@gmail.com

 www.allelelifesciences.com



OUR PEDAGOGY

One of the main reasons why freshers find it difficult to get employment in the industry is the lack of hands-on experience. Our mission to get students industry-ready in their domain. . Our training programs are specially designed for the betterment of students career to help them capture knowledge on emerging technologies and to improve skills for Biotechnology & Biopharma research.

WHO WILL BE BENEFITED

- Looking to get admission in Ph.D. from foreign university
- Career in Life Science Industry
- Institution Education is not adequate
- Six Months Project and Training For Degree Program

HANDS ON EXPERIENCE ON MAJOR TOOL & TECHNIQUES:

- Animal Cell Biology - Culture, Inverted Microscopy, Fluorescence Microscopy & Image Analysis, Apoptosis, Cytotoxicity
- Nucleic Acid Extraction Techniques, PCR & Real Time PCR Analysis, Methylation & rDNA Technology
- Protein Purification by FPLC, Ion Exchange, Affinity Chromatography, Microplate Assay, ELISA, Immuno Fluorescence Assay, SDS-PAGE & BLOT Techniques. Analysis of AAA by HPLC, Fluorescence Detection by HPLC-FLD
- Microbial Techniques, Enzyme Production & Analysis
- Gas Chromatography, Bio-Separation Techniques, Nano Particle Synthesis, Analysis, Nano Lipids, Botanical Secondary Metabolite Extraction, Drug Analysis with nano particle.

SERVICE FEE

Training: INR 45,000 / -

Training + Project: INR 55,000/-

(One Research Paper)

Looking For Admission Foreign

Universities - INR 65,000/-

(Two Research Paper)

DURATION

Six Months

CELL CULTURE & DRUG SCREENING

Lab Safety & Cell Culture Procedures

Unit 1: Cell Culture Lab Safety, Microscopy, Basics of Cell Culture

Unit 2: Culture of a Continuously Growing Nonadherent Cell Line

Unit 3: Microscopy & Imaging- Inverted Microscope, Fluorescence Microscopy

Unit 4: Isolating Cells and Growing Them in Culture

Unit 5: Cell Counting



Mammalian Cell Culture Assay

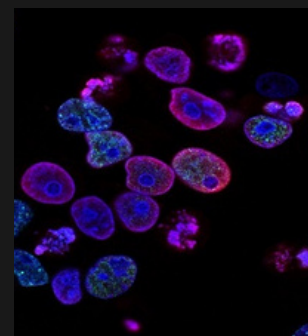
Unit 6: Culture of a Continuously Growing Nonadherent Cell Line

Unit 7: Cryopreservation of Continuously Growing Nonadherent Cells

Unit 8: Detection of Mycoplasma Contaminations by PCR

Unit 9: Eradication of Mycoplasma Contaminations

Unit 10: Authentication of Scientific Human Cell Lines (VNTR PCR)



Cell Viability & Apoptosis Assay

Unit 11: Trypan blue dye exclusion assay

Unit 12: Lactate dehydrogenase assay

Unit 12: Terminal deoxynucleotide transferase-mediated biotin-dUTP nick end Labeling assay (TUNEL Assay)

Unit 13: Comet DNA Damage Assay

Unit 14: MTT Assay For Cell Toxicity



Drug Screening in Mammalian Cell

Unit 15: In-Vitro analysis of curcumin in mammalian cell - Phase I

Unit 16: In-Vitro analysis of curcumin in mammalian cell - - Phase II

Unit 17: RNA extraction and analysis from cell

Unit 18: First Strand cDNA synthesis

Unit 19: Gene Expression Studies



IVth Week - Methylation Analysis by dHPLC & ELISA

Unit 20: Reagent Preparation For dHPLC for Methylation Analysis

Unit 21: Basics of HPLC, Method Discussion & HPLC Software Handling

Unit 22: Sample run For Methylation Analysis by HPLC

Unit 23: Data Analysis of Methylation (detect the level of 5mC (5-methylcytosine))

Unit 24: Methylation Detection by ELISA



MOLECULAR GENETICS

Lab Safety & Nucleic Acids

Unit 25: Genetics Lab safety and Procedures ,Chemical & Reagent Preparation

Unit 26: DNA Extraction & Optimization of Protocol

Unit 27: Quantitative & Qualitative Analysis of DNA

Unit 28: Lab Safety for RNA, Total RNA Extraction & Optimization

Unit 29: Quantitative & Qualitative Analysis of RNA



Bioinformatics, cDNA Synthesis & PCR Run

Unit 30: Bioinformatics: Primer Designing, Vectors, Selection of Restriction Sites, Virtual PCR, other Bioinformatics tools & Techniques

Unit 31: mRNA Purification & First Strand cDNA Synthesis

Unit 32: Optimisation of PCR Reaction – Melting Point , GC Content , Concentrations and Cycles, Sample Preparation For PCR Analysis, PCR sample Run

Unit 33: Analysis of PCR sample

Unit 34: Qualitative RT- PCR sample run & Analysis



Real Time PCR Analysis

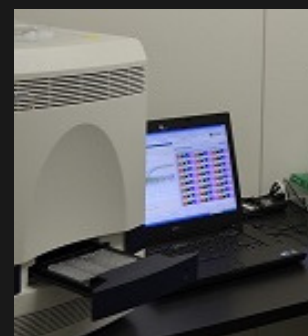
Unit 35 : RNA Extraction, Quantitative & Qualitative Analysis of RNA

Unit 36: mRNA Purification & First Strand cDNA Synthesis

Unit 37: Real Time PCR - Reaction setup for real time PCR, selection of quantification – relative or absolute

Unit 38: SYBR Green Assay and Sample run

Unit 39: Real Time PCR Data Analysis



rDNA Technology

Unit 40: Isolation of pUC18 plasmid from TOP10-pUC18 E coli cells

Unit 41: Restriction digestion of pUC 18 and λ DNA & Purifying pUC18/Hind III/ EcoR I digest by gel elution

Unit 42: Ligating the linearized plasmid -pUC18 and the insert – λ DNA

Unit 43: Preparation of competent cells

Unit 44: Transformation of TOP10 cells with the pUC18- λ DNA ligated Product & Confirmation by PCR



Genetic Toxicology or Epigenetic Studies

Unit 45: Bioinformatics Tools For Methylation Primer Designing

Unit 46: Methylation in DNA - Bisulfites modification of DNA

Unit 47: Bisulfide modification in nanogram quantities of DNA

Unit 48: Methylation Specific PCR Technology :- PCR & Applications, Optimisation of PCR

Unit 49: Expression Studies by Real Time PCR Assay



PROTEIN BIOLOGY

Basics of Protein Lab & Protein Extraction

Unit 50: Lab safety and Procedures , Chemical & Reagent Preparation

Unit 51: Protein Extraction from Mushroom

Unit 52: Quantification of Mushroom Protein

Unit 53: SDS-PAGE Analysis of mushroom protein (2 Days protocol)

Unit 54: Data Analysis of crude mushroom protein



Basics of Protein Purification

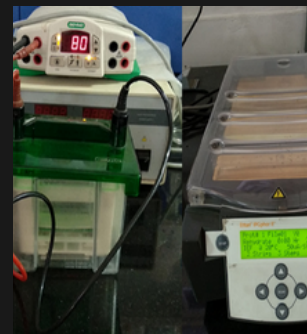
Unit 55: Acid Base Equilibrium, pH, Buffer System, Charge, pI and pKa Value,
Quantitative determination of biomolecule

Unit 56: Ammonium sulfate precipitation

Unit 57: Estimation of Protein after Ammonium sulfate precipitation

Unit 58: Dialysis or Desalting of Protein Sample

Unit 59: Preparation for Protein Purification Strategies (DEAE Sepharose / SP
Sepharose / CM Sepharose)



Advance Protein Purification Techniques

Unit 60: Protein Purification by Ion Exchange Chromatography

Unit 61: Protein Purification by Size Exclusion Chromatography

Unit 62: Estimation of Protein in Fractions

Unit 63: SDS-PAGE of Protein Fractions

Unit 64: Western Blot Analysis



Amino Acid Analysis

Unit 65: Sample Preparation For Amino Acid Analysis

Unit 66: Hydrolysis and Derivatisation of Amino Acid

Unit 67: Preparation of Amino Acid Standards for Quantification

Unit 68: Separation & Detection of Amino Acids by HPLC

Unit 69: Amino Acid Quantification Data Analysis



Antibody Purification

Unit 70: Affinity Chromatography & Antibody Purification

Unit 71: Preparation of Buffer, Column Packing & Reagents Preparation

Unit 72: Downstream Isolation and Purification of IgY

Unit 73: Protein Assay based on Bradford method

Unit 74: SDS-PAGE & Immunoblot Analysis



ENZYMOLGY

Basics of Enzyme Microbiology & In-Silico Studies

Unit 75: Lab safety and Procedures , Chemical & Reagent Preparation

Unit 76: Microbial Selection & Preparation for Enzyme Production

Unit 77: Medium Optimization by Plackett and Burman Design

Unit 78: Effect of pH on enzyme activity

Unit 79: Effect of temperature on enzyme activity



Enzyme Production Strategies

Unit 80: Solid State Fermentation - Phase I

Unit 81: Solid State Fermentation - Phase II

Unit 82: Submerged Fermentation - Phase I

Unit 83: Submerged Fermentation - Phase II

Unit 84: Enzyme Estimation Assay



Enzyme Assay For Optimisation

Unit 85: Enzyme Kinetics Assay

Unit 86: Batch Growth Kinetics of Microbe

Unit 87: Determination of K_{La} by Sulphite Oxidation Method

Unit 88: Enzyme Immobilization

Unit 89: Cell Disruption & Estimation of Enzyme



Downstream Processing of Enzyme

Unit 90: Recovery by ammonium sulphate precipitation

Unit 91: Two phase extraction for partition coefficient.

Unit 92: Dialysis or Desalting of Enzyme Sample

Unit 93: SDS-PAGE of Crude Enzyme

Unit 94: Preparation for Protein Purification Strategies (DEAE Sepharose / SP Sepharose / CM Sepharose)



Enzyme Purification

Unit 95: Purification of Enzyme by Size Exclusion Chromatography (FPLC)

Unit 96: Quantification & Purification of Enzyme by HPLC

Unit 97: SDS-PAGE of Purified Enzyme & Molecular Weight Determination

Unit 98: Separation & Detection of Enzyme by RP-HPLC

Unit 99: Data Analysis



NANO-BIOTECHNOLOGY

1st Week - Basics of Nanotechnology & Synthesis of Nanoparticle

Unit 100: Lab safety and Procedures , Chemical & Reagent Preparation

Unit 101: Synthesis using plant extracts- Phase 1

Unit 102: Synthesis using plant extracts- Phase 2

Unit 103: Synthesis of Lipid Nanoparticle Formulation- Phase 1

Unit 104: Synthesis of Lipid Nanoparticle Formulation- Phase 2

Note - SEM will be outsourced



Biological Assay of Plant-mediated synthesized NPs

Unit 105: Anti-microbial Activity assay - Phase 1

Unit 106: Anti-microbial Activity assay - Phase 2

Unit 107: Anti-oxidant Activity assay - Phase 1

Unit 108: Anti-oxidant Activity assay - Phase 2

Unit 109: Molecular Docking of Nanoparticles



Cell based Assay of Plant-mediated synthesized NPs

Unit 110: Culture of a Continuously Growing Nonadherent Cell Line & Imaging

Unit 111: Cell Counting Assay & Distribution on ELISA Plate

Unit 112: Cell Treatment with Nanoparticles

Unit 113: MTT Assay with nano particles

Unit 114: Total RNA extraction & mRNA Synthesis



Cell Based Assay with LNP's

Unit 115: Formation of Lipid Nano Particle with mRNA

Unit 116: Quantification of encapsulated LNP-mRNA

Unit 117: In-vitro Transfection with animal Cells

Unit 118: High-content imaging for two days

Unit 119: Data Analysis



Project Work

We will assign a project work to shape you for critical thinking, literature search research writing and data analysis.



Cost of Training : Training Only -INR 45,000 / -

Training + Project - INR 55,000/-

Candidate Looking For Admission Foreign Universities - Training + Project Fee & 10,000 for one research paper or 25,000 for two research paper will be additional.

Duration : Six Months

Address Office:

A : C-59, Sector-10, Industrial Area, Noida, Uttar Pradesh, India - 201301

P : +91-9891179928

E : info@allelelifesciences.com



PERSONAL INFORMATION

Full Name :

Address :

Nationality :

Institution (If Any)

Phone :

Email :

Name of Training :

Terms & Conditions

1. The admission to training / internship programs will be confirmed after the payment of registration fee along with documents.
2. The registration fee Rs 1000/- deposited is completely non refundable.
3. I will deposit the service charges as decided by the company in brochure at the time of joining date of training program.
4. Students have to bear their own boarding/lodging /conveyance charges.
5. Trainees will maintain adequate discipline & lab safety inside the lab premises.
6. Company will not be responsible for any medical, legal issues during the internship tenure.

Declaration

I hereby declare that all statement/information given in the application form are true to the best of my knowledge and belief . I will strictly abide by the terms & conditions, norms, lab etiquette during the training .

Pay Registration Fee for confirmation of seat for training program.
Send the copy of the form, payment detail and any identity proof at :
info@allelelifesciences.com



allelelifesciences@upi

THANK YOU FOR REGISTRATION

We will send your training confirmation letter at your Email ID given in the registration form

Trainee Signature

More Information :

If you do not receive confirmation letter kindly WhatsApp your details at:
9891179928

www.allelelifesciences.com



CONTACT US —

ALLELE LIFE SCIENCES PVT. LTD

C-59, Sector-10, Industrial Area, Noida, Uttar
Pradesh, India - 201301

WhatsApp: 9891179928

Email: info@allelelifesciences.com

Web: www.allelelifesciences.com

OUR SERVICES

GENOMICS SERVICES

- Sequencing Services
- PCR & Real Time PCR Services
- Gene Cloning
- Genotyping Services
- Epigenetic Analysis
- Microbiome Analysis
- Nutrigenomics Analysis
- Plant Genomics

PROTEIN CHEMISTRY

- Protein Purification
- Protein Analysis
- Peptide Synthesis
- Peptide Modification
- Peptide Labelling
- Antibody Purification
- Enzyme Production
- Enzyme Analysis

BIOLOGICAL ASSAY

- In-Vitro Cell Assay
- Microbial Assay
- Antioxidant Assay
- Oxidative Stress Assay
- Toxicity Assay
- Nanotechnology Assay
- Bio-Chemical Assay
- Immunology Assay

ANALYTICAL SERVICES

- HPLC Analysis
- GC Analysis
- Mass Spectrometry Analysis
- Vitamin Analysis
- GMO Analysis
- Amino Acid Analysis
- Allergen Analysis
- Trace Analysis

OUR PRODUCTS

- Molecular Biology Reagents
- Biochemical Analysis
- Protein Analysis Reagents
- Cell Culture Products
- Plant Research Products
- Lab Equipment