



STUDY ABROAD

PRE TRAINING

PREPARED BY
ALLELE TEAM

 9891179928 (WhatsApp)

 info@allelelifesciences.com

 www.allelelifesciences.com

TRAINING - STUDY ABROAD

The primary objective of the industrial training organized by allele lifesciences is to make you proficient in various latest and conventional technologies. These skills are essential for those looking to advance their careers in the biomedical and pharmaceutical fields.

Module I: Molecular Genetics & Advanced Diagnostics

Unit 1: Lab Safety, Chemical Preparation & Other Lab Procedures

Unit 2: Nucleic Acid Extraction (DNA & RNA) & Its Purity Analysis

Unit 3: RNA Extraction, cDNA Synthesis and Qualitative RT-PCR

Unit 4: Basics of Real Time PCR, Primer Design, Sample Run & Data Analysis

Unit 5: Basics of ELISA & Application, Analysis by ELISA and Data Analysis

Application:

Master the entire genomic workflow to advance your career in the food, healthcare, and life sciences industries. This session offers thorough, practical instruction in high-yield nucleic acid extraction, accurate fluorometric and spectrophotometric quantification, endpoint PCR amplification, and high-resolution Real-Time PCR (qPCR) data processing.

Module II: Cell Biology & Drug Discovery

Unit 1: In-vitro Cell Culture Lab Safety, Preparation and Sterilization of Culture Media

Unit 2: Sub-culturing, Cell Counting and Microscopic Observation by Inverted Microscopy

Unit 3: Cell Counting, Drug Cytotoxicity Analysis and Trypan Blue Exclusion Assay

Unit 4: Basics of Flow Cytometry in drug analysis, Propidium Iodide (PI) Cell Staining, Cell analysis by Flow Cytometer and Data Analysis

Unit 5: Cell Preparation, Drug Treatment and Staining for IFA, Fluorescence Microscopy and Data Analysis

Application:

Develop advanced bench skills in multi-parameter flow cytometry analysis for phenotypic characterization, real-time cell proliferation tracking using inverted and fluorescence microscopy, and cell-based drug screening cascades.

Module III: Bioprocess Engineering & Downstream Processing

Unit 1: Bio-Process, Growth Curve & cell count, Production of biomass & measurement

Unit 2: Enzyme Activity Assay, Ammonium Precipitation and Partial Purification

Unit 3: SDS-PAGE and Basics of Protein Liquid Chromatography (FPLC)

Unit 4: Fast Protein Liquid Chromatography sample run and data analysis

Unit 5: Protein Derivatization & Preparation and Amino Acid Analysis by HPLC

Application:

Learn critical downstream purification workflows to put yourself at the forefront of the biopharmaceutical industry. Develop industry-ready skills in Western Blotting for target validation, SDS-PAGE for molecular weight profiling, Fast Protein Liquid Chromatography (FPLC) for automated preparative purification, and scalable protein extraction.

Module IV: Immuno-therapeutics & Advanced Immuno-Assays

Unit 1: In-vitro Cell Culture Lab Safety, Preparation and Sterilization of Culture Media

Unit 2: Primary Cell Isolation & counting and Microscopic Observation by Inverted Microscopy

Unit 3: Enzyme-Linked Immunosorbent Assay (ELISA): Direct/Indirect ELISA; signal amplification, standard curves, and troubleshooting

Unit 4: Non-specific binding blocking strategies, target selection and SDS-PAGE and Western Blot Analysis.

Unit 5: Cell Preparation, Drug Treatment and Staining for IFA, Fluorescence Microscopy and Data Analysis

Application:

Bridge theory and laboratory practice with immersive, hands-on training in immunology, chemiluminescence assay Learn antibody purification, ELISA, and advanced diagnostic immuno-techniques.

Module V: Industrial Chemistry & Pharmaceutical Quality Control Training

Unit 1: Assay of Active Ingredient, Confirm API identity, Preservative Content Determination

Unit 2: Microbial Limit Test (MLT), Antibiotic Assay (Microbiological Assay), Sterility Testing

Unit 3: Assay & Analysis of product, Analysis of Vitamin C, Estimation of Drug Content in Pharmaceuticals.

Unit 4: Principle of HPLC, Parts, Detectors and Application, Standard Preparation, sample run and data analysis.

Unit 5: Principle of Gas Chromatography, Parts, Detectors and Application, Standard Preparation, Sample run and data analysis.

Application:

In quality control and analytical chemistry settings, increase your technical authority. Gain extensive, practical experience in volatile compound profiling using Gas Chromatography (GC) platforms, method development on sophisticated High-Performance Liquid Chromatography (HPLC) systems, and high-precision quantitative spectrophotometry.

Advantage:

- Hands on experience on these technique will enhance your chance to get part time or full time job in production, research Lab, diagnostic Lab or as quality analyst.
- Chances to get a Good Scholarship and admission in reputed university.
- Research Project will be an additional academic advantage.

Information

Eligibility: Graduate/ Post Graduate / Research Scholar from life sciences or chemistry / Medical Professionals / Dentist / veterinarian etc.

Duration: 300 Hrs or Up-to 90 Days

Service Charges: We charge non negotiable fee to cover the expenses of chemical and reagents that is **INR 50,000 /- for (Indian Nationals) & INR 20,000/- For Research Project (Optional)**

Allele Life Sciences Private Limited

C-59, Sector -10, IND. Area

Noida -

Uttar Pradesh, India-201301

E.mail: info@allelelifesciences.com

WhatsApp: 989117928

www.allelelifesciences.com