

Internship in Forensic Science & Analysis

Bridging Gap Between Industry & Academia



Forensic science is a discipline that applies scientific analysis to the justice system, often to help prove the events of a crime. Forensic scientists analyse and interpret evidence found at the crime scene. That evidence can include blood, saliva, fibres, tire tracks, drugs, alcohol, paint chips and firearm residue etc.

The overall goal of the training program is to provide the trainee with the skills they will need to provide appropriate Forensic findings as expert witnesses in the court of law.

OBJECTIVES :

- To develop the skill with latest technologies used in Forensic Analysis
- Lab facility with dedicated scientific advisory and research assistants
- Documentation of all experimental work
- Data Handling and interpretation

1

DNA ANALYSIS

Explore the DNA Analysis tool for Forensic Biology

2

FORENSIC CHEMISTRY

Explore the important tool for fire, arsons and many other cases

3

TOXICOLOGY

Forensic Toxicology, a tool for drug of abuse & medical negligence

GENOMICS

Q-PCR Analysis



Microarray



PCR Analysis



HPLC Analysis

GC Analysis

ELISA

Spectrometry

UNITS TO BE COVERED : - All Units are compulsory For Training in Genomics & Molecular Biology

Unit I - Lab safety and Procedures :

Evidence Collection methodology, Evidence containers, Biological lab Safety , Chemistry Lab Safety , Record Maintenance, Understand the importance of the maintenance of forensic records from crime science to court , Forensic Record Formats, raft petition with the admission of scientific evidence , prosecution strategy

Unit II Nucleic Acid Extraction, Optimisation and Quantification

Extraction of both DNA & RNA , Qualitative analysis by electrophoresis, gel Docking and image analysis. Quantitative / DIN or RIN Analysis by Spectrophotometer/ Nano Drop/ Bio-Analyser.

Primer Designing, Vectors , Selection of Restriction Sites, Virtual PCR, Bioinformatics tools & Techniques, Gel Analysis Software, Real Time PCR Primer Design, Q-PCR Data Handling, Sequence Data Analysis .

Unit IV - PCR Optimisation for the Expression of Forensic Samples

Optimisation of Conventional , Nested and PCR , PCR Multiplexing Methods , Run of Conventional PCR , Data Analysis .

Methods and Analysis of DNA Profiling through Molecular Markers: PCR analysis & DNA bar coding, Dendrogram Generation, Similarity & Dissimilarity Matrix , Data Analysis

Unit V - Forensic Analytical Chemistry

Calibration & Instrument Handling , Sample Preparation , Sample Processing, Data Analysis : Standard Curve and Data Interpretation, Method Development

- **Analysis by Spectrometry**
- **Analysis by HPLC**
- **Analysis by TLC**
- **Analysis by Gas Chromatography**

Unit VI - Forensic Drug Analytical Method Validation

Analytical method validation : LOD, LOQ , Specificity, Reproducibility etc. in different condition in artificially prepared gastric lavage with spiked drug or drug in combination

PROJECT WORK :

We will provide a project work of your interested area, our assigned projects will be on product development, basic research and novel idea . **We do respect and welcome all feasible ideas** suggested by you for technology development in life science research.

TECHNIQUES COVERED IN THIS PROGRAM :

Nucleic Acid Extraction ,Optimisation, Electrophoresis, Imaging and Data Analysis, DIN/RIN Quantitative Analysis , Advance Bioinformatics tools and softwares, PCR & Real Time PCR Assay Development and Data Analysis, rDNA Technology, cDNA Construction, Basics of Microarray , Separations by HPLC & Gas Chromatography

BENEFITS OF THE TRAINING PROGRAM :

1. Research & Development in Forensic Science
2. Forensic sample analysis
3. Doctoral Research
4. Bridging Gap in Academic Program
5. Boost your confidence

INFORMATION TO APPLY FOR THE PROGRAM

WHO MAY JOIN :-

Any enthusiast and dedicated learner from life science, biotechnology, chemistry or applied sciences

SELECTION CRITERIA:-

First come first serve basis



TRAINING FEE :

Rs 10,000 / - For 30 Days Training & Rs 12,000 /-For 45 Days (Training + Project Work)

HOW TO APPLY –

Details of Documents :

1. Any identity proof along with University / College Identity Card
2. Filled **Registration form** with photograph (Given in Brochure)
2. Registration fee will be Rs 1000 / - paid through cheque or on line payment

How to pay Registration Fee :

1. Cheque will be in favour of **Allele Life Sciences Private Limited**
2. **For on line payment detail send request at : allelelifesciences@gmail.com**

How to send document :

Those who pay through cheque send all documents at following address :

Allele Life Sciences Pvt. Ltd.

C - 59 , Sector - 10 , Noida
Uttar Pradesh - 201301 , IN
Ph.No : + 91-9891179928

Those who opt on Line registration send scan copy of all documents and receipt of online payment at : allelelifesciences@gmail.com

Note : We will send confirmation within specified time. If not received send a reminder mail.

For Any other query mail at : allelelifesciences@gmail.com or WhatsApp - 9891179928

Registration Form is Given at nest page



Registration Form

Name of Training Program :

Expected Date of Joining :

Candidate Details :

Name:

Father's Name:

Address :

Contact No :

Email:

Institution :

Qualification :

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 deposited is completely non refundable.
3. The industrial training fee includes the cost of chemical , reagents and study material costs.
4. I will deposit the service charges as decided by the company at the time of joining date of training program.
5. Students have to bear their own boarding/lodging /conveyance charges. We facilitate students in finding proper paying guest arrangements.
6. The trainees will have to bring their own lab coat and wear them all the time in the campus.
7. Trainees are selected on first come first serve basis
8. Trainees will maintain adequate discipline inside the lab premises.

DECLARATION

I _____ from _____
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 norms/lab etiquette during the training

Signature

Place: _____

Date: _____

For office use only