

LABORATORY TRAINING IN FORENSIC SEROLOGY AND DNA ANALYSIS

27th-31st MAY 2024

Course overview

The course will cover current laboratory practices in forensic serology and DNA analysis. The training is highly hands on, and each trainee will learn to; independently conduct presumptive and confirmatory tests for body fluids, Extract, purify and quantify DNA from a variety of biological materials, Perform PCR, handle and maintain various DNA analysis instruments and interpret DNA data. In addition, the trainees will appreciate the value of maintaining chain of custody and presentation of DNA evidence as

Suitability

This course is suitable for researchers, scientists, laboratory analysts, graduate students and postgraduate students who have a background in molecular biology or biochemistry, who are interested in learning more about the practical aspects and use of DNA in family relationship testing and solving crime.

DAY 1 (09.00-10.00)	● Registration and Orientation
10.00-10.30	<i>Tea Break</i>
11.00-12.30	● Operation of general equipment in a molecular laboratory, laboratory bookkeeping, chain of custody, client consenting procedures, sample reception procedures and reference sample collection. Presumptive and confirmatory Tests
12.30-14.00	<i>Lunch Break</i>
14.00 -16.30	● Introduction to DNA and DNA processing Techniques
DAY 2 (9.00-10.30)	● DNA extraction-;Manual and Automated DNA extraction technologies
10.30-11.00	<i>Tea Break</i>
11.00-12.30	● Forensic DNA Quantification(qPCR),normalization
12.30-14.00	<i>Lunch Break</i>
14.00-16.30	● Introduction to Restriction Fragment Length Polymorphism(RFLP) and PCR
DAY 3 (9.00-10.30)	● PCR and Short Tandem Repeats(STRs) ● STRS separations and detection
10.30-11.00	<i>Tea Break</i>
11.00-12.30	● STR genotyping, data analysis and interpretation

12.30-14.00	Lunch Break		
14.00-15.30	<ul style="list-style-type: none"> ● STR interpretation and emerging forensic issues 		
DAY 4 (9.00-10.30)	<ul style="list-style-type: none"> ● Preparation of reference samples and casework samples (FTA) for Direct PCR ● PCR set up reaction and runs 		
10.30-11.00	Tea Break		
11.00-12.30	<ul style="list-style-type: none"> ● Preparation of samples for capillary Electrophoresis/ Fragment analysis 		
12.30-14.00	Lunch Break		
14.00-15.30	<ul style="list-style-type: none"> ● DNA databases and future of DNA next generation sequencing 		
DAY 5 (9.00-10.30)	<ul style="list-style-type: none"> ● Scoring of profiles, discussions and interpretation of results ● Discussions and group practice :Writing of forensic reports 		
10.30-11.00	Tea Break		
11.00-12.30	<ul style="list-style-type: none"> ● Discussions and group work: Law of evidence for Forensic Experts 		
	12.30-14.00		
14.00 – 15.00	<ul style="list-style-type: none"> ● Closing ceremony and issuance of certificates 		
Dates: 27th – 31stMay,2024 Reg Deadline17th May,2024		Cost Kes. 92,800.00 or USD 928.00	KISUMU

Telephone: +254 – (20)2594918 | US Operations: St. Paul, Min, USA Telephone: +1 651-731-3670
www.chromafrika.com/ www.chromafrika.co.ke | info@chromafrika.co.ke/info@chromafrika.com
