

Current Training programmes on DNA Fingerprinting and Barcoding

Scheme I: Human DNA Fingerprinting and Identification (*Only for permanent staff of state/central Government forensic science laboratories*)

Laboratory Experiments (hands on): DNA isolation from human blood, quantification and quality check of isolated DNA, DNA dilution, PCR amplification of DNA using multiplex primers, fragment (allele) separation following automated capillary electrophoresis, data capturing, data analysis and DNA fingerprint development.

Duration: 3 weeks *Fees:* ₹ 30000

Scheme II: DNA barcoding Techniques & Analysis

Laboratory experiments (hands on): DNA isolation, quantification and quality check of the isolated DNA, DNA dilution, PCR amplification of DNA using universal primers, agarose gel electrophoresis of PCR products, purification and sequencing of PCR products and sequence data analysis.

Duration: 3 weeks *Fees:* ₹ 20000

Scheme III: DNA Fingerprinting following RAPD/ISSR techniques & Analysis

Laboratory Experiments (hands on): Isolation of DNA, quantification and quality check of isolated DNA, DNA dilution, PCR amplification of DNA using random primers for RAPD/ISSR, agarose gel electrophoresis of PCR products, Gel scoring and data analysis.

Duration: 2 weeks *Fees:* ₹ 12000

Scheme IV: DNA Fingerprinting following Microsatellite technique & Analysis

Laboratory Experiments (hands on): Isolation of DNA, quantification and quality check of isolated DNA, DNA dilution, PCR amplification of DNA using SSR primers for microsatellite analysis, allele separation following automated capillary electrophoresis for microsatellite analysis, data collection and data analysis.

Duration: 2 weeks *Fees:* ₹ 12000

Scheme V: Bioinformatics Analysis of DNA Sequence data

Hand on: Trace file analysis, BLAST, Sequence alignment & editing, Phylogenetic Tree construction, Genetic Distance calculation, Sequence Submission to NCBI.

Duration: 1 week *Fees:* ₹ 8000

Terms and Conditions

- (i) Application form for training can be downloaded from RGCB website
- (ii) Applicants can choose the period of training
- (iii) Scheme III & IV can be combined, and total fee will be ₹ 20000, and duration of the training will be 3 weeks.
- (iv) Send the duly-filled application for training to **‘The Director, Rajiv Gandhi Centre for Biotechnology, Regional Facility for DNA Fingerprinting, Thycaud P.O., Thiruvananthapuram-695014, Kerala, India’**.
- (v) In all correspondence, the envelope should be superscribed in bold letters as **“RFDF-APPLICATION FOR TRAINING”**.
- (vi) Application should be forwarded by the Head of the concerned FSL if applying for Scheme I.
- (vii) Minimum eligibility for applying traineeship is a Bachelors Degree or equivalent in any area of biological sciences. All applications shall be scrutinized before short listing. Selected applicants should pay the full fee in advance on or before the day training starts. Fee can be paid either by DD drawn in favour of **The Director, Rajiv Gandhi Centre for Biotechnology** payable at **Thiruvananthapuram** or in cash at the RFDF cash counter.
- (viii) Training fee paid will not be refunded once the application is processed.
- (ix) The training fee excludes food and lodging. Trainees should make own arrangements for their accommodation.
- (x) Director, RGCB reserves the right to reject an application, citing no reasons.