

SHRI JAI NARAIN PG COLLEGE, LUCKNOW DEPARTMENT OF BOTANY

Organize

## **DNA FINGER**PRINTING: BOON TO FORENSIC SCIENCE

**3 DAYS HANDS-ON WORSHOP ON** 

17<sup>th</sup> TO 19<sup>th</sup> FEBRUARY 2020 In Association with CYTOGENE RESEARCH & DEVELOPMENT LAB, LUCKNOW

Prof. S. D. Sharma - Principal (Patron) Dr. A. B. Mishra – Head, Department of Botany (Convener) Dr. R. K. Pandey – Associate Professor, Department of Botany (Organizing Secretary) Dr. Vivek Singh – Associate Professor, Department of Botany (Joint Secretary)

**Theme:** DNA fingerprinting (also called DNA profiling or forensic genetics) is a technique employed by forensic scientists to assist in the identification of individuals or samples by their respective DNA profiles. Although more than 99.1% of the genome is the same throughout the human population, the remaining 0.9% of human DNA shows variations between individuals. These variable DNA sequences, termed polymorphic markers, can be used to both differentiate and correlate individuals. Alec Jeffreys, a geneticist at the University of Leicester in Britain, invented the first usable version of DNA fingerprinting in 1984. Although it is a relatively new discipline, the application of forensic genetics to the legal arena is aimed to resolve legal problems, such as paternity tests and inheritance matters, to establish identity in criminal cases where biological evidence is found at crime scenes, and to identify victims of mass disasters and missing persons from human remains. This workshop aims to provide a Hands On Experience to our PG students and expose them to the theory and techniques of DNA Fingerprinting.

## Time schedule of "DNA Fingerprinting: A boon to Forensic Science" 17th -19th February, 2020 Day 1 (17th Feb 2020)

Time	Program
09:00 - 10:30	Brief Lecture on Finger Printing and preparation of Reagent
10:30 - 11:30	Inauguration
11:30 - 12:00	Tea Break
12:00 - 02:00	Genomic DNA Extraction (Part 1)
02:00 - 02:45	Lunch Break
02:45 - 04:00	Genomic DNA Extraction (Part 2)

## Day 2 (18th Feb 2020)

Time	Program
09:00 - 10:30	Agarose gel Electrophoresis
10:30 - 10:45	Tea break
10:45 - 01:00	Preparation of Master Mix for PCR
01:00 - 01:45	Lunch Break
01:45 - 03:00	Setup of PCR
03:15 - 04:00	Running of PCR for Reaction

## Day 3 (19th Feb 2020)

Time	Program
09:00 - 10:30	Restriction Digestion
10:30 - 10:45	Tea break
10:45 - 01:00	Agarose Gel Electrophoresis (Digested product)
01:00 - 01:45	Lunch Break
01:45 - 03:00	RFLP Analysis & Interpretation of Results
03:00 - 04:00	Valedictory & Certificate Distribution