

# HANDS-ON TRAINING WORKSHOP ON TECHNIQUES FOR MANIPULATION OF NUCLEIC ACIDS FOR APPLICATION IN GENOMICS (From 26th December - 7th January 2023)



## Purpose of Workshop -

Isolation of nucleic acids from cells is a pre-requisite to their manipulation and use in a variety of different techniques including PCR, Sequencing and Expression. This workshop is designed to provide extensive hands-on training in different methods for the isolation of DNA and its use for Sequencing by Sanger's method. The workshop includes classroom lectures and hands-on training modules. Training in these techniques will provide an edge to the students aiming for research and/or teaching in life sciences. The workshop is open for BSc, MSc and PhD students from all life sciences streams.

Limited to 20  
participant  
only (on first  
come first serve  
basis)

Rs 2000 Non-  
refundable  
workshop fee  
applicable

Registration  
deadline  
20th Dec 2022  
5:00 PM

## THE 100% WHAT WILL YOU LEARN ?

### FUNDAMENTAL OF MOLECULAR BIOLOGY

25%

- Introduction to DNA Structure & Function.
- Genomic DNA & Plasmid DNA.
- DNA Extraction Methods (Manual & Column).
- DNA Quantitation & Quality Check.

### DNA VISUALIZATION BY AGAROSE GEL ELECTROPHORESIS

25%

- Introduction to Electrophoresis.
- Agarose Gel Electrophoresis - Principle & Applications.
- Tracking Dye & Visualization Methods.
- Molecular Marker & Ladder for Sizing DNA.

### ISOLATION OF DNA USING MAGNETIC NANOPARTICLES

25%

- Introduction to Nanotechnology.
- Methods for Synthesis of Magnetic Nanoparticles.
- DNA Extraction by Magnetic Nanoparticles

### SANGER DNA SEQUENCING

25%

- Introduction to DNA Sequencing.
- Sanger Sequencing - Principle & Methodology.
- Setting up Sanger Sequencing Run.
- Analysis of Result to Decipher sequence.

Organized by

**CIIDRET**

CENTER FOR INNOVATION IN INFECTIOUS  
DISEASE RESEARCH, EDUCATION AND TRAINING

<https://ciidret.du.ac.in/>



दिल्ली विश्वविद्यालय **INSTITUTION OF EMINENCE**  
University of Delhi प्रतिष्ठित संस्थान

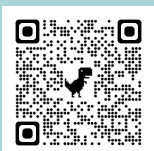
**DELHI SCHOOL OF SKILL ENHANCEMENT &  
ENTREPRENEURSHIP DEVELOPMENT**

<https://www.ioe.du.ac.in/delhi-school-of-skill-enhancement-entrepreneurship-development/>

*Academic Partner*



**SHIVAJI COLLEGE**



For registration, please visit the given link or scan the QR  
<https://forms.gle/ziaELXo5sQNgqDCF7>

Venue: University of Delhi South Campus, New Delhi  
Timing: 9:30 am - 5:30 pm (Daily)

The Workshop certificate will be issued to the participants who successfully attend and complete the full duration of the course.