PMRF-ISSS Teaching Programme Prime Minister Research Fellowship students' teaching requirement facilitated by the Institute of Smart Structures and Systems

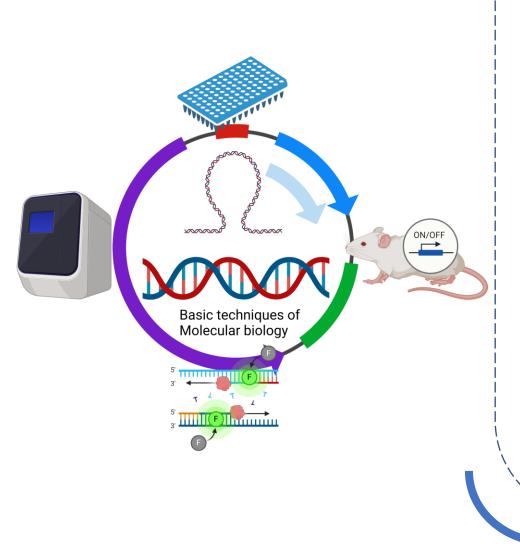
# Module PMRF ISSS019/II/2025 Basic techniques of molecular biology

## Name of the PMRF student

## Risabh Sahu

## **Required background of the students taught**

Undergraduate and postgraduate students interested in biology stream



## Details of the content of the module

- Plasmid and genomic DNA isolation
- Competent cell preparation and transformation
- Molecular cloning and subcloning
- Basics of site directed mutagenesis and CRISPR knock out
- RNA isolation
- cDNA preparation and PCR/quantitative real time PCR
- SDS gel, Western blotting
- Protein preparation from bacterial cells
- Immunoprecipitation
- Polysome profiling
- Northern blotting

#### Schedule of the module

#### Course Starts on : 01/03/2025

Course ends on: 15/04/2025

Lecture days: Monday and Saturday

Time: 9:00pm -10:00pm

### Meeting link : Will be shared later

#### Contact email ID: isss.forum@gmail.com

### Registration link: https://forms.gle/55ptfWF