PMRF-ISSS Teaching Programme

Prime Minister Research Fellowship students' teaching requirement facilitated by the Institute of Smart Structures and Systems

Module PMRF-ISSS037/2022 Super-Resolution Microscopy

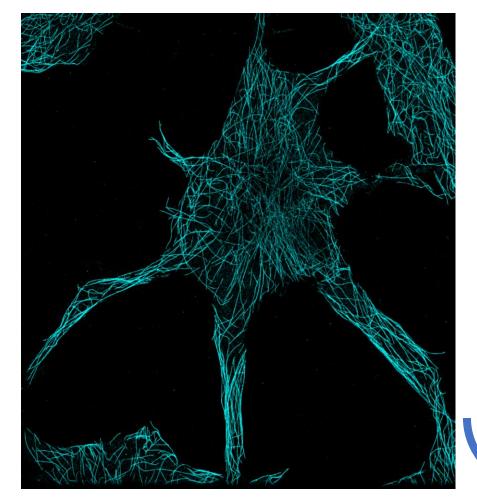
Name of the PMRF student Abhinav Banerjee

Required background of the students taught

Any student with basic higher secondary level Chemistry, Biology and Physics knowledge along with light mathematics can take up this course for gaining knowledge and technical know how on microscopy.

Online session coordinator

Will be chosen from the list of registrants



Details of the content of the module

Super-Resolution Microscopy is coming into mainstream biological research. There exists a plethora of techniques used to obtain superresolution images. We will be covering the following topics under this broad umbrella of science.

- Basics of Super-resolution (Optics vs Computer)
- Single Molecule Localization Microscopy (SMLM)
- DNA-PAINT ins and outs.
- Live Demonstration Sessions on Super-Resolution Data reconstruction.
- Questionnaire discussion on super-resolution with DNA-PAINT.



Schedule of the module

Start Date: 03/04/2023.

End Date: 29/05/2023 (Last Class).

Timings: Mondays, 8:00am to 9:00am.

Extra Discussion Lectures encouraged as required.

Meeting link : Will be shared later

Contact email ID: isss.forum@gmail.com

Registration link:

https://forms.gle/W csCaiY8HWyuRzTJ6

