

PMRF-ISSS Teaching Programme

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



Module PMRF-ISSS077/2024

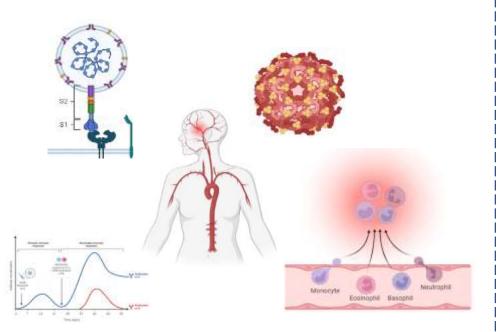
Fundamentals of Virology

Name of the PMRF student

Risabh Sahu

Required background of the students taught

Basic knowledge in molecular biology, microbiology, immunology and cell biology. For Undergraduate and postgraduate



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Details of the content of the module

Virus is an intracellular obligate parasite. In the past few years, the menace created by COVID-19 pandemic and Dengue epidemic suggests why basic research and understanding is necessary in the field of virology. Following topics will be covered in this course.

- Introduction to virology (History, discovery, , Baltimore classification)
- Virus structure, basic concept of VLP
- Virus infection, entry, tropism
- ❖ Basic mechanisms of replication and translation of virus.
- * Role of host factors in virus life-cycle.
- ❖ Role of Innate immunity and adaptive upon virus infection
- Immune evasion mechanism by virus
- Cultivation of animal viruses and quantification, cellular transformation by virus
- viral evolution and emergence, vaccine development and antivirals

Schedule of the module

Course Starts on: 1st June, 2024

Course ends on: 31st November

Time: 6:30 -8:00 pm every Wednesday

Research papers will be be discussed often

Meeting link: Will be shared later

Link

Contact email ID: isss.forum@gmail.com

Registration link:

https://forms.gle/bnuxiCMQaD2mdi3L6