

# FOUNDATIONS OF BIOINFORMATICS FOR INFECTIOUS DISEASE GENOMICS

## *Hands on Training*

25<sup>th</sup> & 26<sup>th</sup> September, 2025

### **Organizing Chairperson:**

Dr. Soma Chaki  
(Professor, Dean - FLAHS, RUAS)

Dr. Tushar Shaw  
(Assistant Professor- FLAHS, RUAS)

### **Organizing Committee:**

Dr. Varun C N  
(Assistant Professor- FLAHS, RUAS)  
[varuncn.ah.ls@msruas.ac.in](mailto:varuncn.ah.ls@msruas.ac.in)

Dr. Prashanthi K  
(Associate Professor- FLAHS, RUAS)  
[prashanthi.bt.ls@msruas.ac.in](mailto:prashanthi.bt.ls@msruas.ac.in)

**Scan to register**



#### **Registration Fee (Including GST)**

- **Students:** 800 INR
- **Faculty & Others:** 2000 INR

Registrations limited to **25 seats**  
*based on first come first serve basis*

## DAY- 1

9:00- 9:30 am :	Opening, Participant Introduction, Pre Test
9: 30- 10:15 am:	Principles of Genomic Sequencing Technologies- Dr. Varun CN, RUAS
10:15- 10:30 am:	Break
10:30- 11:15 am:	Introduction to Bioinformatic tools and Platforms for NGS Data analysis - Dr. Varun CN, RUAS
11:15 - 1:00 pm:	Working with Linux OS (Command line) [Hands-on]
1:00- 2:00 pm:	Lunch Break
2:00- 2:15 pm:	Quiz
2:15- 3:15 pm:	Tools for working with targeted genomic sequencing data [Hands-on]
3:15- 3:30 pm:	Break
3:30- 5:00 pm:	WGS: Obtaining genome fasta sequence from raw file [Hands-on]
5:00- 5:30 pm:	Summary and Discussion for the day. Assignment-I



## DAY- 2

- 9:00- 9:30 am : Opening discussion, Follow up to Assignment-I
- 9: 30- 10:15 am: Introduction to Clinical Metagenomics and its Applications- Dr. Tushar Shaw, RUAS
- 10:15- 10:30 am: Break
- 10:30- 1:00 pm: Working with Metagenomics data [Hands-on]
- 1:00- 2:00 pm: Lunch Break
- 2:00- 2:15 pm: Quiz
- 2:15- 3:15 pm: Environmental surveillance for pathogens and antimicrobial resistance using metagenomics approach  
- Dr. Shivranjani C Moharir, TIGS
- 3:15- 3:30 pm: Break
- 3:30- 5:00 pm: Transcriptomic analysis  
- Dr. Prashanthi K, RUAS
- 5:00- 5:30 pm: Post Test, Feedback, Certificate distribution and conclusion