

# 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)  
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Dr. Prashanthi K  
(Associate Professor- FLAHS, RUAS)  
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**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