RAMAIAH UNIVERSITY OF APPLIED SCIENCES

Faculty of Life and Allied Health Sciences (FLAHS)

6- days Hands-on Training

Basic Bioinformatics and Genomics tools to understand Human Diseases

20th -25th July 2026

Highlights of the programme

- NGS data generation and handling for infectious diseases genomic analysis (Single and metagenome)
- Handling Transcriptomics data
- Structural protein analysis and small molecule docking
- Invited talks from industrial and academic experts

Scan the QR code or click here for registration

Last Date:
30th June 2026

Registration

- **Students:** 4000 INR
- **Faculty & Others:** 6000 INR

Registration limited to ***25 seats*** *based on a first-come, first-served basis*

Dr. Soma Chaki
Professor & Dean;
FLAHS

Dr. Shruti Mathur
Professor & Head
Department of Biotechnology
FLAHS

Dr. Tushar Shaw
Assistant Professor and Head
Department of Allied Health Sciences
FLAHS

Dr. Varun CN
Assistant Professor
Department of Allied Health Sciences
FLAHS

Dr. Deepesh Nagarajan
Assistant Professor
Department of Biotechnology
FLAHS

Dr. Prashanthi K
Associate Professor
Department of Biotechnology
FLAHS

Day 1: 20th July 2026

Time	Topic
9:15 – 10:00 am	Registration & Inauguration
10:00 – 10:45 am	Introduction to Bioinformatics Lab
10:45 – 11:00 am	Break
11:00 am-1:00 pm	2nd Generation sequencing technology: Principles and Applications [Prachi Prawna; Field Application Scientist; Premas Life Sciences]
1:00 – 2:00 pm	Lunch break
2:00 – 4:00 pm	3rd Generation sequencing technology: Principles and Applications [Terence Christie; Field Application Scientist; Genotypic]
4:00 – 5:00 pm	Introduction to Linux based interface for Bioinformatics analysis [Hands-on]

Day 2: 21st July 2026

Time	Topic
9:30 – 10:45 am	Genomic analysis tools [Hands-on]
10:45 – 11:00 am	Break
11:00 am-1:00 pm	Working with NCBI tools [Hands-on]
1:00 – 2:00 pm	Lunch break
2:00 – 5:00 pm	Prokaryotic Genome: Obtaining Whole genome sequence from raw data [Hands-on]

Day 3: 22nd July 2026

Time	Topic
9:30 – 10:45 am	Tools for Metagenomics analysis [Hands-on]
10:45 – 11:00 am	Break
11:00 am-1:00 pm	Metagenomics analysis using QIIME package [Hands-on]
1:00 – 2:00 pm	Lunch break
2:00 – 5:00 pm	Metagenomics analysis using Kraken2 and Centrifuge packages [Hands-on]

Day 4: 23rd July 2026

Time	Topic
9:30 – 10:45 am	Introduction to transcriptomics
10:45 – 11:00 am	Break
11:00 am-1:00 pm	Bulk-RNA Transcriptomics [Hands-on]
1:00 – 2:00 pm	Lunch break
2:00 – 4:00 pm	Talk: “Environmental surveillance for pathogens and antimicrobial resistance using metagenomics approach” Dr. Shivranjani C Moharir, TIGS
4:00 – 5:00 pm	Differential expression analysis for Bulk Transcriptomics data [Hands-on]

Day 5: 24th July 2026

Time	Topic
9:30 – 10:45 am	Single-cell and Spatial transcriptomics [Dr. Sriram P; Chief Scientific Officer; TheraCUES Innovations]
10:45 – 11:00 am	Break
11:00 am- 1:00 pm	Protein structure: Visualization and prediction [Hands-on]
1:00 – 2:00 pm	Lunch break
2:00 – 5:00 pm	Protein Docking studies for finding small molecule inhibitors [Hands-on]

Day 6: 25th July 2026

Time	Topic
9:30 – 10:45 am	Talk “Experiences from infectious disease genomic analysis” Dr. Tushar Shaw, FLAHS, RUAS
10:45 – 11:00 am	Break
11:00 am- 1:00 pm	Pathway analysis, GSA and Network analysis [Hands-on]
1:00 – 2:00 pm	Lunch break
2:00 – 3:30 pm	Diagnostic Genomics in Oncology [Dr. Ashok Gopinath; Head, Partner Development; Strand Life Sciences]
3:30- 4:30	Summary: Participant Interactions and Feedback
4:30- 5:00 pm	Valedictory and Certificate distribution

- **Venue:** Bioinformatics Lab, Faculty of Life and Allied Health Sciences. Ramaiah University of Applied Sciences. New BEL Road, MSR Nagar, Bengaluru - 560054.
- The registration fee includes access to the onsite training program, lunch, refreshments, and registration kit.
- Registration cannot be cancelled or transferred. No requests on this will be entertained.
- The maximum number of participants that may be accommodated is **25**.
- Participants are requested to arrange their own accommodation and transport.
- Participants need not bring their own laptops. All the analysis will be performed in computational systems available in the bioinformatics laboratory.
- If you have any queries related to this training program, please email us
  - prashanthi.bt.ls@msruas.ac.in
  - varuncn.ah.ls@msruas.ac.in