



# FROM READS TO VARIANTS A HANDS-ON TRAINING ON WHOLE GENOME SEQUENCING DATA ANALYSIS

## About the Training

- ✓ This hands-on training program provides a comprehensive approach to Whole Genome Sequencing (WGS) data analysis, covering the complete pipeline from raw sequencing reads to variant identification and functional interpretation.
- ✓ Participants will learn essential bioinformatics techniques, including quality control, read alignment, variant calling (SNVs, Indels, SVs, and CNVs), and annotation using industry-standard tools.

## Key Topics Covered

- ✓ Linux basics & NGS file formats (FASTQ, BAM, VCF)
- ✓ Quality control, preprocessing, and alignment (FastQC, BWA, Bowtie2)
- ✓ Variant calling for SNVs, Indels, Structural Variants (SVs), and CNVs (GATK, FreeBayes, Manta, CNVkit)
- ✓ Functional annotation & interpretation (VEP, ANNOVAR, KEGG, Reactome)



## Duration & Timing



Date: 10 Feb. to 28 Feb. 2025  
7.00 PM - 8:00 PM (IST)  
Monday to Friday  
Registration Closes: 09 Feb. 2025

## Who Should Attend?



Ideal for students, researchers, and professionals in bioinformatics, genomics, and computational biology.

## Eligibility



Students pursuing B.Sc., B.Tech., M.Sc., M.Tech., PhD in life sciences/computer science as well as Teaching and Industry Professionals.

## Benefits



- Certificates
- Access to Live Sessions
- Recordings
- Workshop Materials
- Online Technical Support Post Workshop

## More details



Visit: [www.cbirt.net/training](http://www.cbirt.net/training)

## Course Instructors



Dr. Shikha Mittal,  
Bioinformatics Trainer, CBIRT  
Dr. Tamanna Anwar, Training Organizer & CoFounder, CBIRT







**CENTRE OF  
BIOINFORMATICS  
RESEARCH &  
TECHNOLOGY**

**USING  
COMMAND-LINE  
& LINUX TOOLS**

# FROM READS TO VARIANTS A HANDS-ON TRAINING ON WHOLE GENOME SEQUENCING DATA ANALYSIS



## Training Registration

To register for the workshop, please submit the registration form along with your payment details. We accept multiple payment methods to ensure a convenient and secure registration process.



## Registration Process



**STUDENTS (UPTO PHD LEVEL)**

INR-2500



**POSTDOC/RESEARCH SCHOLARS**

INR-3000



**STAFF/FACULTY**

INR-3500



**INDUSTRY PROFESSIONALS**

INR-4000



**INTERNATIONAL PARTICIPANTS**

**STUDENTS  
(UPTO PHD LEVEL)**

USD 45

**POSTDOC/  
RESEARCH SCHOLARS**

USD 50

**STAFF/FACULTY**

USD 55

**INDUSTRY  
PROFESSIONALS**

USD 60



## Payment Methods

**SCAN QR CODE**



[centrefbioinformaticsresearch@cnrb](mailto:centrefbioinformaticsresearch@cnrb)

**UPI ID**



[PayPal.Me/cbirt1](https://www.paypal.com/india/mc/birt1)

**PAYPAL ID**



**ONLINE TRANSFER**

Account No. - 120023770387  
Bank Name - CANARA BANK  
IFSC Code - CNRB0002336  
Branch Code - 002336  
Branch - Kelangar, Aligarh

Payable to: Centre of Bioinformatics Research and Technology

**Contact Us**



+91 6398142849



[www.cbirt.net](http://www.cbirt.net)