



CENTRE OF  
BIOINFORMATICS  
RESEARCH &  
TECHNOLOGY

EARLY BIRD  
DISCOUNT  
OPEN TILL  
7<sup>TH</sup> JULY

USING  
COMMAND-LINE  
& LINUX TOOLS

# 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)



## Duration & Timing



- Date: 14 Jul. to 25 Jul. 2025 (2 Weeks)
- 7.00 PM - 8:00 PM (IST)
- Monday to Friday
- Registration Closes: 13 Jul. 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

Contact Us



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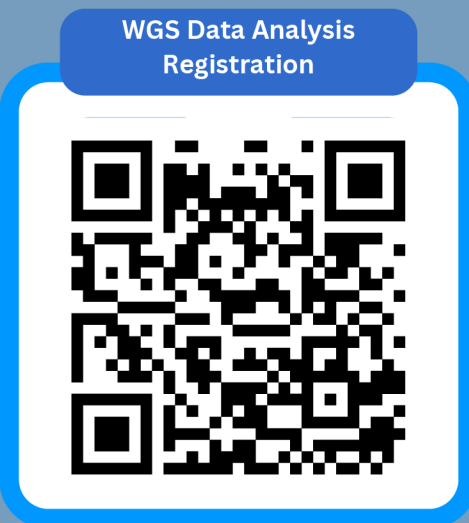
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FROM READS TO VARIANTS  
A HANDS-ON TRAINING  
ON WHOLE GENOME  
SEQUENCING DATA  
ANALYSIS

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-2499



POSTDOC/RESEARCH SCHOLARS  
INR-2999



STAFF/FACULTY  
INR-3499



INDUSTRY PROFESSIONALS  
INR-3999



INTERNATIONAL PARTICIPANTS

STUDENTS  
(UPTO PHD LEVEL)  
USD 40

POSTDOC/  
RESEARCH SCHOLARS  
USD 45

STAFF/FACULTY  
USD 50

INDUSTRY  
PROFESSIONALS  
USD 55

Early Bird Registration (Closes 7 <sup>th</sup> July, 2025)	Students (Upto PhD Level)	Postdoc/Research Scholars	STAFF/Faculty	Industry Professionals
Indian Participants	INR-2249.00	INR-2699.00	INR-3149.00	INR-3599
International Participants	USD 36	USD 42	USD 45	USD 50

Payment Methods

SCAN QR CODE



centreofbioinformaticsresearch@cnrb

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