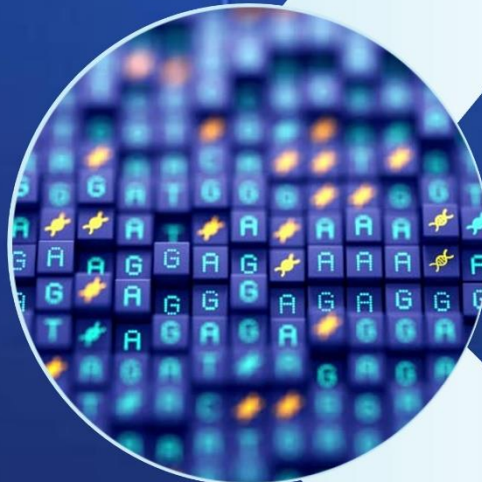




# A workshop with hands-on on **Basic of NGS Data Analysis**



**Organized by**

Department of Digital & Computational Oncology, TMC-ACTREC



**24-25 June, 2026**

## **Prerequisites**

- All participants must bring their laptops along with latest R, Rstudio, MobaXterm installed.
- Please register using <https://forms.gle/QPHC4SAvWiGbM6> on or before **05 June, 2026**.
- There are limited seats. Only selected participants will be communicated via email.
- There is minimal entry fee of Rs. 500/- for students and Rs. 1000/- for staffs, faculties, PIs and others.

## **PATRONS**

Dr. Sudeep Gupta, Director TMC

Dr. Pankaj Chaturvedi, Director ACTREC

## **Organizing Committee**

Dr. Swapnil Rane

Dr. Gourab Das, Secretary

Mr. Nikhil Gadewal

Dr. Tripti Bameta

Contact: [gourabdas0727@gmail.com](mailto:gourabdas0727@gmail.com)



Seminar Room, DCO, 1st floor, R. Chidambaram Shodhika (Archival building), ACTREC, Tata Memorial Centre, Navi Mumbai 410210.

## Tentative Program

No.	Topic	Time
<i>Day 1(24<sup>th</sup> June): WGS data analysis &amp; variants mining</i>		
<i>Welcome note and overview of workshop and its outcomes (SR)</i>		9.45 AM – 10 AM
<i>Lecture + Hands-on Session</i>		10 AM – 1 PM
1	Overview Clinical NGS methods (NP)	10 AM – 10:45 AM
2	Overview of NGS data, formats, tools (GD)	10:45 AM – 11.30 AM
<i>Tea Break</i>		11:30 AM -11:45 AM
3	Introducing variant discovery (GD)	11:45 AM – 1:00 PM
<i>Break</i>		1 PM – 2 PM
4	Mining Somatic mutations (GD)	2 PM – 3 PM
5	Exploring germline variants and its annotation (NG)	3 PM – 4 PM
<i>Tea Break</i>		4 PM - 4:15 PM
6	Basics of Genome-wide association studies (GD)	4:15 PM – 5 PM
7	Mutations as diagnostic and prognostics markers (OS)	5 PM – 5:45 PM
Faculties: Dept. of Digital and Computational Oncology; NP (Patkar Lab), OS (TMH)		
<i>Day 2(25<sup>th</sup> June): RNASeq data analysis and enrichment</i>		
<i>Lecture + Hands-on Session</i>		10 AM – 1 PM
1	Overview of Transcriptomics data, Expression mining and Normalization (NG)	10 AM – 11:30 AM
<i>Tea Break</i>		11:30 AM -11:45 AM
2	Differential Gene expression Analysis (GD)	11:45 AM – 1:15 PM
<i>Break</i>		1:15 PM – 2:15 PM
3	Basics of Pathway Enrichment Analysis (GD)	2:15 PM – 3 PM
4	Basics of Spatial Transcriptomics (TB)	3 PM – 4 PM
<i>Tea Break</i>		4 PM - 4:15 PM
5	Q&A session	4:15 PM – 4:30 PM
<i>Concluding remarks and vote of thanks</i>		4:45 PM – 5 PM
Faculties: Dept. of Digital and Computational Oncology		

SR: Swapnil Rane; NG: Nikhil Gadewal; NP: Nikhil Patkar; OS: Omshree Shetty; TB: Tripti Bameta;  
GD: Gourab Das