

# Training Programme in Exome data analysis

CCMB proposes a training course in analysis of whole exome data generated by Next Generation Sequencing (NGS). The course aims to generate human resources that are employment-ready for the requirements of industries and academia. The program targets students and employees from government labs/ Institutes, Industries, Hospitals, and Universities with a view to train them to be able to establish a set-up for NGS data analysis at their respective institutes. Candidates currently not enrolled in a course or not associated with industry / academia are also encouraged to apply.

<b>Duration</b>	:	1 week
<b>No. of seats</b>	:	10-12 Nos
<b>Education Qualifications</b>	:	M.Sc., B.Tech., B.V.Sc., MBBS (minimum)
<b>Age group</b>	:	21-45 years (relaxation for SC/ST/OBC as per GOI Rules)
<b>Date of Commencement</b>	:	31st Mar – 4 <sup>th</sup> April 2020
<b>Venue of the Course</b>	:	iHub; Annexe-II, CSIR-CCMB
<b>Course Fee</b>	:	Rs. 15,000/- (self/sponsored)
<b>Residential/non-residential</b>	:	Residential (accommodation provided)

**Sponsorship:** Established public/private sectors are welcome to sponsor candidates of their interest.

## Training Curriculum:

### **Primer on Linux (Hands-on)**

- Working with the command line: File and folder navigation (cd, mkdir, rm, ls, mv); Basic file handling (cat, more, wc); File manipulation (cut, awk, sed, grep, sort)

### **Whole exome analysis (Theory/Hands-on)**

- Quality check and raw data clean-up
- Mapping to reference genome
- Variant calling using the GATK best practices pipeline
- Variant annotation and filtering

## Salient Features of the Training:

- 25% theory and 75% hands-on sessions as per the course curriculum.
- Tutorials (personal attention) along with course manual
- Lectures are assisted with multimedia aids
- Evaluation by assignments and exams
- Certificates will be issued to the successful candidates