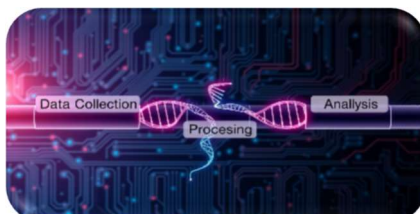
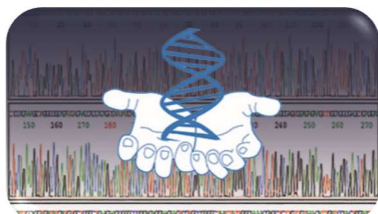


Skill Development Program On

“Next-Generation Sequencing and Bioinformatics: From Bench to Insight”



Dates: 22nd to 27th February 2027

The CSIR-Center for Cellular and Molecular Biology is organizing a hands-on training on “**Next-Generation Sequencing and Bioinformatics: From Bench to Insight**” (NGS-2) targeted to faculty members/researchers from universities/institutes/industries and interested individuals in the field of Life Sciences, Medical Sciences, Pharmaceutical Science & allied areas. This advanced-level workshop is intended to train participants in the principles and practical aspects of Next-Generation Sequencing (NGS) using Illumina and Oxford Nanopore platforms (**largely towards Whole genome Sequencing**). It will be supplemented with expert lectures, hands-on training in library preparation, sequencing run setup, and bioinformatics data analysis for comprehensive end-to-end learning.

No. of seats	:	20
Target Audience	:	Faculty/ Researcher from Academia/Industries/ Institutes
Minimum Qualification	:	Masters in any branch of Life Science/Allied areas
Mode of the Course	:	In-house training at CCMB, Hyderabad
Mode of selection	:	Application form & Statement of Purpose
Course Fee	:	Rs. 15000/- (includes Taxes)
Course Code	:	NGS-2
Application link	:	http://61.1.171.19/training_programs/sdp/
Accommodation	:	Available upon request & Subject to the availability

Training Curriculum:

- DNA/RNA quality control (QC) using Qubit and TapeStation, data interpretation, and sample preparation for sequencing.
- Illumina WGS library preparation, followed by library QC, sequencer setup and run demonstration.
- Oxford-Nanopore WGS library preparation, followed by flow cell loading, sequencer setup, and run demonstration.
- Raw data QC and adapter trimming, followed by sequence alignment, SAM format, variant calling, VCF, variant annotation, and introduction to long-read sequencing (LRS) data analysis.

Salient Features of the Training:

- Exposure to multiple sequencing platforms and comparison of short-read (Illumina) and long-read (Oxford-Nanopore) technologies.
- Expert lectures from Scientists, and experienced NGS facility staff on sequencing principles, emerging technologies, and real-world applications.
- Training in basic bioinformatics tools for quality assessment, read alignment, annotation, variant calling and data analysis.
- Exposure to laboratory safety regulations.
- Evaluation assignments and Trouble-shooting sessions.
- Certificate of participation will be issued to the participants.

Course Coordinator:

Dr. Subhajit Sen
Scientist - C
In-Charge - NGS Facility
CSIR-CCMB, Hyderabad

Program Coordinator:

Dr. Archana Bharadwaj Siva
Scientist - G
Nodal Scientist - Skill Development Program
CSIR-CCMB, Hyderabad.

Scan to Apply



For any assistance with the application process, please contact: sdp.ccmb@csir.res.in