

Report on
Hands-on training on “NGS Data Analysis with Special Reference to Transcriptomics and Metagenomics” from 16-20 October, 2023

A hands-on training program on “NGS Data Analysis with Special Reference to Transcriptomics and Metagenomics” was organized by Fish Genetics and Biotechnology Division in collaboration with the ABI unit of ICAR-CIFE, Mumbai from 16-20 October 2023. The training program was directed by Dr. Mukunda Goswami, Head, FGBD, co-directed by Dr. N.S. Nagpure, Principal Scientist and coordinated by Dr. M. P. Brahmane, Dr. A. Sonwane and Dr. Kiran D. Rasal. Ten participants (05 males and 05 females) have participated in this program. During the inaugural function, Dr. Mukunda Goswami, HoD, FGBD, ICAR-CIFE addressed the participants and highlighted the importance and applications of NGS tools. Dr. N. S. Nagpure gave an overview of the status of whole genome sequencing projects in fish and shared the experience regarding rohu and magur genome sequencing. In this training program, theory and practical sessions were conducted, which included basic sequence analysis, use of biological database, primer designing, etc. The training mainly covered high-throughput data analysis which includes pre-processing of NGS data, mapping and assembly, transcriptome and metagenome data analysis using ‘Geneious Prime software’. The pre- and post-training evaluation of trainees was performed, and participants achieved 70-80% improvement in their knowledge on transcriptome and metagenome sequence data analysis. The participants rated the training as excellent and appreciated the practical mode of training. During the valedictory function Dr. N.S. Nagpure, emphasized the significance of such training for developing expertise for DNA sequence analysis and integrating it into the aquaculture research.

	
Inaugural Session of Training Program	A view of On-going Lecture Session
	
Group Photograph of Participants and Faculty of Training Program	Lecture Session By Guest Faculty