

# Completion Report of CAFT on Gene Mining Approaches and *In Silico* Functional Analyses

3 – 23 Dec 2018

The ICAR sponsored CAFT program on 'Gene Mining Approaches and *In Silico* Functional Analyses' was held at FGB division, ICAR-CIFE, Mumbai during 3 – 23 Dec 2018. The Course Director for the 21 days training was Dr. Aparna Chaudhari, while the Course Coordinators were Dr. Gireesh Babu P. and Dr. A. Pavan Kumar. A total of 12 Assistant Professors/ Scientists (10 men and 2 women) from various ICAR institutes and SAUs attended the program. During the inaugural program, Dr. Gopal Krishna, Director, ICAR-CIFE and CAFT Director expressed happiness that the faculty of FGB Division has acquired the expertise to conduct a hands-on training program in the cutting edge area of high-throughput DNA sequence analysis for gene mining and validation. Interestingly, the participants came from Crop Sciences, Veterinary and Fisheries backgrounds and the course content could cater to all their respective expectations. Apart from lectures and practicals conducted by faculty members of the Institute, participants also benefitted from invited guest faculty. Dr. V. Mohindra (ICAR-NBFGR, Lucknow) shared her experiences with whole genome sequencing of rohu and hilsa using PacBio II NGS platform. Dr. Prakash Koringa (AAU, Anand) introduced the concept of metagenomics to the participants. Dr. Dinesh Kumar and Dr. M. A. Iquebal (ICAR-IASRI, N. Delhi) conducted a 2.5 day module on whole genome sequence data analysis, RAD sequence analysis and IPR. Dr. D. Vasudevan (ILS, Bhubaneswar) enlightened the participants on the aspects of protein structure determination by X-ray crystallography. Dr. R. Solanki (Illumina Application Specialist from Premas Life Sciences Pvt Ltd., interacted with the participants and explained the principle and work-flow of Illumina sequencing. The selection of resource persons and the content of lectures and practicals was highly appreciated by the participants who were very interactive and eager to acquire new knowledge and skills. The pre and post training evaluation of the participants showed 40 – 50% improvement in their knowledge. During valedictory program, the participants had expressed complete satisfaction with all aspects of the training and rated the program as excellent. Dr. B.K. Das, Director, CIFRI and chief guest of the valedictory function emphasized on the importance of trained manpower in the emerging area of 'omics' technologies. Dr. Gopal Krishna, Director, CIFE congratulated the coordinators for successful conduct of the training and for maintaining high standards of CIFE, Mumbai.