## Report of CAFT

on

## 'Development and Application of Vaccines for Fish Aquaculture' 04-13 February 2019.

Organized by Aquatic environment and Health Management Division ICAR-Central Institute of Fisheries Education, Mumbai-400061

ICAR-CIFE organized a 'Training Program on 'Development and Application of Vaccines for Fish Aquaculture' under the ICAR-sponsored Centre of Advanced Faculty Training (CAFT), during 4-13 February 2019. A total of 11 participants from various ICAR institutes, SAUs and Department of Fisheries attended the programme. The programme had been designed to provide a complete theoretical and practical exposure to immune system of fish and shellfish, overview on vaccines, setting up of vaccine experiments starting from bacterial characterization, selection of fish stock, procedure of bacterial inactivation, dose calculation, ELISA test for sero-screening, gene expression for molecular screening, and RPS calculation. Practical exposure to different methods of vaccine delivery through immersion, feed and nanoparticle had also been covered. Theoretical aspects of in vitro studies for cytotoxicity, bioinformatic approaches and immunostimulants have also been provided to the trainees. Moreover, two most important aspects of vaccine research viz regulatory issues in vaccine development and administration and vaccine failure were also included in the training. One guest lecture and demonstration on foldscope (a customized microscope) by Dr. Irfan Ahmed, Professor and Head Division of Fish Genetics and Biotechnology (SKUAST.K) was arranged during the training. The internal resource persons included, Dr. Aparna Chaudhari, Head, FGB Division, Dr. Kishore Krishnani, Dr. K. Pani Prasad, Dr. R.P. Raman, Dr. Gaytri Tripathi, Principal Scientists, AEHM division; Dr. Rupam Sharma, Principal Scientist, Dr. Gireesh Babu, Dr. Mujahid Kahn, Scientists, FGB Division; Dr. Ashuthosh Deo, Senior Scientist, FNBT Division; Dr. Suarav Kumar, Scientist, and Dr. Nalini Poojary, Chief Technical Officer, AEHM division. Research Fellows and PhD students of AEHM division assisted the faculty in the successful conduct of practical sessions. The training programme was Co-ordinated by Dr. Megha K Bedekar, Senior Scientist, Dr. Kundan Kumar and Mrs Jeena K., Scientists. Dr. K V Rajendran, Principal Scientist & Head, Aquatic Environment and Health Management Division was the Course Director of the training. Pre-and postevaluation of the training was conducted and a significant improvement was achieved in terms of enhancing the theoretical and practical skills of the trainees. In the concluding session, the participants provided a very positive feedback on the overall content and delivery of the programme. Director, ICAR-CIFE & Programme Director, Dr. Gopal Krishna distributed the certificates to the participants in the valedictory function. He expressed his satisfaction and happiness over the successful conduct of the raining programme.



Group photograph of the Trainees along with Director, ICAR-CIFE, Members of the Faculty and other Resource persons





Valedictory function- Distribution of certificate by the Director, ICAR-CIFE, Dr. Gopal Krishna











Glimpses of the practical sessions