



ICAR- CENTRAL INSTITUTE OF FISHERIES EDUCATION

(University under Sec. 3 of UGC Act, 1956)

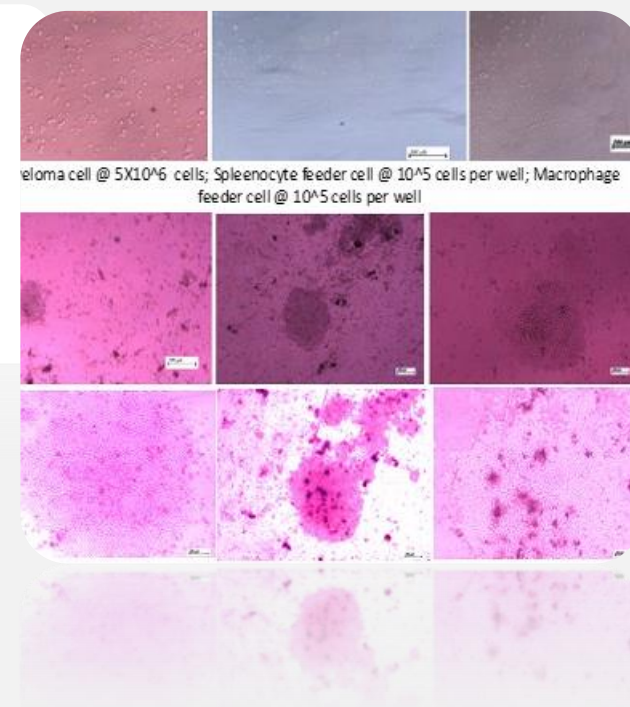
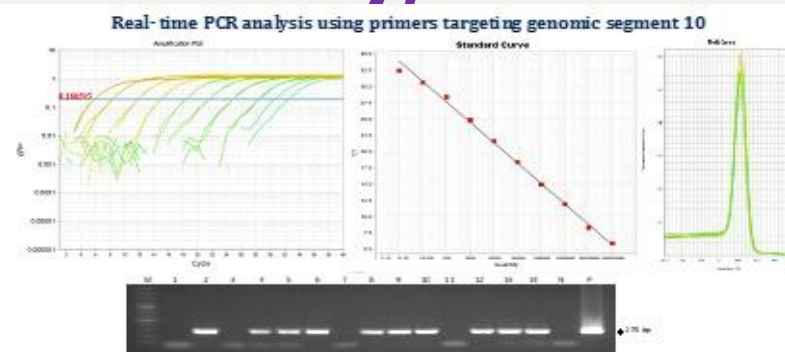
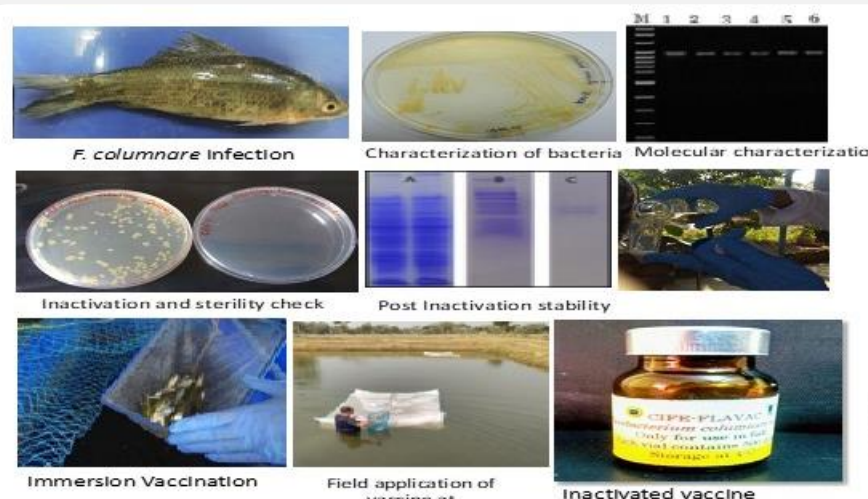
Panch Marg, Off Yari Road, Versova, Andheri (W), Mumbai

www.cife.edu.in



Centre for Advanced Faculty Training in Fisheries Science **CURRENT APPROACHES AND NEW STRATEGIES IN AQUATIC ANIMAL DISEASE DIAGNOSTICS AND VACCINATION**

8-28 January, 2025



Programme Director

Dr. C.N. Ravishankar

Director/Vice-Chancellor

Programme Co-Director

Dr. N.P. Sahu

Joint Director

Course Director

Dr. Megha K. Bedekar

Head, AEHM Division

Course Coordinators

Dr. Jeena K, Scientist, AEHM Division

Dr. Kundan Kumar, Senior Scientist, AEHM Division

Last date for
submission of
application

30.12. 2024

**DATES TO
REMEMBER**

Communication
of acceptance

31.12. 2024

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CENTRE FOR ADVANCED FACULTY TRAINING (CAFT) IN FISHERIES SCIENCE

CURRENT APPROACHES AND NEW STRATEGIES IN AQUATIC ANIMAL DISEASE DIAGNOSTICS AND VACCINATION

8-28 January, 2025

Genesis of the Training

Health and disease management in aquaculture is essential for maintaining the sustainability, productivity, and profitability of fish farming. Overall, a holistic, integrated approach to disease and health management in aquaculture combining preventive measures, early detection, and responsible farming practices, is essential for reducing disease outbreaks, improving fish welfare, and ensuring food security. Early detection, precision of diagnostics, and disease prevention strategies are inevitable in aquaculture systems. Traditional diagnostic methods like microscopy and culturing are being complemented by advanced molecular techniques, including Polymerase Chain Reaction (PCR), next-generation sequencing (NGS), and metagenomics, which enable faster and more accurate identification of pathogens. Vaccination is the major player in disease prevention; researchers at present are moving beyond conventional vaccines to explore DNA, mRNA, and viral-vectored vaccines, which offer broader protection and can be tailored for specific pathogens. Additionally, immune modulation through adjuvants/immunostimulants etc. and their novel delivery methods are being studied to improve vaccine efficacy and fish health. Emerging technologies aim to improve the sustainability of aquaculture by preventing diseases, reducing antibiotic use, and ensuring the health of aquatic ecosystems. There is a greater need for trained manpower in fish health management. With this background, the Training Programme is being organized at the ICAR-Central Institute of Fisheries Education, Versova, Mumbai – 400 061.

Topics

- Evolution of diagnostics: Presumptive to confirmatory
- Molecular diagnostics: development and applications
- CRISPR based diagnostics: Basics and applications
- Holistic Approaches in Precision Diagnosis
- Understanding host pathogen interaction mechanisms for vaccine development
- Fish Vaccines: Molecular players in vaccination mechanisms
- Vaccine development: Basics to application
- Vaccine efficacy and quality control
- Regulatory Affairs in diagnostics and vaccines



Eligibility

Assistant Professors and above/Scientists/Extension Personnel/Researchers who are employed in SAUs/CAU/ICAR Institutes/Agriculture faculty of BHU/AMU/ViswaBharti/KVKs are eligible for the training programme. The applications must be forwarded by the Head of the Institution. All the applications duly forwarded should be sent to the Course Coordinator (email mentioned) on or before 30.12.2024. Eligible candidates may upload their application on the portal: cbp.icar.gov.in

Intake Capacity

A total of 25 participants only will be selected after screening the applications

General Information

To and fro II tier AC train fare, by the shortest route, will be reimbursed by the organizers. DA will be paid only during the journey period, provided they produce a certificate from the parent organization that they are not being paid TA and DA. Free boarding and lodging arrangements will be made in CIFE Campus.

About Us

ICAR- Central Institute of Fisheries Education (CIFE), country's premier fisheries education and training Institute are pioneers in research and technology development. The Institute has served the cause of science and society with distinction through high quality human resources, high-end research in both basic and applied aspects, generation of appropriate technologies and their dissemination. The Institute organizes several training programs for the benefit of researchers, faculty and farmers under various schemes. CIFE plays a major role in disseminating the advances in science and technology. Aquatic Environment and Health Management Division of ICAR-CIFE have an ISO/IEC17025:2017 accredited disease diagnosis platform and are leaders in fish vaccine development. The institute is about 10 Km from the airport and 20 Km from Dadar Railway station. The climate during January is pleasant, however the participants may carry slight warm clothing.

Fee: There is no training fee for the programme