

## **Application Form**

Short Term Training Programme  
On  
**Development and Characterization of Fish  
Cell Lines for Biotechnological Applications**  
December, 2017

Name.....

Designation.....

Qualification.....

Address.....

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Mobile.....

E-mail.....

Research Experience .....

.....

Current Research Area.....

.....

Signature

Date

Recommendation of the Competent Authority

Signature with seal

## **Programme Director**

**Dr. Gopal Krishna**

Director

ICAR-CIFE, Off Yari Road, Mumbai-61  
E-mail: director@cife.edu.in

## **Course Director**

**Dr. Aparna Chaudhari**

Principal Scientist & Head  
Fish Genetics & Biotechnology Division  
E-mail: aparnac@cife.edu.in

## **Course Coordinators**

**Dr. M Goswami**

Principal Scientist  
Fish Genetics & Biotechnology Division  
E-mail: mukunda@cife.edu.in

&

**Dr. Gayatri Tripathi**

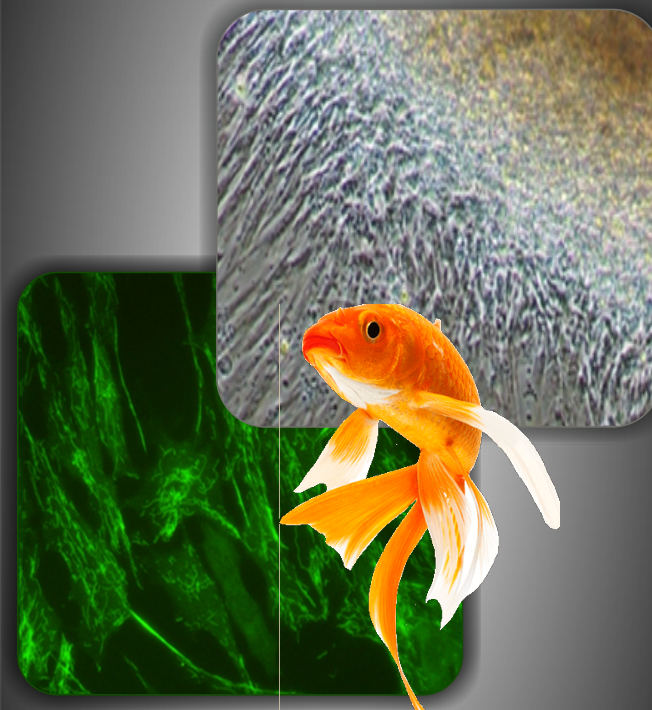
Principal Scientist  
Aquatic Environment & Health Management  
Division  
E-mail: gayatrit@cife.edu.in

All correspondence should be made to **Dr. Aparna Chaudhari**, Principal Scientist & Head, Fish Genetics Biotechnology Division, E-mail: aparnac@cife.edu.in or **Dr. Mukunda Goswami**, Principal Scientist, ICAR-Central Institute of Fisheries Education, Off Yari Road, Panch Marg, Versova, Mumbai-40 0061.

## **ICAR Sponsored Short Term Training Programme on**

## **Development and Characterization of Fish Cell Lines for Biotechnological Applications**

December 14<sup>th</sup>-23<sup>rd</sup>, 2017



**ICAR-Central Institute of Fisheries Education  
(Deemed University)**

Panch Marg, Off Yari Road, Panch Marg, Mumbai-61  
Tel: 022 26361446/7/8  
www.cife.edu.in

## Introduction

Fish cell lines offer many advantages over mammalian cell lines and are becoming the first choice of researchers for *in vitro* biological research. They are being increasingly used in virological studies as there are repeated reports of disease outbreaks in aquaculture. Fish cell lines are used as effective, fast and economical *in vitro* tools for screening toxicity of chemicals and environmental samples. Fish cell lines are also important for conserving germplasm for posterity in the current scenario of climate change and other threats to biodiversity. Hence, development of cell lines from commercial and endangered fish species would be of great importance for aquaculture, environmental biology, biotechnological applications as well as conservation. An increasing trend in fish cell line development from a wide variety of tissues covering freshwater, brackish water and marine water fish species has been observed in India. More than 50 fish cell lines have been developed in the country and they are being maintained in a recently established Department of Biotechnology, Govt. of India funded National Repository of Fish Cell Lines (NRFC) at National Bureau of Fish Genetic Resources, Lucknow.

The scheduled training programme on Development and Characterization of Fish Cell Lines for Biotechnological Applications during 14<sup>th</sup> to 23<sup>rd</sup> Dec., 2017 is going to be conducted to train researchers in the area of development, characterization and application of fish cell lines for genetic conservation and biotechnological research.

## Course Contents

- Basic understanding of cell culture & biology of cultured cells
- Good laboratory practice for cell culture
- Basic techniques for development of cell line
- Detection of contamination & its control
- Characterization of cell lines
- Application of fish cell lines
- Maintenance & cryo-storage of fish cell lines

## Intake Capacity

A total of 25 participants will be selected based on their research relevance and experience pertaining to the training programme.

## Eligibility

Assistant Professor and above / Scientist/ Researchers who are employed in SAU / CAU /ICAR institutes are eligible for the training programme.

## How to apply

Applicants need to apply online using the CBP portal ICAR as per the following steps

- Log on to <http://cbp.icar.gov.in/applyDetails.aspx>
- Fill up the online application following the on screen guidelines.
- Take a printout of the filled-in-application and get it approved by the competent authority of your organization.
- Upload the scanned copy of approved application at the CBP portal.

However, in case applicants are not able to submit online application, application in the prescribed format through proper channel may directly be sent to Dr. Aparna Chaudhari, Course Director & Head, Fish Genetics & Biotechnology Division, ICAR-Central Institute of Fisheries Education, Off Yari Road, Panch Marg, Versova, Mumbai-40 0061, E-mail: [aparna@cife.edu.in](mailto:aparna@cife.edu.in) or [mukugoswami@gmail.com](mailto:mukugoswami@gmail.com) (Dr. Mukunda Goswami, Coordinator & Principal Scientist, ICAR-Central Institute of Fisheries Education, Off Yari Road, Panch Marg, Versova, Mumbai - 40 0061).

## Registration Fee

There is no registration fee for the selected candidates.

## Travel & Logistics

To and fro II tier train fare by the shortest route from the respective institute to CIFE, Mumbai will be paid as per the ICAR norms. Travel Allowance (TA) will be paid on submission of the tickets as well as certificate from the parent organization that the participant is not being paid TA. For participants who choose to travel by air, the reimbursement will be limited to AC 2Tier train fare only if they travel by Air India. Travel by private carriers will not be reimbursed at all. In case of road travel, only State Transport Bus fare will be reimbursed. Free boarding and lodging will be provided to the participants in CIFE guest house as per ICAR approved norms.

## About ICAR-CIFE

ICAR-CIFE (Deemed University), Mumbai is the only national fisheries university in the country. It is a premier academic institution dedicated towards promotion of world class higher fisheries education and it has been serving the nation through generation of high quality human resources, high end research in the cutting edge areas of fisheries science and generation of appropriate technologies and their dissemination. CIFE, Mumbai has global linkages and it has been playing significant role in fisheries education of African and SE Asian countries. The institute is located about 10 km from the airport and 20 km from Dadar Railway Terminus and 1 km from Versova Metro Railway Station. Mumbai is well connected by air, rail and road with all the major cities of India. The weather in Mumbai continues to be mild in the months of December and January when the temperature in Mumbai jiggles in between 12 °C degree and 17 °C.

## Fish Genetics and Biotechnology Division

The division has been working in the area of fish molecular genetics and breeding, biotechnology for the last two decades. The division has also facilitated cell culture work in the central cell culture facility of the institute.

## Dates to remember

Last date of submission of application: 15<sup>th</sup> Nov., 17  
Communication to Selected Participant: 20<sup>th</sup> Nov., 17  
Confirmation by the Selected Participant: 27<sup>th</sup> Nov., 17