Centre of Advanced Faculty Training in Fisheries Science

Training Programme
on

Gene Mining Approaches and In Silico Functional Analyses

3rd to 23rd December, 2018

ICAR-Central Institute of Fisheries Education
Off Yari Road, Panch Marg, Versova, Mumbai -400 061

Application

Name:

Designation:

Research experience:

Address:

Telephone no:

Fax no.:

E. mail:

Justification for attending the programme:

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Signature of the Candidate:

Comments & Signature of the Forwarding Authority

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Programme Director

Dr. Gopal Krishna
Director/Vice-Chancellor

Course Director

Dr. Aparna Chaudhari
Head, FGB Division

Course Coordinators

Dr. Gireesh Babu P.
Scientist, FGB Division
Dr. Annam Pavan Kumar
Scientist, FGB Division

Dates to remember
Last date for submission of application
20th November, 2018
Communication of acceptance
23rd November, 2018

All future correspondence may kindly be directed to

Dr. Aparna Chaudhari
Principal Scientist & Head
ICAR-Central Institute of Fisheries Education
Off Panch Marg, Versova, Mumbai - 400 061, India
Fax. 022-26361573
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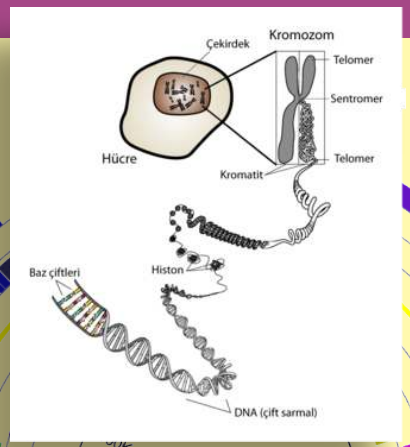
CAFT Training Programme on

Gene Mining Approaches and *In Silico* Functional Analyses

3rd to 23rd December 2018



CAFT in Fisheries Science

ICAR-Central Institute of Fisheries Education
(Deemed University, ICAR)
Off Yari Road, Panch Marg,
Versova, Mumbai- 400 061

Introduction

One of the most important applications of molecular biology tools and techniques has been gene mining, and up till recently, candidate gene approach was the method of choice. While this method is employed for validation, the growing quest for novel genes with known and innovative functions for various industrial and medical applications has fueled the development of new high-throughput screening strategies for gene mining and functional characterization. These strategies utilize high-throughput sequencing technologies that provide insights into the secrets of life by monitoring the activities of thousands of genes, simultaneously. Large amounts of genome, exome and transcriptome data are being generated and several bioinformatics tools are now available to predict gene sequences. Identification of differentially expressed genes and function prediction of novel genes have been actively researched areas for a host of applications including characterization of the quantitative trait loci/ genes. Agricultural scientists and teachers, particularly those researching in fisheries and aquaculture need to recognize the scope of these technologies in order to design research proposals aimed at realizing the full potential of cutting edge biotechnology and bioinformatics tools.

The training programme on "Gene Mining Approaches and In Silico Functional Analyses" is designed to provide hands-on training in both classical and high throughput sequence-based techniques for the identification of target gene sequences for various applications. The training is being organized at the ICAR-Central Institute of Fisheries Education, Versova, Mumbai - 400 061, during 11-20 February 2018.

Course contents

- Candidate gene identification and amplification
- Full-length sequencing of candidate genes by RACE PCR
- Expression analysis and absolute quantification by real-time PCR
- Gene cloning and recombinant protein expression
- Global gene expression analysis
- Transcriptome analysis and identification of differentially expressed genes
- Protein modeling and docking studies on identified candidate genes

About the Institute

ICAR-Central Institute of Fisheries Education (ICAR-CIFE), the only National University for fisheries science in India, was established in 1961 with the help of UNDP to promote fisheries education in the country. By 1979, the administrative control of CIFE was transferred from Ministry of Agriculture, Govt. of India to the Indian Council of Agricultural Research. Recognizing its role in human resource development, CIFE was bestowed with the status of Deemed-to-be-University by the University Grants Commission in 1989. Subsequently, the scope and mandate have been widened to include education as well as research. CIFE has made its mark in delivering quality fisheries education and the academic programmes offered by CIFE were accredited by ICAR. CIFE, since then, has been providing a rich curriculum mixed with a wide range of extracurricular activities for the holistic development of fisheries professionals. CIFE continues to be a global player in fisheries academics and research by creating globally competent students and faculty through world class education.

How to reach

The Institute is located about 10 km away from the domestic and international airports and 20 kms from Dadar Railway Terminus. Mumbai, the financial capital or India, is well connected by air, rail and road with all major cities of India. The climate is extremely pleasant during December and trainees are advised to carry light warm clothing.

How and who can apply

Faculty, Researchers, Teachers, Scientists of Fisheries and allied sciences and those having interest in 'Gene mining' and working in SAUs/CAUs/ICAR Institutes/Agriculture faculty of BHU/AMU/Viswa Bharti not below the rank of Scientist/Assistant Professor can apply in the prescribed format for the programme. The applications must be forwarded by the respective Head of the Institution. All the applications duly forwarded should be sent on or before 1st November, 2018 to the Course Director, Gene Mining Approaches and In Silico Functional Analyses, ICAR-Central Institute of Fisheries Education, Panch Marg, Off Yari Road, Versova, Mumbai - 400 061.

Intake Capacity

A total of 25 participants only will be selected after screening.

Travel Allowance

To and fro II tier AC train fare, by the shortest route, will be reimbursed by the organizers. In case of travel by air, reimbursement shall be restricted to admissible train fare only if the journey is made by Air India or code sharing flights. 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.

Boarding and Lodging

Accommodation will be arranged for the participants free of cost in the institute guest house for the period of their stay during the course. Wholesome food will be provided to all the outside participants. Local participants will be provided with minimum hospitality with lunch, tea, coffee etc. as per the ICAR norms. Due to restricted availability of accommodation, participants are advised not to bring their family members.

Course Fee

There is no training fee for the programme for eligible candidates.