Boarding and lodging

Lodging and boarding facilities will be provided free of cost to the participants at CMFRI guest house. Participants should not bring any family members as the accommodation is for the trainees only. No DA will be paid by the organizers to the participants.

How to Apply for the programme

- Interested candidates can register and apply online through "Capacity" Building Programme" (CBP) portal by the following steps,
- Go to the website https://cbp.icar.gov.in/ or click the "Capacity Building" Programme" link under https://www.icar.org.in/
- Login using your user ID and password. To create user ID use "Create" New Account" link. After login, click on "Participate in Training" link and fill the Proforma.
- After filling the online application the applicants have to take a print out of the application form and get it approved by the competent authority of the organization.
- Upload the scanned copy of the approved application in the CBP portal.
- The hard copy of the completed application form along with demand draft for R. 50/- drawn in favour of ICAR Unit-CMFRI payable at Kochi is to be submitted to the course director through post.
- A confirmation letter will be sent to the participant via email. The participants may proceed to the programme after receiving the confirmation letter.

Contact address

Dr. A. Gopalakrishnan

Director **ICAR-Central Marine Fisheries Research Institute** Post Box No.1603, Ernakulam North P.O. Kochi - 682 018, Kerala Ph. No. 0484-2394867 Fax No. 0484-2394909 E-mail: director@cmfri.org.in

Applications may be sent to:

Dr. Sandhya Sukumaran

Course Director & Senior Scientist, Marine Biotechnology Division, **ICAR-Central Marine Fisheries Research Institute** Ernakulam North P.O., Kochi, Kerala, India - 682018 Email: sandhyasukumarancmfri@gmail.com Mobile: +91-9495614119 Office: +91-484-2394867; Ext. No.388 Fax no: +91-484-2394909/2396685

Dr. P. Vijayagopal

Head and Principal Scientist Marine Biotechnology Division **ICAR-Central Marine Fisheries Research Institute** Post Box No. 1603 Ernakulam North P.O., Kochi-682 018, Phone: 0484-2394867 09496280584 E-mail:vgcochin@hotmail.com

Dr. Sumithra T.G.

Course Coordinator & Scientist Marine Biotechnology Division ICAR-Central Marine Fisheries Research Institute. Ernakulam North P.O., Kochi, Kerala, India – 682018 Mobile : +91- 9495614119 Office: +91-484-2394867; Ext. No.388 Fax no: +91-484-2394909/2396685



Application Form for ICAR Short Course on Application of advanced molecular methods in marine fishery resource management, conservation and sustainable mariculture (24th October- 03rd November 2018)

Full name (in Block letters): Designation:	
Present employer & Address:	
Address for communication	
E-mail Address:	
Mobile No:	
Sex (Male/Female):	

Present employer & Address:	
	•••••••••••••••••••••••••••••••••••••••
E-mail Address:	
	Date of Birth:
Sex (Male/Female):	

Present employer & Address:	
Mobile No:	Date of Birth:
Sex (Male/Female):	

Teaching/ Research/ Professional experience (Mention posts held during last 5 years and number of publications):

Mention if you have participated in any Training Programme, Seminar/ Summer/Winter School, Short Course, etc. during the previous years under ICAR/ Other organizations:

Demand draft drawn in favour of ICAR Unit-CMFRI .Dated: For Rs. 50/- (Non Refundable) as registration fee, Payable at Ernakulam

Examination passed	Subjects main/ Subsidiary	Year	Division	University/ Institution
Degree				
Post Graduate				
Doctoral				
Others				

Date: Place:

Countersigned Sponsoring Authority (Director/ Dean/ Head of Regional Station, etc.

(Signature of the Applicant)

ICAR Short Course ow **Application of Advanced Molecular Methods** in Marine Fishery Resource Management, Conservation and Sustainable Mariculture

24th October - 3rd November 2018









Organised by **ICAR-Central Marine Fisheries Research Institute**

Post Box No. 1603, Ernakulam North P.O., Kochi-682 018 Kerala, India



ICAR- Central Marine Fisheries Research Institute is a premier organization carrying out research activities in prioritized areas like marine fishery resource management, marine biodiversity, mariculture and marine biotechnology. The institute over the course of 71 years of active research and extension has emerged as one of the leading marine fisheries research institutes in the world addressing the concerns of tropical marine fishery. Marine Biotechnology Division of CMFRI caters to the needs with respect to applications of biotechnological tools towards fishery resource management and mariculture. Research on fish genetics, molecular taxonomy, population genomics, functional genomics, fish nutrition, nutrigenomics, fish pathology, microbiology and bioprospecting is being carried out by the division on a priority basis.

About the Short course

Molecular techniques are revolutionizing the way we perceived science especially due to the precise nature of the information generated out of such investigations and the rapidity with which such knowledge is generated. Application of advanced molecular methods in fishery research is the need of the hour as many problems faced in marine fishery management and governance can be sorted out based on knowledge generated using molecular tools. Genomic information generated using Next Generation Sequencing Techniques may be very vital in understanding the climatic adaptations at multiple levels of organization mainly genome, individual and population. Genetic and genomic tools are increasingly being applied to address relevant

issues related to conservation and sustainable management of resources. Functional genomics investigations and selective breeding programmes provide impetus to traditional mariculture activities, thereby ensuring sustainability of mariculture ventures. The short course is aimed at providing exposure to various applications of molecular methods in fisheries resource management, conservation and mariculture. The content of the short course is given below.

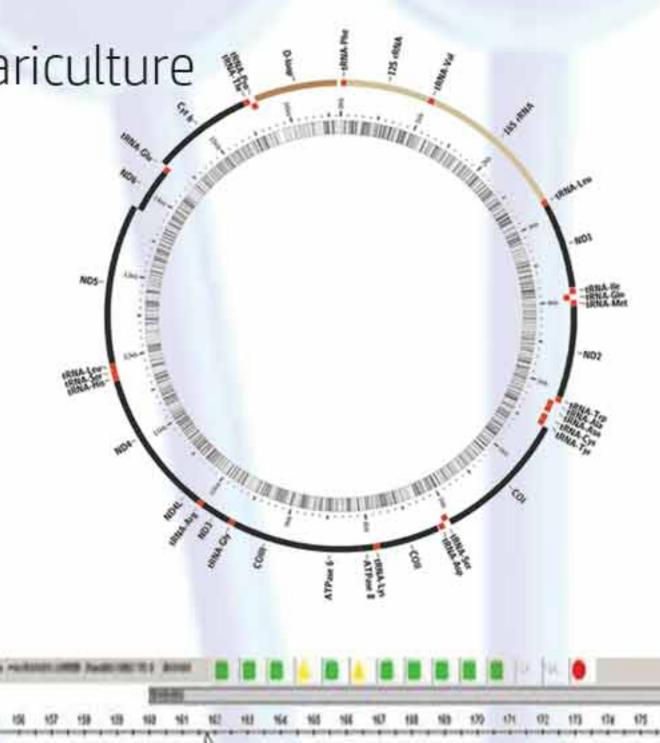
- Molecular tools for marine biodiversity characterization barcoding
- Molecular tools for stock identification in fisheries population genetics
- Functional genomics in fisheries and mariculture
- Population genomics in fisheries
- Metabarcoding Environmental DNA based estimation of marine fish stocks
- Software packages used in genetics and genomics – demonstration-Hands on exercise
- Next Generation Sequencing
- Metagenomics
- Transcriptomics

Eligibility

- Assistant Professor or Scientist or an equivalent rank
- The number of participants will be limited to 25.
- The selection of participants will be based on eligibility criteria and is entirely a matter of discretion of the competent authority
- A formal letter of confirmation of selection will be sent via email to the selected participants within one week of the last day of application.

Duration

Ten days ; 24th October 2018 – 3rd November 2018 Participants may arrive by the evening of 23rd October 2018 and leave CMFRI after 5:00 PM on 3rd November 2018.



Scientists and faculty members of ICAR and SAUs not below the rank of

Important Dates

Venue

Marine Biotechnology Division **ICAR-Central Marine Fisheries Research Institute** Ernakulam North P.O. Kochi, Kerala, India – 682018

Nomination and Course fee

There is no course fee, but a non refundable registration fee of Rs. 50/-(Rupees Fifty only) is to be remitted as demand draft drawn in favour of ICAR Unit-CMFRI payable at Kochi along with hard copy of the application form.

Travel

Kochi is well connected by air, road and rail. ICAR, CMFRI is located near Ernakulam High Court.

Travelling Allowance

Participants will be paid onward and return fare for journey performed by the shortest route by road or rail. The payment will be restricted to maximum of AC II tier train fare. Even if any participant chooses to travel by Air, the claim shall be restricted to AC II tier train fare, provided they travel by Air India and book the tickets with ICAR Code (095) and on Air India website only.

Last Date for receipt of application **September 15, 2018**

Intimation to selected applicants **September 20, 2018**

Confirmation by the applicants **September 25, 2018**