DBT SPONSORED

NATIONAL TRAINING IN

MOLECULAR BIOLOGY & BIOTECHNOLOGY FOR FISHERIES PROFESSIONALS

ICAR-CIFE (Nodal Centre)



National Coordinator Dr. Gopal Krishna

Course Coordinators

ICAR-CIFE

Dr. Aparna Chaudhari

ICAR-CIFA

Dr. Jitendra Sundaray

ICAR-CMFRI

Dr. P. Vijayagopal





Background

Molecular biology and biotechnology are advancing rapidly and new tools and techniques are becoming available to researchers. It is essential to update skills in these cutting edge areas for designing more effective research projects of both basic and applied nature. DBT has sponsored a 3 month national training program to promote development of trained human resource for application of molecular tools to research problems in fisheries and aquaculture. At present, largely traditional methodologies are being used in the fisheries sector and only a few scientists are applying molecular approaches. The emphasis is on enhancing capabilities of research personnel already employed in fisheries institutes, universities and colleges or even in traditional universities and colleges, but working in the area of marine biology/ fisheries/ aquaculture. The course content is designed to cover all kinds of applications of molecular methods in fisheries. The emphasis will be on hands-on experience and skill development of the participants. Various advanced molecular techniques (like Real-time PCR, RNAi, Microinjection, 2D gel electrophoresis, etc.) will be demonstrated to the candidates and they will be expected to take up independent short term projects during the training period. Seminars and group discussions will be organized on selected topics. Guest faculty from various prestigious institutions will also be invited to share their experiences. The project includes a component of post-training mentoring to help participants prepare project proposals for funding. The training program will be conducted simultaneously at 3 fisheries institutes (ICAR-CIFE, ICAR-CIFA & ICAR-CMFRI).

Course contents

The 3 months training program comprises 45 days of theory classes with hands-on practical sessions and 45 days of research work. All basic molecular biology and genetic engineering and molecular genetics techniques are included in the course along with their applications in various aspects of aquaculture and fisheries. Each institute offers specialized modules based on areas of expertise. Participants are also expected to prepare research proposals and reports in DBT prescribed formats to familiarize them with the procedure of seeking extramural funding from DBT or other funding agencies.

Program dates:

Batch IV - CIFA & CMFRI: 15th Feb to 13th May 2017;

CIFE: 7th Mar to 6th Jun 2017

Batch V - CIFA, CMFRI and CIFE: 01.11.2017 to 30.01.2018

Eligibility

Assistant Professors/ Scientists and above/ Post-doctoral fellows employed in SAUs, CAUs, Fisheries Colleges, research institutes, traditional universities and engaged in research and teaching in the area of aquaculture, fisheries, marine biology, aquatic biology and allied disciplines.

Travel, boarding and lodging

The participants are allowed to travel by their entitled class (not above II AC train fare) or by state bus. Actual TA will be reimbursed on production of a certificate and tickets by the participants. Free boarding and lodging will be provided only to the participants within the budgetary provisions as per ICAR norms. No accompanying persons will be allowed.



Selection of participants

The total number of participants will be 10 at each collaborating institute. Selection letters will be communicated 20 days prior to the start date of the program subject to receiving duly forwarded applications.

Course fee

This program is completely sponsored by Department of Biotechnology, Govt. of India.

All future correspondence may kindly be directed to the address below Director

ICAR-Central Institute of Fisheries Education

Panch Marg, Off Yari Road, Mumbai- 400 061, India

Email: ICAR-CIFE: <u>director@cife.edu.in</u>; <u>dbthrd@cife.edu.in</u>,

ICAR-CIFA: dbthrdcifa@gmail.com ICAR-CMFRI: vgcochin@hotmail.com





ICAR-CIFE Mumbai (Nodal Centre)

The Central Institute of Fisheries Education (CIFE) located at Mumbai, Maharashtra is a premier institution under ICAR that promotes high quality fisheries research and education in India and Afro-Asian countries. Being a deemed university recognized by UGC, ICAR-CIFE offers MFSc and PhD programs in eleven specialized disciplines. This institution has made its mark in India's knowledge driven economy by generating high quality human resource through a rich curriculum mixed with a wide range of extracurricular activities for holistic development of fisheries professionals. The institute is also for a Centre for Advanced Faculty Training in Fisheries. The specialization offered at this centre is 'Molecular Biology, Genomics & Transgenics'.



ICAR-CIFA Bhubaneshwar

The Central Institute of Freshwater Aquaculture located at Kausalyaganga, Odisha, is a premier research Institute on freshwater aquaculture in the country. It is dedicated to making Indian freshwater aquaculture globally competitive through eco-friendly and economically viable fish production systems. The institute is mandated to enhance production efficiencies through biotechnological tools and has a strong research group working in the area of molecular and quantitative genetics. The genetically improved rohu, Jayanti, is one of the star accomplishments of this institute. The specialization offered at this centre is 'Aquaculture Biotechnology, Genomics & Molecular Breeding'.



ICAR-CMFRI

The Central Marine Fisheries Research Institute located at Kochi, Kerala is a leading tropical marine fisheries research institute in the world. Keeping in tune with today's research advancements the institute has a strong research team applying biotechnological tools for mapping biodiversity of marine resources, bioprospecting for bioactive marine products and developing viable farm and hatchery technologies for shrimp, edible oyster, mussel, clam and seaweeds and marine pearls. CMFRI is also addressing climate change issues affecting coastal habitats and fishers. The institute is well equipped with state of art laboratories and infrastructure. The specialization offered at this centre is 'Marine Biotechnology'.