### ICAR Sponsored Short Course on Molecular Immunology of Fish and Shellfish 15-24 March 2017

Organised by ICAR-Central Institute of Fisheries Education Mumbai-400061

#### **Application Form**

Name of the candidate:
Designation:
Present employer:
Qualification:
Qualification: Age: (Yrs) Gender: Male/Female Address for correspondence:
Email:
Mobile No:
Fax:
Teaching/Research/Professional experience during last 5 years:
Mention if you have participated in any summer/winter school/short course etc. during the previous years:
Signature of the applicant with date
Recommendation of the institute
Signature & designation of the sponsoring authority

### **Programme Director**

**Dr. Gopal Krishna**Director & Vice Chancellor

# **Course Director**

Dr K. V. Rajendran

Principal Scientist & Head, Aquatic Environment & Health Management Division

### **Course Coordinator**

**Dr. Megha Bedekar** Senior Scientist

All future correspondences may kindly be directed to the address below

#### Dr K.V. Rajendran

Course Director

Aquatic Environment & Health Management Division
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## Preamble of the training course

Though innate and adaptive immunity constitute a combinational system, increasing focus on innate immunity has enriched research on immune defense. Being lower vertebrates and invertebrates, innate immune system plays a crucial role in fish and shellfish. Over the last several vears, research in this area has revealed a wealth of receptors and signalling pathways and provided greater insights into defense mechanisms. This is especially true with aquatic organisms having aquaculture potential. Understanding the molecular basis of immune responses against invading pathogens provides new insights into the host-pathogen interactions and thereby helps in developing strategies for the effective management of infectious diseases in aquaculture. Against this background, the major objective of the short course is to impart hands-on training to young faculty and scientists in the area of molecular immunology of fish and shellfish and provide better insights into the immune mechanisms of farmed fish and shellfish.

#### Course content

- Overview on defence mechanism in fish and shrimp
- New insights into the innate immune mechanisms in crustaceans
- · Pathogen recognition receptors
- Host response to pathogen challenge using in vivo and in vitro models
- New generation tools for studying host pathogen interaction
- Bioinformatics tools related to molecular immunology
- Molecular approaches for elucidating immune response pathways
- Gut and mucosal immunity

## Eligibility

Assistant Professor/Scientist or equivalent and above from NARS including SAUs, Deemed University, CAUs, KVKs and other agriculture and allied science faculties of other Universities can apply. To encourage the underpinning of agricultural sciences within basic sciences and to address both fundamental and applied research problems, a few participants from the basic sciences would also be selected. A total of 25 participants will be accommodated in this course.

## How to apply?

Interested participants must apply online using CBP portal at www.iasri.res.in/cbp. Participant has to create an account on the CBP site and then using the login ID, enter into the system to apply online. After filling the application, a printout of the application form needs to be taken for due approval of the competent authority of the candidate's organization. The same needs to be scanned after approval and must be uploaded using CBP portal or it could be sent by post/email to the Course Director. In case of any difficulties in applying through CBP portal, the participants may send the filled - in proper channel copy to the Course Director to the given address.

Application must reach the Course Director on or before 25 February, 2017.

### Travel and accommodation

The participants will be paid for the journey, to and fro, restricted to AC-II-tier train fare or bus. TA will be paid from the place of duty to the Short Course location and back by the shortest route. Facilities for boarding and lodging will be made available for the participants only free of cost at CIFE.

### About the Institute

ICAR-Central Institute of Fisheries Education (CIFE), in over 50 years of existence, has emerged as a centre of excellence in higher education in fisheries and allied disciplines. The Institute was established on 6<sup>th</sup> June 1961, under the Ministry of Agriculture, Govt. of India with assistance from FAO/UNDP. It came under the administrative control of Indian Council of Agricultural Research (ICAR) in 1979. Considering the wide mandate involving education, research and extension and recognizing the pivotal role played by CIFE in human resources development in fisheries, the institute was conferred the status of Deemed-to-be-University in 1989. The institute with its core strength in quality teaching, research and training has become a brand name in fisheries higher education.

ICAR-CIFE is now placed in a new campus with state-of-the-art facilities and located about 8 km from the domestic and international airports and 20 km from Dadar railway station, a major rail terminus in Mumbai.