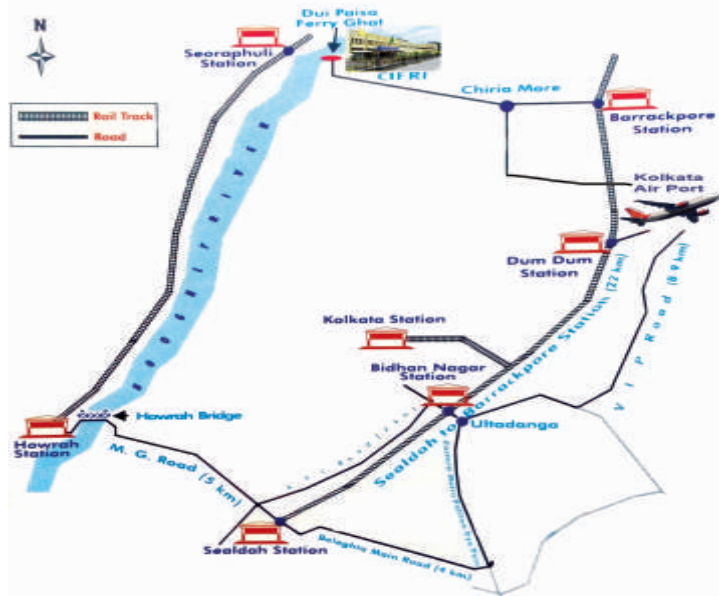


How to reach ICAR-CIFRI

Barrackpore is located in North 24-Parganas District, 24 Km. away from Netaji Subhas Chandra Bose airport and Howrah Rly. Stn., and 22 Km. away from Sealdah/ Kolkata Rly. Stn. ICAR-Central Inland Fisheries Research Institute is located at Manirampur, 5 Km. away from Barrackpore Rly. Stn. on Sealdah Main Rly. section. One can reach also from Howrah Rly. Stn., alighting at Sheoraphuly Rly. Stn. (on Howrah-Burdwan Main Section) and then by crossing the Hooghly River by ferry at Sheoraphuli ghat (*alias* Du paisa ghat) to Manirampur and walking to the campus.



How to Reach



Application Form

Training programme on Bioinformatics Tools and its Application in Predictive Ecology and Fisheries

Name of the applicant :

Nationality :

Educational qualification :

Date of birth : Sex:

Designation/ Present position :

Organization/Affiliation :

Address for correspondence :

E. mail address :

Cell phone /Whatsapp number :

Whether accommodation (on payment basis) required at CIFRI:

..... Yes/ No

Transaction ID of registration fee payment :

.....
Signature of competent/
forwarding authority

.....
Signature of the applicant
with date

Contact

For further query, please contact

Course Director

Dr. Basanta Kumar Das, Director
ICAR-Central Inland Fisheries Research Institute
Barrackpore, Kolkata – 700 120

Course Coordinators

Dr. Vikash Kumar, Scientist
kumar.vika.vikash2@gmail.com, Cell: 7005943001
Dr. Suvra Roy, Scientist
suvrar6@gmail.com, Cell: 7005780975



Duration

19 - 25 January 2024

Course Director

Dr. Basanta Kumar Das

Course Co-ordinators

Dr. Vikash Kumar & Dr. Suvra roy

Organized by



ICAR-Central Inland Fisheries Research Institute
Barrackpore, Kolkata – 700 120

About the Training Programme

There has been a huge effort in advancing analytical techniques for molecular biological data over the past decade. This has led to many novel algorithms that are specialized to deal with data associated with biological phenomena, such as gene expression and protein interactions. In contrast, ecological data analysis has remained focused to some degree on off-the-shelf statistical techniques. However, this is starting to change with the adoption of state-of-the-art methods, where few assumptions can be made about the data and a more explorative approach is required, for example, through the use of Bayesian networks. This training program will give information on novel bioinformatics tools and their 'crossover potential' with an application to ecology and fisheries data. In particular, a focus is made on developing models that identify functionally equivalent species in different fish communities to predict functional collapse. The **off-line training** encompasses the fundamentals and diagnostic approaches in Bioinformatics Tools and its Application in Predictive Ecology and Fisheries.

About the Institute

Central Inland Fisheries Research Institute (ICAR-CIFRI), an ISO 9001: 2015 certified and recipient of the Sardar Patel Outstanding Research Institute Award 2020, is India's premier fisheries research institute since 1947. The headquarters of the Institute is located in Barrackpore, Kolkata – 700120. With more than 75 years of national and international presence in the field of inland open-water fishery, ICAR-CIFRI is extending its expertise and facilities for the direct benefit of the fisher community, private and public organizations, academic institutions, and state departments. Research activities are conducted through five divisions: Riverine & Estuarine Fisheries (REF), Reservoir & Wetland Fisheries (RWF), Fisheries Resource Assessment & Informatics (FRAI), Fisheries Enhancement & Management (FEM), and Aquatic Environmental Biotechnology (AEB).

Course to be covered

Introduction to Bioinformatics

- ❑ Bioinformatics Databases
 - ❑ File Formats
 - ❑ Sequence search and retrieval from Databases
- Software through practice problems and assignments
- ❑ MEGA (Multiple Sequence Alignment and Pairwise Alignment)
 - ❑ Phylogenetic tree construction
 - ❑ Secondary structure prediction
 - ❑ Primer Design
 - ❑ Basic R programming
 - ❑ Molecular Docking

Introduction to Metagenomics (taking river Ganga sediment samples as a model for analysis)

- ❑ Sequencing technology platforms and data quality control
- ❑ FastQC and analysis through MG-RAST

Introduction to transcriptomics

Introduction to Metatranscriptomics

Introduction to proteomics

Introduction to whole genome sequencing

Expert lectures

Online lectures

- ❑ Aquaculture Pathology Laboratory, The University of Arizona, USA
- ❑ Dept. of Aquatic Resources Management, Udayana University, Indonesia
- ❑ Chinese Academy of Fishery Sciences, People's Republic of China
- ❑ Espol, Ecuador

Offline lectures

- ❑ ICAR & ICMR institutes
- ❑ Industry lectures (Neuberg diagnostics and Nucleome informatics)

Venue

ICAR-Central Inland Fisheries Research Institute, Barrackpore, Kolkata – 700 120, West Bengal

Training Period

19 to 25 January 2024

Dates to Remember

Last date of receipt of application/nomination: **January 09, 2024**

Intimation to selected candidates: **January 12, 2024**

Who can Apply?

Faculties, researchers, Fishery officials, post-graduate students, entrepreneurs in fisheries / fish farming

Training Fee

The course fee is ₹3000 (three thousand) for students and ₹5000 (five thousand) for others. This includes registration/bench fee but does not cover food, lodging and boarding charges. Accommodation in the Institute Guest House/ Training Facility and food will be provided to desiring candidates as per availability and at Govt. rates. No TA and DA will be paid by the organizer to the participants.

Modes of payment

The training fee may be paid as a Demand draft payable to '**ICAR UNIT CIFRI, BARRACKPORE**' or by **Account Transfer to ICAR UNIT CIFRI, BARRACKPORE, Bank Account Number: 11278713220, at State Bank of India, Barrackpore Branch (IFSC code: SBIN0000029)**. Payment may be made only after confirmation of participation. Demand draft or proof of payment must be brought by hand. Participants may also pay by credit or debit cards at the Institute; payment by cash is not accepted.

How to Apply

Eligible candidates may apply in the prescribed application form along with brief biodata, which may be sent by post to Dr. Basanta Kumar Das, Director, ICAR-Central Inland Fisheries Research Institute, Barrackpore, Kolkata – 700120, and must reach on or before 09.01.2024. Or the scanned copy of the same may be emailed to: **kumar.vika.vikash2@gmail.com**. Selected candidates will be informed regarding their participation by E-mail.