Hands-on Training

Basic and Advanced Computational Tools for Molecular Genetics

3-10 Jan 2022

Registration Form

Name .....

Occupation .....

Affliation .....

Address .....

Mobile No & email: .....

Educational Qualification .....

Sex .....

Experience in the field (if any) .....

.....

Reason of attending .....

.....

.....

Forwarded by HOD/PI/ Head of Institution
(In-service candidates only)

Signature of the Candidate

Program Director

Dr. N. P. Sahu
Director (Acting), ICAR-CIFE

Course Director

Dr. Aparna Chaudhari
Head, FGB Division

Course Coordinators

Dr. M.P. Brahmane
Principal Scientist

Dr. Pavan Kumar
Senior Scientist

Dr. Arvind Sonawane
Senior Scientist

Dr. Kiran Rasal
Scientist

For details please contact

Dr. Aparna Chaudhari
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Website: www.cife.edu.in

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Basic and Advanced Computational Tools for Molecular Genetics

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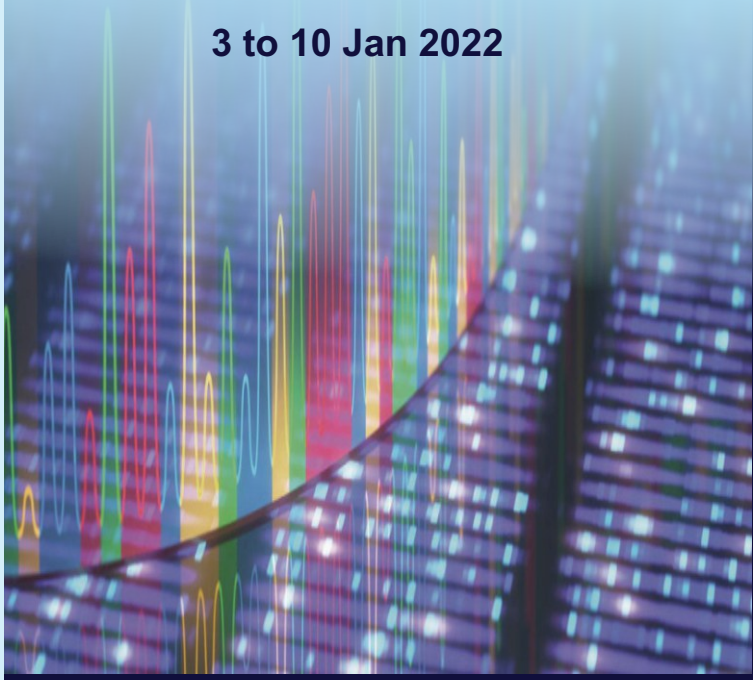

Organized By

Fish Genetics and Biotechnology Division

ICAR-Central Institute of Fisheries Education
(Deemed University)
Mumbai
www.cife.edu.in

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Background

Recent advances in sequencing technologies have led to unravelling of genomic information from the model and non~model organisms at an affordable cost. Novel algorithms and computational tools are required to harness meaningful information from the high/throughput DNA sequence data. Accordingly, different computational tools have been developed to analyse sequence data in order to estimate biodiversity, resolve taxonomic ambiguity, develop molecular markers, and identify novel genes. In addition, several researchers also continue to use sequence variation at known loci for taxonomic delineation.

Hence, this online/offline training is designed to impart hands/on training on basic and advanced computational tools (Geneious Prime) for molecular data analysis. Geneious Prime is a user~friendly and affordablesoftware for analysing small as well as high/throughput DNA sequence data. The trainees will be provided a license key of the software during the training. The course contents are as below. The minimum laptop/desktop configuration required is 4 GB RAM.

Course content

- Introduction to Sanger and Next Generation Sequencing Technologies
- Introduction to bioinformatics tools
- Sequence databases and their utility
- Sequence retrieval and analysis
- Sequence alignment using web/based tools
- Phylogenetic analysis
- Primer designing
- DNA Barcode data analysis
- NGS data analysis using Geneious Prime (Metagenomics, Metabarcoding)
- Identification of SSR and SNPs from NGS data and development of markers

Dates: 3 to 10 Jan 2022

Training fee

Students:Rs.2000/-

Faculty:Rs.5000/-

CIFE students: Rs.1500/-

Eligibility: PGStudents,Research Scholars, Assistant Professors and Scientists

Last date of Application

25 Dec 2021

How to apply

Please use the format provided alongside (Registration Form) and email your application along with the proof of transfer of the course fee to aparnac@cife.edu.in /hod.fgb@cife.edu.in.

Trainees may join in-person or online.

Bank details for registration fee transfer

Account Name: ICAR Unit CIFE, Mumbai
Name of the Bank: State Bank of India
Account Number: 10132355212
IFSC Code: SBIN0003117

About ICAR-CIFE

CIFE ICAR/Central Institute of Fisheries Education (Deemed University) is India's only national fisheries university. It is a premier institution dedicated to promoting higher fisheries education through generation of high quality human resource, high end research in both basic and applied aspects, generation of appropriate technologies and their dissemination. CIFE alumni constitute the country' s present leadership in this sector.

Fish Genetics and Biotechnology Division has been working in the area of molecular genetics since last two decades. In recent years, We have developed species specific DNA barcodes and delimited monogenean parasites, crustaceans, molluscs, elasmobranchs and teleosts with confirmatory nuclear markers. The Division has also unravelled the mitochondrial genome of mahseer fishes for species delineation, developed microsatellites and mined SNPs from high/throughput sequence data, and has expertise in the area of molecular genetics.