

International Workshop on

Genomic Selection in Aquaculture

16-18 January, 2019

ICAR-CIFE, Mumbai

Application Form

Name : _____

Designation : _____

Affiliation : _____

Address : _____

Mobile : _____

Email : _____

What is your primary area of interest?

Are you working on Genomic Selection?

Are you bringing your laptop? Yes/No

Are you making a poster presentation? Yes/No

(If yes, kindly send the abstract copy)

Do you need accommodation? Yes/No

Signature:

Date:

Important Dates

Last date of Receipt of Application at CIFE

10th January 2019

Communication of Selection

11th January, 2019 by email/ Mobile

Convener

Dr. Gopal Krishna

Director

ICAR-CIFE

Organizing Secretary

Dr. Shrinivas Jahageerdar

Principal Scientist

FGB Division

ICAR-CIFE

The Application may be sent to

The Director

ICAR-Central Institute of Fisheries Education

Panch Marg, Versova

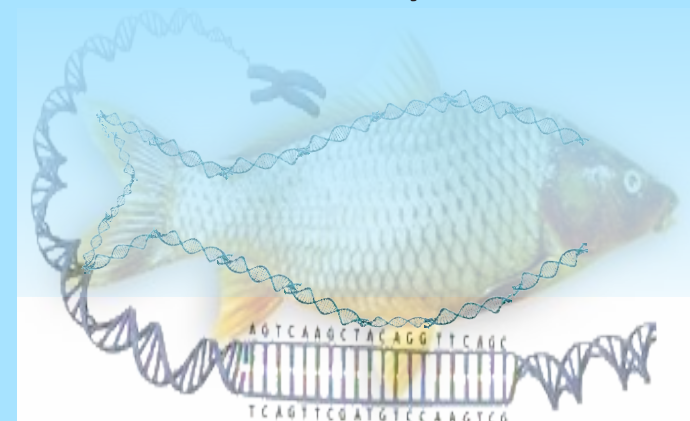
Mumbai-400061

Fax:022-26361573

and email a copy to jahageerdar@cife.edu.in

International Workshop on Genomic Selection in Aquaculture

16-18 January, 2019



Venue

Central Institute of Fisheries Education, Mumbai



Under the aegis of

National Agricultural Higher Education Project



भा.कृ.अनु.प.-केन्द्रीय मात्स्यिकी शिक्षा संस्थान
मुंबई

ICAR-Central Institute of Fisheries Education
Mumbai

Introduction

Genetic selection and breeding has helped the agriculture production to multiply in many folds, but there is still a requirement for more, to meet the requirements of ever increasing human population. Animal, fish and plant breeders have always incorporated advanced technologies in the genetic selection programs to predict the breeding values (EBV) accurately and enhance the genetic gain. Similarly a new technology called genomic selection is revolutionizing animal, fish and plant breeding. Genomic selection refers to selection decisions based on genomic breeding values (GEBV). The GEBV are calculated as the sum of the effects of dense genetic markers, or haplotypes of these markers, across the entire genome, thereby potentially capturing all the quantitative trait loci (QTL) that contribute to variation in a trait. It can be applied to a wide range of breeding goals, but in a very focused manner. Genomic selection requires large amounts of accurate data and involves advanced statistical models. Genomic selection is relatively new to India and there is need to develop expertise in this field. Considering these aspects a workshop is planned to provide firsthand knowledge on genomic selection to the researchers. It will also provide a platform for sharing the knowledge on the issues with fellow researchers.

The present workshop focuses on teaching the requisite principles involved in genomic selection and analysis of genomic data by hands on training employing the R software along with supporting statistical packages.

The workshop will be conducted under the overall guidance of Dr. Rama Bangera, Sr. Geneticist, AKVAFORSK-Genetics, Sunndalsora, Norway and he will be the key resource person for this workshop. The ICAR-Central Institute of Fisheries Education, Mumbai, India, always thrives to bring in the latest development in science to the NARS scientists in India. Considering the availability of expert faculty in all modern fields of fisheries and aquaculture science and its commitment to the development of



HRD, ICAR had recognized the CIFE as '**Center for Advanced Agricultural Science and Technology (CAAST)**' under world bank funded National Agricultural Higher Education Project (NAHEP). As a part of NAHEP project CIFE is organizing a three day

workshop for the scientists, teachers and research scholars on the '**Genomic Selection in Aquaculture**' during 16-18 January, 2019.



For attending the workshop the familiarity with R-software and basic quantitative genetics knowledge is preferred but not compulsory. The workshop is structured around 4 x 1.5 hour sessions per day, most with 30 minutes of lectures and 1 hour of practical sessions in groups of 2 using R-Statistical package and some supporting software. Also one session is provided for the poster and paper presentation. The data and supporting materials will be provided to all participants.

Participants will be provided with PCs on share basis, however participants are requested to bring their laptop preferably with R-software installed and packages upgraded.

Workshop program

Introduction to R and use of R in genetic data analysis; Genetic parameter estimations; Genomic selection: the optimization of the training population; developing prediction equation; the construction of the genomic relationship matrix; the prediction of the breeding values; Poster presentation.

Who should attend

The Scientists, faculty members and researchers who are involved in breeding, molecular genetics work. There are only 25 seats available for this workshop.

Course fee and accommodation

There is no course fee for the workshop. Participants need to bear TA and DA on their own. Accommodation at Government guesthouse or hotels will be made available on request and on payable basis. Students will be accommodated in the CIFE hostel dormitory on a nominal fee. The filled in application form may be sent to the address given overleaf. Students/Research Scholars need to produce a bonafide certificate from their respective dean/adviser. More information may be had from The Director, ICAR-CIFE, Mumbai.

Travel

Mumbai is well connected by road, rail and air. Weather during this part of the year is comfortable and you are requested to bring normal clothing.