

## Training programme

# Computational based Molecular Modeling & Big Data Analytics approaches in Fisheries and Life Science

26<sup>th</sup> February to 4<sup>th</sup> March, 2019

A seven days training programme on “Computational based Molecular Modeling & Big Data Analytics approaches in Fisheries and Life Science” was organized by the DBT funded BIF Centre, College of Fisheries, Central Agricultural University (Imphal), Lembucherra, Tripura from 26<sup>th</sup> February 2019 to 4<sup>th</sup> March, 2019. In this training programme a batch of 26 participants including 25 students of B.Sc Bioscience and one faculty of Swami Vivekananda Mahavidyalaya, Mohanpur, Tripura (W), Tripura. The objective the training programme was to sensitize and train these students on basic techniques of bioinformatics and molecular techniques. The programme was started with registration and pre-training evaluation of participant on 26-02-2019 at 10 AM. In the beginning, the details of BTISNET programme of the DBT GOI of India, BINC examination and objective and activities of the BIF centre of the College of Fisheries have been highlighted by the Dr. A.D. Upadhyay, Coordinator of the Training Programme. In the seven days long training programme the topics covered under theory and practical class are applications of biotechnology and bioinformatics in fisheries and other life sciences, introduction to molecular techniques, information search and sequential data retrieval from NCBI database, introduction to sequence alignment, isolation of nucleic acids (DNA and RNA), quantification, Agarose Gel Electrophoresis, PCR, Expressed Sequence Tag (EST), phylogenetic tree construction using MEGA-6 & Clustal Omega software, structural bioinformatics and its application, primary structure analysis of protein using ExPasy ProtParam, Protein 3D structure prediction and homology modeling, statistical software (SPSS and R), primer designing and its applications, molecular docking, introduction to Next Generation Sequencing (NGS) etc.

The resource person in training programme includes faculties of college, other institute and research scholars of the different projects. The post-training evaluation has been conducted to know the effectiveness of the training programme.

Among 26 trainees total 13 boys and 13 girls and out of all the trainees, 11 belongs to general category, 9 from OBC, 5 from SC and 1 from ST category. Pre training and post training evaluation indicated that in pre-training out of total 17 marks, average marks of the participant was 6.76 (<5 to 10)(39.76%) whereas after training the participants average marks was 15.12(<10 to 19)(60.48%). The trainees were rated this training programme in terms of topics covered in the programme and theory classes, balanced between theory and practical classes, food arrangement, and over all about training programme. The rating on these parameters was given 80%, 60%, 84% and 72%, as very good, respectively, by the participants and remaining were rated as average to good. The certificate of successful completion of the training was distributed to the participants by the Dr. Promod Kumar Pandey, Dean, College of Fisheries, CAU(I), Lembucherra, Tripura. The programme was ended with vote of thanks by the Coordinator Dr. AD Upadhyay on 4-03-2019 at 4 PM.





**Demonstration of DNA Isolation and PCR**



**Certificate distribution by Dr. Pramod Kumar Pandey, Dean, College of Fisheries**



**Group photographs**