

**A National Workshop on  
Next Generation Sequencing (NGS):  
An Advancement in Bioinformatics  
17<sup>th</sup> - 19<sup>th</sup> February, 2017**

**Registration Form**

1. Name (Dr./Mr./Ms): \_\_\_\_\_
2. Date of Birth: \_\_\_\_\_ M/F: \_\_\_\_\_
3. Designation: \_\_\_\_\_
4. Department/Institute: \_\_\_\_\_
5. Educational Qualifications: \_\_\_\_\_
6. Teaching/research area: \_\_\_\_\_
7. Address for Communication: \_\_\_\_\_
- Phone: \_\_\_\_\_
- E-mail: \_\_\_\_\_
8. Weather you have attended any training programme/  
workshop in Bioinformatics earlier: \_\_\_\_\_
9. Registration Fees: \_\_\_\_\_
- DD.No.: .....Dt: ..... Name of Bank: .....
11. Accomodation Required (Yes/No): \_\_\_\_\_

**Date:** \_\_\_\_\_ **Signature**  
**Place:** \_\_\_\_\_ **of the Candidate**

**Signature of  
Principal/Head/Research Director**

\*(A photocopy of the form may also be used)

**Important Dates**

Receipt of Application begins: 31/01/2017  
Application Deadline: 10/02/2017  
(Advance copy application along with a  
scanned copy of DD can be sent through E-  
mail. Registration will be confirmed only after  
DD is received).  
Intimation of selection: 13/02/2017.  
(Selected candidates will be informed through  
E-mail).

**Venue**

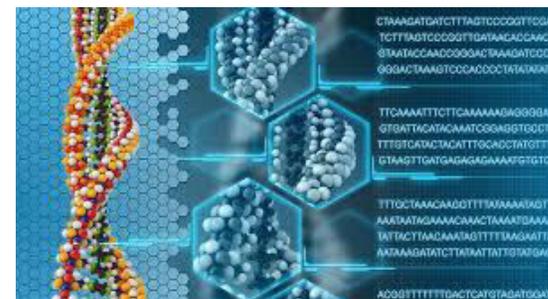
**Department of Marine Living Resources  
(Library Hall), Andhra University,  
Visakhapatnam-530 003**

**For any queries regarding programme,  
contact**

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Next Generation Sequencing (NGS):  
An Advancement in Bioinformatics  
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**Organized by  
BIOINFORMATICS INFRASTRUCTURE  
FACILITY**

**Dept. of Marine Living Resources  
Andhra University  
Visakhapatnam – 530 003  
Andhra Pradesh, India**

**Sponsored by**



**Department of Biotechnology  
Ministry of Science & Technology  
Government of India, New Delhi**

## Background

The Department of Biotechnology (DBT), Ministry of Science & Technology, Govt. of India has been pleased to establish Bioinformatics Infrastructure Facility (BIF) under BTISnet programme for the promotion of Biology teaching through Bioinformatics at dept. of Marine Living Resources Andhra University, Visakhapatnam, Andhra Pradesh in November; 2008. It provides services to the teachers, research scholars and students of the host University and other neighboring institutions in terms of networked computers with leased line and broadband internet connectivity in the retrieval of online and offline biological databases, bioinformatics software and tools. The Centre's facilities include dedicated lease line Internet connectivity from BSNL, HP servers, HP PCs with vista operating system, HP Printers, Xerox etc. It fosters research and developmental activities in major thrust areas like Sequence Alignment & Phylogenetic analysis, Molecular Modeling, Drug Designing and Vaccinology and also promotes marine bioinformatics works/research.

## Objectives

The BIF Centre is established with the main objectives:

1. To support the teaching activities of biology and its allied areas
2. To build up information resources, prepare databases of interest to its users and to develop relevant information handlings tools and techniques.
3. To establish linkage with BTISnet of DBT for sharing information resources and expertise.
4. To organize training/workshops for familiarizing the application of Bioinformatics in biology teaching and learning activities.

## About the Workshop

Next Generation Sequencing (NGS) has become an essential tool in modern day biological research. Due to the advancement of sequencing platforms and decrease in the cost and time for sequencing, NGS has played a significant role in gaining deeper understanding of the biological system. However, as the next generation sequencers generate huge amount of sequencing data, their analysis is one of the biggest bottleneck for a researcher with no computational biology background.

Therefore it is increasingly important for researchers to equip themselves with the required bioinformatics skills to store, process and analyse these big data. The current workshop - "Next Generation Sequencing- An Advancement in Bioinformatics" aims to train participants with the essential skills and knowledge required to begin next generation sequencing data analysis.

The workshop will begin with the introduction to Bioinformatics and Linux. This will be followed by introduction to Next Generation Sequencing and its application. 70% of time will be devoted to hands-on session. DNaseq and RNAseq data analysis pipeline will be conducted as case studies. Participants will also be introduced to NGS specific databases, sequence repositories, command line and web-based tools and various online NGS analysis platforms such as Galaxy, SangeniX.

## Course content

1. Introduction to bioinformatics & Computational Biology.
2. Introduction to NGS: What, Why & How.
3. Introduction to DNaseq, RNAseq and other NGS Application.
4. NGS Extensive Hands-on session on DNaseq and RNAseq.
5. Hands-on session on Databases and online platforms such as Galaxy, SangeniX.

## Faculty

Faculty will include eminent guest speakers of neighboring institutions working in the field of Bioinformatics, NGS & Computational Biology conducting teaching / research in Next Generation Sequencing(NGS).

## Methodology

Lectures, Demonstration by Hands-on sessions. Revision and an exam will be conducted on the last day. Participants more than 40% marks will be eligible for award of certificate with statement of marks. Others will be given only participatory certificates.

## Level of participants

Research Scholar, Post Doctoral fellows and Faculty of Bioinformatics, statistics, computer sciences, life sciences, pharmaceutical sciences.

## Prerequisites

Participants should have fundamental understanding of various molecular biology concepts and basic computer knowledge.

## Number of Participants

Number of participants will be restricted to 25.

## Accommodation

Outstation participants will be given shared accommodation upon prior request with nominal charges (ranging from Rs. 200/- to Rs. 300/- extra per head per day) participants should pay for accommodation.

## Registration Fee:

**Rs. 750/-** for Research Scholars, Post doctoral fellows and for faculty **Rs.1000/-**.The registration fee includes training material and working lunch and tea for all the days of the Programme.

## How to apply?

Interested candidates can use the Registration form for applying. Applicants may submit their registration forms duly filled in, to the following (**E-mail: [dbtbifau@gmail.com](mailto:dbtbifau@gmail.com)**) through proper channel along with a write up (250 words only) of their knowledge in Bioinformatics and how they will be benefited by attending the workshop.

Demand Draft towards registration fees should be drawn in favour of "**Coordinator, DBT-BIF Programme**" payable at **SBI AU campus branch Visakhapatnam**.