

# 8<sup>th</sup> Training on Next Generation Sequencing and Analysis

## (Genomics, Transcriptome and Transposons)

Jointly organizing by Center for Functional Genomics &  
Bioinformatics, TDU and  
Bengaluru Genomics Centre (BGC)

**November 26 - December 1, 2018**

**FRLHT  
25<sup>th</sup> years  
Silver  
Jubilee  
Celebrations**

### Program Directors:

- **Malali Gowda,**  
Professor, Center for Functional Genomics and Bioinformatics,  
TDU
- **Pruthvi Chakravarthi T**  
CEO, Bengaluru Genomics Centre (BGC)

### Theme:

Impressive progress has been made in the field of Next Generation Sequencing technologies, and the power of high-throughput NGS platforms are being harnessed by researchers to address an increasingly diverse range of biological problems. Role of bioinformatics is getting bigger and bigger in management and analysis of the enormous amount of biological data generated through research globally. Recent genome studies have shown that 50-80 % of most eukaryotic genomes composed of Transposable Elements or Mobile DNA. Due to repetitive nature of these elements, genome assembly become challenging. In this workshop we will resolve some of the problems of genome assembly and annotation.

### Objectives:

1. To train and capitalize the human resources for carrying out Next Generation Sequencing and Big-Data Analyses.
2. To develop bioinformatical tools to dissect elements of genomes, transcriptome and transposons.

### Previous Events:

Website Link: <http://tdu.edu.in/genomics/genomics-events/>

### Who Can Participate?

Students, faculty and scientists from academics and industries including Life Sciences, Computer Science, Medicine, Agricultural Science, Environmental Science etc., are encouraged to participate in this event.

### Recommended for:

This certificate course is Transdisciplinary in nature. TDU strongly recommends this module for UG, PG students and Research scholars.

### Computer Support:

We will be providing computers/server with required programs and softwares for the participants.

### Registration Fee (INR)

BSc, BTech	:9,000
MSc, MTech, MBBS	:10,000
PhD Scholars.	:12,000
Postdoc	:14,000
Faculty	:16,000
Industry	:20,000
International	:700 (USD)

Day	Schedule
26.11.2018 (Monday)	• Introduction to next generation sequencing (NGS) technologies • Sample collection, DNA isolation and Quality check
27.11.2018 (Tuesday)	• NGS library preparation and sequencing • Visiting to Facilities
28.11.2018 (Wednesday)	• Basic of computing • Whole genome sequence (WGS) analysis - De novo based Assembly and Annotation
29.11.2018 (Thursday)	• WGS analysis - Reference based Assembly and Annotations • Transcriptome Sequencing Analysis
30.11.2018 (Friday)	• Transposon Discovery and Annotation • Application of R - programming language in NGS technologies
1.12.2018 (Saturday)	• NGS data submission to NCBI • Genome Browser and Databases • Intellectual Property Rights (IPR) and Manuscript Writing

### Registration Link:

<http://tdu.edu.in/genomics/genomics-events/>

### Last Date for Registration:

**November 12, 2018 (Limited seats),  
No refund for cancellation of registration.**

### Payment Mode NEFT (Online):

Account Name: ITD-HST General Fund  
Account Number: 0694104000134705  
IDBI Bank, Yelahanka New Town, Bangalore-560064,  
IFSC: IBKL0000694, MICR: 560259014  
The Demand Draft in favor of "ITD-HST" and payable at Bengaluru

### Postal Address:

The University of Trans-Disciplinary Health Sciences and Technology (TDU),  
#74/2, Jarakabande Kaval, Post Attur via Yelahanka, Bengaluru,  
Karnataka, 560064

### Accommodation:

It will be arranged based on request latest by **12 November, 2018** with additional charges

### Organizing Secretary:

- Ravindra Raut, TDU
- M. O. Farooque, BGC



<http://tdu.edu.in/>



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