

## Training Programme on “Advanced Genomic Tools for Crop Improvement”

Jointly Organized by  
Trans-Disciplinary University of Health Sciences (TDU), Bengaluru,  
International Crops Research Institute for the Semi-Arid Tropics (ICRISAT),  
Hyderabad,  
University of Agricultural Sciences (UAS), Bengaluru

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 TDU: +91 - 7760280280

**November 25 to 28, 2019**

### Program Directors:

- **Prof. Malali Gowda**  
Head Center for Functional Genomics and  
Bioinformatics, TDU, Bengaluru
- **Dr. Santosh Deshpande**  
Senior Scientist, ICRISAT, Hyderabad

### Training Theme

- Introduction to Next Generation Sequencing (NGS) that transformed plant science
- Present training helps to get a deeper understanding in NGS technology with a special focus in the field of Agriculture for breeding and crop improvement
- Teach the fundamentals of NGS workflow from sample preparation to sequencing data analysis
- Global genomics market driving job market

### Objectives

- Training capitalizing human resources to carry out NGS analysis for crop improvement.
- Carry out high throughput research using genomic tools to foster the advancement of NGS in breeding methodologies over traditional crop improvement technologies.

### Mission Accomplished (2018-19):

- Created “Genomics Ecosystem” in the country by conducting 15 training programs.
- Trained > 500 Scientists and students (Streams of biology including plant science, Engineering, Technology).
- More details at:  
<http://tdu.edu.in/genomics/genomics-events/>

### Who can participate?

Finger Millet Genome consortium members, UG and PG Students from Agriculture and allied fields, Faculty and scientists from academia, industries including Life Sciences, Biology, Computer, Environmental Science and any other disciplines.

### Payment Mode NEFT (Online):

**Account Name: UTD-HST General Fund**

**Account Number: 0694104000134705**

**BANK: IDBI Bank, Yelahanka New Town, Bangalore - 64,**

**IFSC: IBKL0000694, MICR: 560259014**

The **Demand Draft** in favour of **UTDHST** and payable at Bengaluru

### Computer Support:

We will provide computers/server with required programs and software for the participants.

### Organizing Secretaries:

**Dr. Prasanna S Koti, TDU**

**Dr. Deepak C A, UAS (B)**

### Knowledge Partners

Day	Schedule
Day 1	<b>Talk:</b> <ol style="list-style-type: none"> <li>1. Introduction to Advanced Genomics tools</li> <li>2. Overview of Integrated genomics-assisted breeding for efficient development of superior finger millet varieties for Karnataka.</li> <li>3. Prospects of Genomics assisted breeding for Blast resistance in Finger millet</li> </ol> <b>Hands on:</b> <ul style="list-style-type: none"> <li>• Sample collection, DNA isolation</li> <li>• Polymerase Chain Reaction</li> </ul>
Day 2	DNA Library Construction and whole genome sequencing <b>Hands on:</b> <ul style="list-style-type: none"> <li>• Whole genome sequencing library construction</li> <li>• Nanopore sequencing (Demo)</li> <li>• Demonstration of the Illumina platform.</li> </ul>
Day 3	<b>Hands on:</b> <ul style="list-style-type: none"> <li>• Basics of Computing Linux command line utilities.</li> <li>• Reference based mapping.</li> <li>• SNPs prediction.</li> </ul>
Day 4	<b>Hands on:</b> <ul style="list-style-type: none"> <li>• Functional associations</li> <li>• Pedigree Analysis</li> <li>• SSR Markers analysis</li> </ul>

Registration Fee	(INR) *
UG Students	7500/-
PG students	8500/-
Ph. D. Scholars	11000/-
Post-doctoral Researchers	13000/-
Faculty Member	18000/-
Industrial Member	20000/-

### \*Inclusive of GST

**Early Bird offer till 20<sup>th</sup> October 2019**

**Registration link: <https://forms.gle/ReZ2jAVR6cSsDdGK8>**

**Last Date for Registration: 1<sup>st</sup> November, 2019**

**No refund for cancellation of registration.**

**On-Spot Registration: Extra Charges Apply**

### Accommodation and Lunch:

Lunch will be provided

Accommodation will be arranged based on request, with additional charges (Contact: +91 9972490101)



### Address:

Jarakabande Kaval, Post Attur via, Yelahanka, Bengaluru,  
Karnataka – 560 064, India