

DST STUTI TRAINING PROGRAM

“Synergistic Training Program Utilizing the Advanced Research Instrumentation”

21- 27 January 2023

In Collaboration with Jamia Hamdard PMU



ORGANIZED BY (VENUE):

Department of Genetics and Plant Breeding
Ch. Charan Singh University,
Meerut- 2500 04 (UP) INDIA

About the Department

The Department of Genetics & Plant Breeding (formerly, Department of Agricultural Botany) was established in 1969, initially as a part of Division of Plant Sciences under the Institute of Advanced Studies. The department has a unique position in the university and is recognized nationally and internationally for its academic and research activities. The department was also awarded UGC SAP-DRS and DST-FIST programmes. The department has received more than Rs. 100 millions as research/teaching grants from various national agencies. During last 25 years, the department has become known globally for its outstanding contributions in the area of development and use of molecular markers for quantitative trait loci (QTL) analyses and understanding the genetic control of important agronomic traits in wheat and other crop plants. Presently, the emphasis is on courses related to Genetics, Crop Biotechnology, Quantitative Genetics, Bioinformatics, Molecular Breeding, Cytogenetics, etc., which also represent the core and major thrust areas of research including epigenomics.

The more recent activities during the last 25 years involved development of molecular markers and their applications in the preparation of molecular maps, study of genetic diversity, genetic dissection of quantitative traits (grain yield, protein content, rust resistance, drought and heat tolerance, preharvest sprouting, Fe and Zn content in grains, etc.), plant parasitic nematode-wheat interaction, and marker-assisted selection involving introgression and pyramiding of genes/QTLs. As a result, the Department has identified and characterized a number of important QTLs/genes for the above traits for use in crop improvement programs, especially in wheat and developed several improved genetic stocks some of them being used by other institutions. The above studies were largely supported by the grants received from DBT, DST and ICAR.



Importance of the Training Program

Proposed workshop is highly useful for interdisciplinary research (like biotechnology, seed science, botany, plant pathology, horticulture etc.), teaching and training for all life science students and faculty member of this University and affiliated colleges. During this programme, lectures and hands on training on molecular techniques and equipment like AAS, FTIR, Real time PCR, PCR, Phase contrast microscope, Grain analyser, UV spectrophotometer etc. will be provided.

Major Theme

- ❖ Molecular Breeding for Crop Improvement.
- ❖ Advances in Crop Genomics.
- ❖ Application of Nanoparticles for crop improvement.
- ❖ Use of computational and bioinformatic approaches in Agricultural Sciences.
- ❖ Interval mapping and genome wide association studies (GWAS).
- ❖ Biofortification and Food Security.
- ❖ Molecular Virology

Registration Details

In total, 30 participants (with matching research areas) will be selected for the training. There are three categories of participants;

- A. Doctoral Students
- B. Post-doctoral Researcher
- C. Early-career Scientist/Faculty Members

- Candidate should send their CV and recommendation letter duly forwarded by their supervisor/Mentors/Head of the Department.
- There is no registration fee for training program and it is completely supported by the DST-STUTI Program.
- Limited accommodation will be provided to outstation candidates.

Link for Registration: <https://forms.gle/esLX19ZSxo9kPJEt6>

Last Date of Registration: December 31, 2022

Historical Places in and nearby Meerut



SARDHANA CHURCH

AUGHARNATH TEMPLE

JAMBUDWEEP HASTINAPUR

CLOCK TOWER

Organizing Committee

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(Hon'ble Vice Chancellor)

Organizing Convener

Prof. Shailendra Sharma
(HoD Dept. of Genetics & Plant Breeding)

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(Dean, Agriculture Faculty)

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PMU Coordinator

Prof. Suhel Parvez,
Dept. of Toxicology, SCLS,
Jamia Hamdard