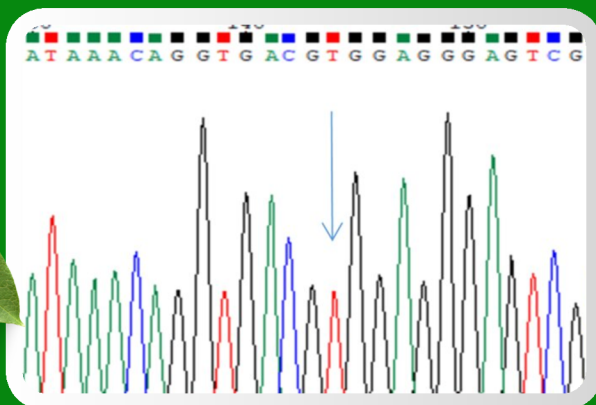




# 10 DAYS HANDS-ON TRAINING PROGRAMME ON MARKER - ASSISTED BREEDING IN PLANTS AND ANIMALS

11<sup>th</sup>-20<sup>th</sup> December, 2024



**Organized by**

**Institute of Biotechnology  
Sher-e-Kashmir University of Agricultural  
Sciences and Technology of Jammu  
Main Campus, Chatha, Jammu -180009**

Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu (SKUAST-Jammu) is a leading University in North India with aspirations, commitment and missionary zeal to cater to the needs of society in general, and students and farming community in particular through region specific advances in education, research and extension. The University has a state of art infrastructure in the form of Faculty buildings, well equipped laboratories and research farms at Faculties of Agriculture, Basic Sciences, Horticulture & Forestry, Agriculture Engineering and Institute of Biotechnology at Chatha Campus; and Faculty of Veterinary Sciences & Animal Husbandry and Dairy Technology at R.S. Pura Campus, Jammu. Since its inception in 1999, the University has grown with rapid pace in terms of infrastructure and human resource. The University runs degree programmes at UG and PG (M.Sc. and Ph.D.) levels in Agriculture, Horticulture, Forestry, Veterinary, Dairy Science, Biotechnology, Agribusiness and allied fields. The University pursues high standard research through research projects funded by various central and state agencies.

### **INSTITUTE OF BIOTECHNOLOGY (IBT)**

The Institute of Biotechnology formerly School of Biotechnology, an integral part of SKUAST-Jammu came into existence in 2010 with the sole aim to generate quality manpower with extensive knowledge, advanced technical know-how and outstanding academic potential in the subject. The Institute is offering B. Tech (Biotechnology), M.Sc. and Ph.D. degree programmes to aspirants. The courses have been designed to keep the students abreast with latest technological know-how. The Institute has highly dedicated and competent core and adjunct faculty with diverse experience. The faculty members regularly update their knowledge and skill through advanced training in reputed national and international institutes and through interactions with eminent guest faculty.

### **INTRODUCTION**

This training aims to introduce the participants with Marker Assisted Selection (MAS). The participants will be provided hands on training in advance techniques and tools used in “Marker-Assisted Selection” to make them confident and competent in their future endeavours. The participants will be trained in various aspects related to DNA isolation, PCR technique, Gel electrophoresis, NGS techniques and Analysis of the results by various

softwares. The training is aimed to develop the skill on the subject and to make the participants familiarize with the MAS and interpretation of the data.

### **Objectives:**

The objective of this training is to give an opportunity to the faculty members and students to provide hands on experience in Marker Assisted Breeding

### **Course outline:**

- Overview of Marker Assisted Selection
- Molecular Marker Techniques
- PCR and RT-PCR
- Disease Diagnostic and Hybrid Purity Checking
- Genetic Diversity and Population Structure Analysis
- NGS Sequencing (Nanopore)

**Duration of the course: 11<sup>th</sup> – 20<sup>th</sup> December 2024**

### **Eligibility:**

Open to faculty members and PG students of Agriculture, Horticulture, Veterinary Science, Biotechnology and other relevant discipline of Life Science.

### **Application and Selection:**

Applications are invited through google form link given below and selection will be made on the first come first serve basis.

**Mode of Payment:** UPI / Bank Transfer / NEFT / RTGS / Demand Draft

**Account number:** 1235040500000031 **IFSC code:** JAKA0EAURSP

### **Registration link:**

[https://docs.google.com/forms/d/e/1FAIpQLSd\\_hZqlzICnviuNIzYvoO22rpoYYK\\_0IRpFe0xVb\\_a9DWc\\_7g/viewform?usp=pp\\_url](https://docs.google.com/forms/d/e/1FAIpQLSd_hZqlzICnviuNIzYvoO22rpoYYK_0IRpFe0xVb_a9DWc_7g/viewform?usp=pp_url)





### **Important dates:**

Last date for receipt of Application: 30th November 2024

Intimation to the selected candidate: 1st December 2024

Confirmation by the selected candidate: 5th December 2024

### **Registration fee\*:**

Faculty: Rs. 3500/-

Students/ Research Fellow/ Project Staff: 2500/-

\*Only working lunch is included in the fee.

**Logistics:** Accommodation has to be borne by the participants.

**Contact person & address for correspondence:**

### **Course Director:**

Dr. R. K. Salgotra, Director, Institute of Biotechnology,  
SKUAST-J, Chatha, Jammu, Pin :180009, Mob:+919419153813  
email: directoribt@skuastj.org

### **Course Coordinator:**

Dr. Kapil K. Tiwari, Associate Professor (Biotechnology),  
Institute of Biotechnology, SKUAST-J Chatha, Jammu,  
Mob: 7046115784, email: kapil21282@gmail.com

### **Course Co-Coordinator(s):**

Dr. Anil Kumar Singh, Dr. Manmohan Sharma,  
Dr. Gyanendra Kumar Rai, Dr. Narinder Panotra,  
Dr. Susheel Sharma, Dr. Ravinder Singh, Dr. Harsimran Singh Bindra



**Scan code to Register**