



सत्यमेव जयते

Department of Science & Technology  
Govt. of India



 **Shoolini  
University**

  
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Amrit Mahotsav

# Insight and Hands-on Training Program on Techniques in Biotechnology

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**July 21-27, 2022**

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**The Last Date of Registration  
July 7, 2022**

UNDER THE AEGIS OF

**Synergistic Training Program  
Utilizing the Scientific and  
Technological Infrastructure  
(STUTI)**

ORGANISED BY

**Faculty of Applied Sciences and  
Biotechnology, Shoolini University**  
*In collaboration with*  
**SAIF/ CIL Panjab University, Chandigarh**



## ABOUT SHOOLINI UNIVERSITY

Founded by Prof. P.K. Khosla, a visionary academician and research professional, Shoolini University is a research-focused university established in 2009. This innovation-led centre of learning has made giant strides and achieved its vision to be a Top 200 global university in 2022 (THE Impact Rankings 2023) and ranked 801-1000 in QS Global rankings (2022). It has consistently been ranked among India's top universities as per MHRD NIRF (#89), Top 3 private University (QS Global Ranking, 2022), top 10 patent filer in India (IP India), and matches the world's best universities in research output under the guidance of young and dynamic leaders, Prof. Atul Khosla, Vice Chancellor of Shoolini University, and Mr. Vishal Anand, Pro- VC, Shoolini University. A research driven model has been adopted to achieve excellence in various fields of Basic Sciences, Biotechnology, Engineering, Pharmaceutical Sciences and Management Sciences, Law, Yoga and Liberal Arts.

## FACULTY OF APPLIED SCIENCES AND BIOTECHNOLOGY

The Faculty of Applied Sciences and Biotechnology at Shoolini University attracts the best students of India for its Biotechnology, Microbiology, Nutrition and Food Technology programs at UG, PG and doctoral level. It has been recognised for its excellent research in Biotechnology Sciences by CCI and Gujarat Technological University. Aligned with Shoolini University's thrust areas of research, the focus of the department is to harness the Himalayan biodiversity for societal benefits. Research grants worth Rs. 13 crores have been generated from DST, DBT, ICMR, NMHS, HIMCOSTE and MoFPI. Scientists of the department have filed 200+ patents in translational research of international importance, with UG, PG, and doctoral students as one of the inventors. More than 140 students have been awarded doctoral degrees. The faculty has been sanctioned a food-testing laboratory by MoFPI, DST- FIST grant for infrastructure development, and skill development grant under DBT-HIMCOSTE program. The faculty is emerging as one of the leading center for Biotechnology research in India.



**RAJ KHOSLA CENTRE FOR CANCER RESEARCH**  
SHOOLINI UNIVERSITY



### **CHIEF PATRONS**

Prof. P.K Khosla • Prof. R.C. Sobti • Mr. Satish Anand

### **PATRONS**

Mrs. Saroj Khosla • Prof. Atul Khosla • Mr. Vishal Anand

### **CONVENORS**

Prof. Anuradha Sourirajan • Prof. Sunil Puri • Prof. JM Julka

### **CO-CONVENORS**

Prof. Dinesh Kumar • Prof. Kamal Dev • Prof. Saurabh Kulshreshtha

### **ORGANIZING SECRETARIES**

Dr. Nitika Thakur • Dr. Chandresh Kumari

### **ORGANIZING COMMITTEE**

Prof. Somesh Sharma  
Dr. Azhar Khan  
Dr. Pankaj K Chauhan  
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Mr. Kamel Haydar  
Mr. Jagdish Verma  
Mr. Hailemeleak Regassa  
Mr. Subhash Sharma  
Ms. Suman Sharma

## **ABOUT THE DST-STUTI TRAINING PROGRAM ON TECHNIQUES IN BIOTECHNOLOGY**

The COVID-19 pandemic has highlighted the importance of biotechnology field to the society. Today's research is mainly focussed on the techniques to understand the molecular aspects relevant to health, environment, food, etc. The current training program is a step in this direction to provide hands on training on modern techniques of Life Sciences/Biotechnology to young professionals in teaching institutes. The training session will cover the fundamental aspects of Molecular Biology, which forms the basis of Biotechnology.



# SCHEDULE FOR DST-STUTI TRAINING PROGRAM ON TECHNIQUES IN BIOTECHNOLOGY

## Day 1 Inauguration and Familiarization of the Research Laboratories

Days	Expert Talk (9:15-10:00 AM)	Technical Talk (10:00-10:30 AM)	Experiment details (10:00-5:00 PM)
Day 1	<b>Prof. R C Sobti</b> Professor (Emeritus) Dept. of Biotechnology, PU and EX VC, PU, Chandigarh.	<b>Prof. Saurabh Kulshrestha/ Dr Chandresh Kumari</b>	<b>Experiment-I:</b> Isolation of Genomic /Plasmid DNA from bacterial cells <b>Experiment-II:</b> Agarose gel electrophoresis for separation of Genomic/Plasmid DNA
Day 2	<b>Dr Rashmi Sharma</b> Scientist-F, SEED, Council of Science and Technology Communication Division, DST, New Delhi.	<b>Dr Lokender Kumar/ Dr Swarup Roy</b>	<b>Experiment-III:</b> Polymerase chain reaction for amplification of DNA <b>Experiment-IV:</b> Agarose gel electrophoresis of amplified DNA
Day 3	<b>Dr PK Seth</b> Former Director, ITRC, Lucknow and Founder/CEO Biotech Park.	<b>Dr Vihang Ghalassi/ Dr Gaurav Saxena</b>	<b>Experiment-V:</b> Elution of DNA from gel, Restriction digestion of DNA and its analysis <b>Experiment-VI:</b> DNA ligation and its analysis
Day 4	<b>Narendra Chirmule</b> Co-founder and CEO, Symphony Tech Biologics	<b>Prof Dinesh Kumar/ Dr Rupak Nagraik</b>	<b>Experiment-VII:</b> Competent cells preparation <b>Experiment-VIII:</b> Transformation of competent cells by plasmid DNA
Day 5	<b>Dr Anand Kumar Bachhawat</b> Professor, IISER Mohali, Punjab.	<b>Prof Kamal Dev/ Dr Pankaj Chauhan</b>	<b>Experiment-IX:</b> Screening of transformants by blue-white screening
Day 6	<b>Dr Alok Sinha</b> Staff Scientist-7 NIPGR, New Delhi.	<b>Dr Nitika Thakur/ Dr Avinash Sharma</b>	<b>Experiment-XII:</b> Verification of transformants by colony PCR and its analysis
Day 7	<b>Dr Manishi Mukesh</b> Principal Scientist, ICAR-NBAGR, Karnal, Haryana.	<b>Dr Azhar Khan/ Dr Chandresh Kumari</b>	<b>Experiment-X:</b> Basics of plant tissue culture: Media preparation and inoculation of explants <b>Experiment-XI:</b> Basics of Animal Cell Culture: Media preparation in animal tissue culture lab. and to observe cell lines

## Day-7 Valedictory Session and Certificate Distribution



## REGISTRATION DETAILS

### How to Apply

Application/Bio-data form is attached with brochure and the same can also be downloaded from [www.shooliniuniversity.com](http://www.shooliniuniversity.com) and submit the same to the following email:

[stuti@shooliniuniversity.com](mailto:stuti@shooliniuniversity.com)

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**Last Date to apply : 7th July 2022**

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Program is sponsored by DST, Govt. of India

\*Limited seats available; No Registration Fee.  
Free Accommodation.

## CONTACT DETAILS

### Dr Nitika Thakur

+91-821-995-5735

[nitikathakur@shooliniuniversity.com](mailto:nitikathakur@shooliniuniversity.com)

### Dr Chandresh Kumari

+91-701-891-6518

[chandreshkumari@shooliniuniversity.com](mailto:chandreshkumari@shooliniuniversity.com)

### Biotechnology Office No.

+91-921-830-1025

## **SHOOLINI UNIVERSITY OF BIOTECHNOLOGY AND MANAGEMENT SCIENCES,**

Bajhol, Solan- 173229, Himachal Pradesh,  
India



### ABOUT SOLAN

Known as the “Mushroom City of India” is a beautiful place with hills and mountains abound. Solan is surrounded by high peaks. To the east of the town is the Matiul Peak with a height of 1,986 meters; to the north lies the Karol Peak, which is also the highest peak of the region with a height of 2,000 meters. Solan derives its name from Goddess Shoolini who is the main deity of the region. The pleasant climate of this place round the year makes it an ideal destination for all season.



### HOW TO REACH



**By Road:** Solan is well connected by an extensive network of roads. One may reach conveniently by taxi or bus from Delhi.



**By Air:** The nearby airports are Chandigarh and Shimla.



**By Rail:** The nearest broad gauge railway station is at Kalka, while the closest narrow gauge railway station is at Solan.