Application Form

1. Full Name: _____
2. Designation: _____
3. Sex: _____   4. Date of birth _____
5 Present address:
   _____
   _____
6 Tel No. _____ (office)_____(Res)
7 Email address _____
8 Teaching/ research /professional experience along with the posts held
   (During last five years)

Post held	Institution	Period	Nature of duty

9 Academic records

Exam Passed	Subjects	Year of passing	Percent/ OGPA	University
Ph.D.				
Masters degree				
Bachelors degree				

Signature of the applicant

10 Date: _____
11 Place: _____
12 Recommendation of forwarding institution/organization:

**Training Course on
"Current Methods in Biotechnology and Bioinformatics"
September 25th to October 15th 2025**
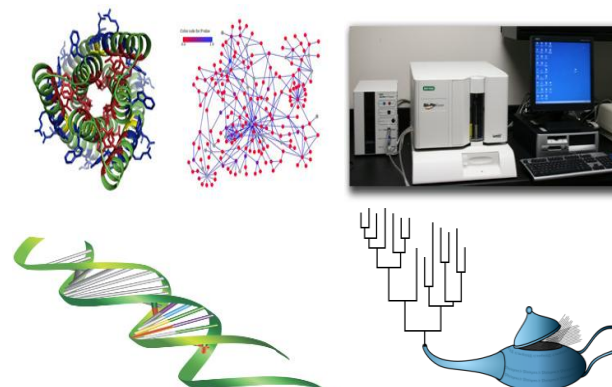
Course Director: **Dr. Sushila Maan**
Course Coordinator: **Dr. Joshi V. G.**
Course Faculty: **Dr Aman Kumar**
                                       Dr. Pawan Kumar
                                       Dr. Kanisht Batra

Organized by

Department of Animal Biotechnology
College of Veterinary Sciences, LUVAS, Hisar 125 004, Haryana
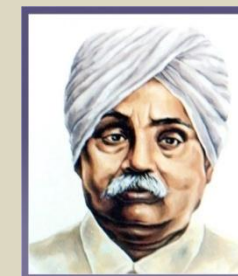
OBJECTIVES

Techniques in molecular biology can be used for various biomedical applications such as diagnostics and therapeutics. These techniques can help in generating biologically valuable recombinant DNA materials. Recombinant DNA (rDNA) pertains to the creation of new combinations of DNA that would not otherwise be found in biological organisms or in nature. Along with rDNA technology other methods and techniques in biotechnology and bioinfromatics are very helpful and define way to understand the molecular basis of the diseases of human and animal origin. In addition, synthetic peptide and their diagnostic and therapeutic uses of would help in greater biomedical applications of knowledge. Nowadays these basic molecular biology tools are commonly used in the area of genomics, transcriptomics, metabolomics, metagenomics, protein homology modelling and different aspects of reproductive biotechnology for various purposes like disease specific molecular marker development, molecular typing of microbes, new generation vaccine development, development of antisense technology, molecular therapeutics identification of breeds etc. Bioinformatics helps in analyzing huge data generated through newer techniques like next generation sequencing. However, DNA based tools are yet not routinely used for diagnosis of infectious diseases of livestock, pets and poultry. Therefore, present practical training course is designed to provide hands on training on Techniques in molecular biology and bioinformatics. The training programme will also include theoretical aspects of molecular biology, applications of synthetic peptides and bioinformatics techniques for better understanding of the practical events.

Course contents:

- Extraction and purification of genetic material of pathogens from various sources & electrophoretic separation of nucleic acid
- PCR & real time technology
- Molecular cloning of genes.
- Sequencing of Nucleic acid (DNA)
- *In silico* Primer designing.
- Analysis of nucleotide sequences.
- Sequence alignment tools e.g. BLAST.
- Phylogenetic analysis of sequence data
- Solid phase peptide synthesis and its applications
- RP-HPLC based peptide purification
- Various tools and databases of peptide and proteins, peptide structure prediction
- Principles of Phage display peptide library and its applications
- B cell T cell linear epitope identification
- Antimicrobial peptide database searching
- Designing of antimicrobial peptides
- Gold/silver/iron oxide nanoparticles synthesis and characterizations
- Homology modeling of protein

Hisar: It is located 165 Km from Delhi, 320 Km from Jaipur. It is connected from Delhi by train as well as bus. The buses ply between interstate bus terminuses (ISBT) New Delhi and Hisar. There are three trains from Delhi *viz*., Haryana Express (leaves New Delhi Railway station at 6:18 PM) Kisan Express (leaves Old Delhi railway station at 3:00PM) and Gorakdham Express (leaves New Delhi Railway station at 5:30AM).

Duration: September 25th to October 15th 2025

Course Fees: Indian participants are requested to pay a sum of Rs. 8000/- (Rs eight thousand only) while for foreign delegates US$ 200 per week as registration fee. The registration fee shall be deposited in cash at the time of registration.

Laboratory and computing facilities: The molecular diagnostic laboratories are well equipped with modern equipments and other lab wares.

Accommodation: Arrangements for the stay of the participants (if he/she is govt./private employee) **during the training program will be made in faculty house of the University on the payment basis.** For others, private PG/Hotels are available in the market.

Number of participants: The maximum number of participants shall not exceed 20.

Participants and eligibility: Participants are invited from ICAR Institutes/ SAU/Basic Science Institutes/ Sate Governments/Private Organizations. Students from relevant disciplines can also participate

How to apply: The application for participation may be sent in prescribed format, duly forwarded by Head of the institution. It should reach to the Course Director latest by **25th September 2025 up to 10 AM** by post, in-person, fax or email. **TA & DA of the participants will be borne by participants/sponsoring institutions/ organizations etc. The participants will also have to pay for their boarding and lodging charges during the training program. The organizers of the course will not bear any expenses on account of the participants.**

All correspondence may please be addressed to:
Dr. Sushila Maan, Course Director cum Prof. & Head
Department of Animal Biotechnology, LUVAS, Hisar
Phone no. 01662- 256130 (office). Mb number 8950344104
Email: hod.abt@luvas.edu.in, vinaygjoshi18@luvas.edu.in
Photocopy of the application form can be used