ICAR CENTRE OF ADVANCED FACULTY TRAINING

(Established in the year 1995 AD vide 0.0.No.1-2/93 (CAS)/UNDP dated 11.11.1994)

IN

VETERINARY MICROBIOLOGY





38th ICAR - CAFT Course

ON

"CURRENT ADVANCES IN DIAGNOSIS AND CONTROL OF ANIMAL DISEASES"

22nd January - 11th February, 2026

Organized by

Dept. of Veterinary Microbiology

Lala Lajpat Rai University of **Veterinary and Animal Sciences** Hisar-125004, Haryana



About the Department and University

Established as Department of Bacteriology and Hygiene in 1965, the department has taken a lead role in teaching and research in Veterinary Microbiology and Immunology. The pioneering and first-time lead studies have been made in the fields of poxviruses, salmonellae, foot-and-mouth disease virus, bluetongue virus, equine herpesvirus, bovine rotaviruses, buffalo immunology, phage display technology for nanobody production, monoclonal antibody-based assays, molecular diagnostic tests, etc. The faculty and students have won several awards, honours and recognition, including Rafi Ahmad Kidwai Memorial Prize, Hari Om Trust Award, ICAR Team Award, National Professor and National Fellows. besides Commonwealth Doctoral Scholarships and Post-Doctoral Fellowships. The ICAR had established Regional Research Centre on FMD, at this department since 1969.

Since 1995, as ICAR Centre for Advanced Studies/Faculty Training the department has successfully organized 37 Trainings/Refresher courses on various aspects of Veterinary Microbiology to train the faculty from various SAUs, SVUs and ICAR institutions across India. College of Veterinary Sciences is one of the oldest Colleges in Northern India. From Lyallpur (currently in Pakistan), the Campus at Hisar was shifted consequent to partition of India. Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS), Hisar was established by the state government of Harvana in December, 2010 in pursuance of the Haryana Act No. 7 of 2010 notified on 7th April, 2010.



About the Course

The training program entitled "Current Advances in Diagnosis and Control of Animal Diseases" will serve as a crucial platform for enhancing the knowledge and technical capacity of veterinarians, microbiologists, researchers, animal health professionals, and related stakeholders. With the continuous emergence and re-emergence of infectious diseases, it is imperative that veterinary scientist and academicians remain updated with the latest diagnostic techniques and control measures. This training will provide in-depth insights into modern diagnostic tools, including molecular methods like PCR, ELISA, next-generation sequencing, and advanced imaging technologies. which enable rapid and accurate disease detection. Furthermore, it emphasizes integrated disease management approaches that combine biosecurity, vaccination, epidemiological surveillance, and the use of digital technologies for disease monitoring and reporting. The training also fosters interdisciplinary collaboration, preparing participants to respond effectively to transboundary animal diseases and zoonotic threats that pose risks to public health and food security. By engaging in practical sessions and case-based learning, participants gain hands-on experience applicable to both field and laboratory settings. Importantly, the course promotes a One Health perspective. highlighting interconnectedness of human, animal. and environmental health. This holistic understanding ensures preparedness for future disease outbreaks and supports the development of sustainable control strategies.

and allied professionals with the skills, awareness, and scientific outlook needed to tackle current and 21. Basics for Development of SYBR Green based Real future challenges in animal health, thereby contributing significantly to global efforts in 22. Diagnostics and Surveillance of FMD in Harvana safeguarding animal welfare, public health, and food 23. Next-Generation systems resilience.

Course Contents

- 1. Antimicrobial Resistance: Challenges and Solutions
- 2. Brucellosis and Q Fever: Diagnostic Developments and Control Strategies
- 3. Immunological Assays for Veterinary Diagnostics: A Journey from Classical to Contemporary 26. Application of Liquid Chromatography for **Approaches**
- Antibodies
- Protocols
- Recombinant Antibody Development
- Diagnosis
- 8. Viral Genomics as a Tool for Diagnosis of Veterinary **Pathogens**
- 9. Bioinformatic Approaches to Study Recombination in RNA Viruses
- 10. Designing and Application of Anti-Microbial Peptide with Special Reference to Multi Drug Resistant Bacteria
- 11. Development of Vaccine Candidates Employing EHV-1 as Vector
- 12. Diagnostic Approaches for Influenza A Virus **Detection and Serological Investigations**
- 13. Harnessing Bacteriophages as Precision Tools against AMR
- 14.One Test, Many Answers: Multiplex Molecular Assavs in Animal Health
- 15. Biosafety and Biosecurity: Cornerstones in Animal Disease Prevention and Control
- 16. Recent Advances in Isothermal Amplification Assays for Rapid Detection of Pathogens
- 17. Metabolomics in Diagnostics: Practical approach
- 18.Next-Generation Sequencing: An Advanced Platform for Detection of Pathogens
- 19.Reverse Genetics for Development of RNA Virus 2. The selected candidates are required to submit the Vaccines

- Overall, the training will equip veterinary 20. Current approaches for Diagnosing Enteric DNA Viral Infections in Poultry
 - Time PCR Assay for Enteric Pathogens

 - Biosensor Diagnostics: Integrating Nanotechnology, AI, and Point-of-Care Innovations
 - 24. PCR based Molecular Detection of Bovine Viral Diarrhoea Virus Infected Cattle
 - 25. Assessment of Cell Mediated Immunity by Lymphocyte Proliferation Assay
 - Detection of Antimicrobial and Aflatoxin Residues
- 4. Generation and Future Prospects of Monoclonal 27. Serological and Molecular Tests for Diagnosis of **Bovine Tuberculosis**
- 5. Molecular Diagnostic Assays: Principles and 28. Flow Cytometry Based Assays in Livestock **Disease Diagnostics**
- 6. Phage Display Technology as a Platform for 29. Vitek-2 Based Microbial Identification and **Antibiotic Sensitivity Testing**
- 7. Immunohistochemistry in Veterinary Disease 30. Intellectual Property Rights in Animal Health and Production

Eligibility

- The candidates not below the rank of Asstt. Prof./ Scientist or equivalent will be eligible to participate in the training.
- They should be from ICAR-AU system including from private ICAR-accredited Colleges/Universities (Not more than two candidates).
- They should have completed the prescribed probation period as per ICAR/University rules a applicable.

How to Apply

- 1. The participants should submit the duly filled and approved application form through email at veterinarymicrobiology_caft@luvas.edu.in with copy to hod.vmc@luvas.edu.in. After filling the application form, take a printout of the application form and get it approved by the competent authority of your institute and send the scanned copy of the approved application on or before 20.12.2025. Selected candidate will be informed via email.
- original application form at the time of Registration.

T.A., Boarding and Lodging

The participants will be paid train or bus fare (or by any other means of transport in vogue), restricted to AC-II tier train, for the journey from the place of duty to the LUVAS and back by the shortest route on production of valid travel documents. The boarding and lodging shall also be arranged by the host institute. The participants are requested not to accompany family members with them.

Weather

The weather during January/February at Hisar will be cold (winter season). The participants are advised to carry woollen clothes.

Registration Fee (On spot)

Registration fee (non-refundable): Rs. 1000/- per participant (Rs. 5000/- in case of candidates from private ICAR-accredited Colleges/Universities) is to be deposited at the time of registration by the selected candidates only.

How to reach Hisar

Hisar is well connected through buses 24x7 from neighbouring states as well as Delhi [Inter State Bus Terminus (ISBT) at Kashmiri Gate]. Trains for Hisar could be taken from Delhi: 12555/Gorakhdham SF Express (Departure from New Delhi at 05:30 A.M.); 14731/Kisan Express (Departure from Old Delhi Station at 02:00 P.M.); 14085/Sirsa Express (Departure from New Delhi at 17:55 Hours).

Course Director

Dr. Rajesh, Senior Scientist & Head

Department of Vet. Microbiology, LUVAS, Hisar Email: hod.vmc@luvas.edu.in;

veterinarymicrobiology_caft@luvas.edu.in Mobile:9466171440

Tel Office: 01662-256104; 01662-256132

Course Coordinators

Dr. Akhil Kumar Gupta, Scientist

Department of Vet. Microbiology, LUVAS, Hisar E-mail: drakki1984@luvas.edu.in

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Dr. Mahavir Singh, Scientist

College Central Laboratory, LUVAS, Hisar

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Application format for participation in CAFT Training Programme(To be sent to Course Director of the Training)

ICAR sponsored 21 days CAFT training programme on "CURRENT ADVANCES IN DIAGNOSIS AND CONTROL OF ANIMAL DISEASES" from 22nd January – 11th February, 2026 organized by Dept. of Veterinary Microbiology, College of Veterinary Sciences, Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS), Hisar-125004, Haryana.

1.	Full Name (in block letters	s)			
2.	Designation				
3.	Name of the Department				
4. Name of the Institute/					
	University				
5.	Address for corresponden	ce			
6.	Date of joining		Marital Status :		
7.	Date of birth		Gender:		
8.	Mobile No.				
	WhatsApp No.				
8. Email ID					
9.	Teaching/Research/				
	Professional experience				
	Academic Record	X7 C	TI		
De	gree Discipline/Subject	Year of passing	University	Any distinction	
Bach	elor	passing			
Mast					
Ph. I					
Othe					
11. Mention if you have participated in any research seminar, Summer / Winter / Short Courses etc. during last five years under I.C.A.R. / Other Organizations:					
Signature of the Applicant:			Date:	Place:	
12. I	Recommendations of forward	ling Institute			
Certificate It is certified that the information was furnished by the office record and was found corrected.					
Signature:			Designation:		
Address:			Date:		