



ICAR Sponsored Ten days Short Course on

Physiological and Genomic Approaches to Climate Resilience in Farm Animals

11-20 February 2026

Course Director **Dr Brijesh Yadav**Professor

Veterinary Physiology

Course Coordinators

Dr Mukul Anand
Associate Professor
Veterinary Physiology
Dr Dilip K. Swain
Associate Professor
Veterinary Physiology

Sponsored by

# **Indian Council of Agricultural Research**

Organized by

# **Department of Veterinary Physiology**

College of Veterinary Science and Animal Husbandry U.P. Pt. Deen Dayal Upadhyaya Pashu Chikitsa Vigyan Vishwavidyalaya Evam Gau Anusandhan Sansthan (DUVASU), Mathura

### **Organizing Committee**

#### **Patron**

## Dr Abhijit Mitra

Vice Chancellor, DUVASU, Mathura

### Chairman

### **Dr Vikas Pathak**

Dean CoVSc and AH

### **Course Director**

## Dr Brijesh Yadav

Professor, Veterinary Physiology

### **Course Coordinators**

### Dr Mukul Anand

Associate Professor, Veterinary Physiology

## Dr Dilip K. Swain

Associate Professor, Veterinary Physiology

### **Core Faculty**

### **Dr Sarvajeet Yadav**

Professor, Veterinary Physiology

## Dr Arun Kumar Madan

Professor, Veterinary Physiology

### **Dr Amit Kumar**

Assistant Professor, Veterinary Physiology

### **Important Dates**

Last Date of Application: 20 January 2026 Notification of Selection: 25 January 2026

### **Bank Account details**

Name of the Bank: Indian Overseas Bank

Account Name : Finance Officer, DUVASU, Mathura

Account Number: 147501000000123

IFSC: IOBA0001475

#### Course Contents at a Glance

The course combines lectures, hands-on training, and field visits to promote practical understanding.

- Impact of climate change on livestock physiology and productivity
- Mechanisms of stress physiology and adaptive responses
- Genomic tools for studying heat and climate stress
- Epigenetics, transcriptomics, and molecular markers of adaptation
- Role of heat shock proteins and stress biomarkers
- Gut microbiome and its role in climate resilience
- Nutritional and management interventions for stress mitigation
- Reproductive physiology under heat stress conditions
- CRISPR and genome editing for enhancing resilience
- Methane mitigation and sustainable livestock production strategies
- Field visits to climate-resilient livestock units and laboratories
- Hands-on training on:

RNA extraction and expression analysis

Protein Isolation and Western blotting

Microbiome sequencing workflow

Methane measurement and HPLC-based assays

• Panel discussions on ethical and regulatory aspects

### About the University, College and Department

Uttar Pradesh Pandit Deen Dayal Upadhyaya Pashu Chikitsa Vigyan Vishwavidyalaya Evam Go-Anusandhan Sansthan (DUVASU), Mathura, was established by the Government of Uttar Pradesh through Act No. 27 of 2001 by carving out the College of Veterinary Science and Animal Husbandry from C.S. Azad University of Agriculture and Technology, Kanpur. The College of Veterinary Science and Animal Husbandry, Mathura, has the unique distinction of being the first Veterinary College established in independent India in 1947 and the first in Asia to start the B.V.Sc. & A.H. degree programme, M.V.Sc./M.Sc. programmes (1951), and Ph.D. programmes (1953). The University now encompasses the College of Veterinary Science and Animal Husbandry, College of Biotechnology, College of Dairy Technology, College of Fisheries Science, and Institute of Para-Veterinary Sciences, reflecting its comprehensive growth in education, research, and extension in animal and dairy sciences.

The Department of Veterinary Physiology has been an integral part of the college since its inception, imparting quality teaching and research in animal physiology. The department started the M.V.Sc. programme in 1956, the first of its kind in India, and is recognized for Ph.D. programmes in Veterinary Physiology. Its faculty members have received several prestigious awards, including the Rafi Ahmed Kidwai and Jawaharlal Nehru Awards. The department houses the Prof. M.D. Pandey Bio-Climatology Laboratory, a state-of-the-art facility equipped with climate chambers, calorimetric units, molecular and analytical labs, and a continuous gas monitoring system.

In alignment with national priorities, the department has undertaken pioneering research in stress physiology, climate adaptation, and genomics of livestock species, making it an ideal centre for the ICAR short course on Physiological and Genomic Approaches to Climate Resilience in Farm Animals.

#### **Eligibility Criteria**

Scientists/faculty members from ICAR/SAUs/Veterinary Universities can participate in the short course. The total number of participant will be 25.

#### **How to Apply**

Eligible candidates may fill the application in the prescribed format and get it recommended by the competent authority. The approved copy of the application may be sent to brijesh.yadav@vetuniv.edu.in before the last date of submission i.e., 20th January 2026. There is no course fee, however, the participants will have to pay Rs. 50/- as registration fee online in the given bank account or by demand draft drawn in favour of "Finance Officer, DUVASU, Mathura" payable at Mathura. The details of online transaction may be sent for confirmation. A confirmation email will be sent to selected candidates.

#### **Travel Allowances**

Participants will be paid return journey fare by shortest route by rail (permissible up to AC II tier)/road route as per ICAR guidelines. Participants are requested to make their own travel arrangements for reaching the venue and book the tickets after getting the email confirmation from the Course Director.

### **Boarding and Lodging**

Outstation participants will be provided boarding and lodging in the University Guest House on sharing basis. Expenses on boarding and lodging arrangements for selected participants will be borne by the organizers as per the ICAR guidelines. Participants are requested not to accompany their family members as accommodation facility is limited.

### Correspondence

## Dr. Brijesh Yadav

**Course Director** 

Professor, Veterinary Physiology brijesh.yadav@vetuniv.edu.in, Contact No. 9411006534



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# "Physiological and Genomic Approaches to Climate Resilience in Farm Animals"

11-20 February 2026

# **Application Form**

Name of	the Appli	cant:			
Disciplin	ne:				
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E-mail:					
Mobile:					
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Number	of Course	es Attende	d in Last 5 Years:		
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1. 2.					
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Signature of the Head of Institution (with Seal and Date)

Signature of Participant