





# National Training Program On Hands on Training on Molecular Techniques

# Sponsored under ICAR (Schedule Caste Sub plan)

# March 22 - 28, 2022



Department of Veterinary Physiology College of Veterinary Science and Animal Husbandry U.P. Pandit Deen Dayal Upadhyaya Pashu Chikitsa Vigyan Vishwavidyalaya Evam Go Anusandhan Sansthan (DUVASU), Mathura-281001 (U.P.) INDIA



#### 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 Government of Uttar Pradesh through the Act No. 27 of 2001 on October 25, 2001, by carving out all the units of College of Veterinary Science and Animal Husbandry from C.S. Azad University of Agriculture & Technology, Kanpur. The College of Veterinary Science and Animal Husbandry, Mathura became its first constituent college. The parent institution of this University had the distinction of being the first Veterinary College set up in independent India in 1947. It was the first Veterinary College in Asia to start with degree programme in Veterinary Science and to start M.V.Sc/M.Sc degree programmes in various disciplines of Veterinary and Animal Sciences in 1951 and the Ph.D. degree programmes in 1953. The main campus appears impressive with the buildings of College of Veterinary Science & Animal Husbandry, College of Biotechnology, College of Fisheries Science, College of Livestock Products Technology, College of Dairy Technology and Institute of Para - Veterinary Sciences.

The department of Veterinary Physiology imparts teaching to the students of B.V.Sc. & A.H. since the inception of the college in 1947. In 1956, M.V.Sc. in Physiology was started for the first time in the country. The department is also recognized for conducting research work leading to Ph.D., degree in the subject of Veterinary Physiology. The teachers of this department have been awarded with prestigious "Rafi Ahmed Kidwai Award" and "Jawharlal Nehru Award" for their research work. The staff members of this department have also contributed one chapter each in three scientific books and more than 250 original research articles



have been published in various National and International research journals. Egg yolk coagulating enzyme in the semen and cowper's gland of the goat was reported for the first time from this laboratory which was published in the most reputed journal "NATURE". Roy. A. (1957), 179: 318. Department had been pioneer in the research area of ruminant physiology, sheep, goat and buffalo reproduction, salivary physiology, environmental physiology and climatology. Since last few years, the department is slowly reviving its old glory. The department has established Professor M. D. Pandey Bio-Climatology Laboratory equipped with a state of art analytical and molecular laboratory, climate chamber for six adult cattle/buffalo, three calorimetric units, automatic weather station, continuous gas analysis monitoring system (methane, Carbondioxide) and infra-red camera. A state of art semen production, cryopreservation and analysis facility, knowledge dissemination center and machine milking facility for goats has been established. Semen from six different goat breeds is being supplied to nine different states of the country and the Veterinary Officers, AI workers are routinely being trained for AI in goats and the farmers are trained for profitable goat rearing. The department also has sperm signaling laboratory which was established under DBT project which has Computer assisted semen analysis facility. In the last few years, department has been able to publish research papers in different international journals of repute; Theriogenology, Animal Reproduction Science, Cryobiology, Cell stress and Chaperon, Journal of Thermal Biology, Scientific Report, Small Ruminant Research and Journal of Animal Science and Technology.

#### **About the Training**

Molecular biology tools are commonly used research and development, disease diagnosis, clinical research and other purposes. The training is intended to provide hands on training to candidates from schedule caste communities for their capacity building. The training would provide better exposure of working with high end instruments and enhancing their confidence in their future endeavors. The training will provide practical exposure to the participants in the area of RNA/DNA and protein based technologies.

#### **Tentative program contents**

- 1. Isolation of DNA from blood, tissues, cells
- 2. Agarose Gel Electrophoresis
- 3. PBMC isolation from blood
- 4. Isolation of RNA and cDNA synthesis
- 5. PCR and qRT-PCR
- 6. Protein Isolation
- 7. SDS-PAGE
- 8. Western Blotting
- 9. Florescent Microscopy

### **Eligibility Criteria**

Applications are invited from schedule caste category candidates enrolled/completed post graduate courses in biological sciences and Junior Research Fellows, Senior Research Fellows and Research Associates from different institutes.

### **Registration fee and Lodging**

The registration fee for the training will be free. The selected candidates will be provided free boarding and lodging facility during the training period. The candidates will be reimbursed the to and fro charges not exceeding the ordinary bus and railways sleeper class fare. The schedule timing for training would be from 10 to 5 PM.

#### **Organizing Committee**

Patron	Dr G.K. Singh, Vice Chancellor		
Chairman	Dr P. K. Shukla, Dean, COVSc& AH		
Training Director	Dr Sarvajeet Yadav, HoD, Vet. Physiology		
Training Co-ordinator	Dr. Brijesh Yadav, Associate Prof., Vet. Physiology		
	Dr. Dilip K. Swain, Assistant Professor, Vet. Physiology		
Core Faculty	Dr Arun Madan, Professor, Vet. Physiology		
	Dr Mukul Anand, Assistant Professor, Vet. Physiology		
	Dr Ajay P. Singh, Assistant Professor, Vet Microbiology		

#### **Important Dates**

Deadline for Submission of Application by mail: 18.03.2022 Confirmation to Selected candidates: 19.03.2022

### **Address for Correspondence**

## **Dr Brijesh Yadav** Co-ordinator Contact No. 9411006534 e-mail ID: drbrijvet@gmail.com

All COVID-19 Protocols (as per MHA, GOI Guidelines) must be strictly followed.



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Proforma of Application Form for the Participation in



- 1. Full Name (in block letters)
- 2. Designation
- 3. Present Employer and address
- 4. Discipline
- 5. Permanent Address
- 6. Address for correspondence

Mobile / Phone:

Email:

- 7. Research Experience
- 8. Number of courses attended in last 5 years
- 9. Academic records

### Education qualification

S.N.	Degree	Major Subjects	Year	University/Institute	O.G.P.A. Percentage

Date:

Place:

#### (Signature of the applicant)

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