ICAR-National Institute of Veterinary Epidemiology and Disease Informatics
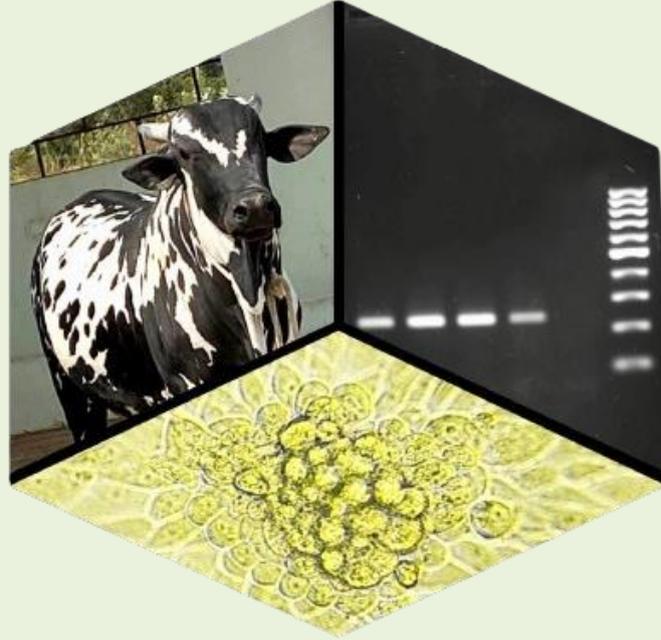
Training Program on
Techniques In Molecular Biology
17th – 19th February, 2025
(For Scheduled Caste participants only)

Sponsored by

ICAR-Network Programme on Genome Editing Technology

Patron

Dr. BR Gulati
Director, ICAR - NIVEDI, Bengaluru 560119

Course Director

Dr. Manjunatha Reddy GB
Senior Scientist
ICAR-NIVEDI, Bengaluru – 560119

Course Coordinators

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Senior Scientist	Senior Scientist	Senior Scientist
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Organized by

ICAR-National Institute of Veterinary Epidemiology and Disease Informatics

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About ICAR-NIVEDI

ICAR-National Institute of Veterinary Epidemiology and Disease Informatics (NIVEDI), (Formerly the Project Directorate on Animal Disease Monitoring and Surveillance, PD-ADMAS) has been set up under the aegis of the Indian Council of Agricultural Research (ICAR), Department of Agricultural Research and Education, Ministry of Agriculture and Farmer Welfare, Government of India. ICAR-NIVEDI is a pioneering research institute working with the mandate of R&D in the field of veterinary epidemiology and disease informatics and carrying out disease surveillance, monitoring and impact analysis of livestock diseases in India through collaborative centers located in different states of the country. The Institute has a long successful history of delivering predicted informatics and epidemiological solutions for various animal diseases. Located in Karnataka, ICAR-NIVEDI had its humble beginning as All India Coordinated Research Project (AICRP) on Animal Disease Monitoring and Surveillance (ADMAS) in 1987, up-graded to Project Directorate on Animal Disease Monitoring and Surveillance (PDADMAS) in 2000 and finally in the year 2013 it was rechristened as ICAR-NIVEDI.

The Institute has state-of-the-art Bio-safety Level 2 laboratory, which is managed as per the national guidelines for laboratory biosafety and biosecurity practices.

The role of NIVEDI is significant in developing disease models, risk analysis, animal disease forecasting & forewarning. It is also working on development of population assay surveillance diagnostic kits for epidemiological serosurvey for field diagnosis. NIVEDI is also working on development of spreadsheet modules for economic impact analysis of important endemic livestock diseases viz., FMD, PPR, BT, Brucellosis, HS, LSD in the country.

The role of this institute in the eradication of Rinderpest from India and the development of the National Animal Disease Referral Expert System (NADRES),

an interactive software for animal disease forecasting is noteworthy.

ICAR-NIVEDI is in the forefront for the societal development of scheduled caste and schedule tribe communities through DAPSC and TSP programs. Under these GOI initiatives, goats, chickens along with feed, medicines and training programs have been provided to ensure economic, social upliftment and nutritional security for the children, rural women and youth.

The institute has developed and released various technologies and patented a few products which are being utilized by different stakeholders in the country. The institute has five patents granted to its credit and another five patents have been filed in the area of disease diagnostics. In addition, 3 applications have been copying-right registered, and another 4 applications are in pipeline in the field of veterinary epidemiology.

About the training

The 3-day hands-on training program on molecular biology techniques offers a structured blend of theoretical knowledge and practical application. Each day commences with a morning theory session covering topics such as bioinformatics tools, good laboratory practices, DNA extraction and quantification, and PCR methodologies. Practical sessions complement the theoretical components, enabling participants to gain hands-on experience with advanced techniques like primer design, micropipette handling, DNA quantification, and agarose gel visualization. Afternoon sessions include keynote addresses by experts, laboratory visits, and interactive discussions to foster deeper engagement. The workshop culminates with participant feedback, interaction, and a formal valedictory session, ensuring a comprehensive and enriching learning experience.

The training programme is under the SCSP component of the ICAR funded "Network Program on Application of Genome Editing Technology for Improvement in Livestock Health and Production (NPGET)" project.

Training Highlights

1. Basics of Bioinformatics, NCBI Tools, Primer design.
2. Overview of genomic DNA and its application Types of DNA extraction.
3. Qualitative and quantitative quantification of genomic DNA.
4. PCR- requirements, process, types, applications, and visualization and analysis.
5. Good laboratory practices (GLP) and Biomedical waste management (BMW), Bio-safety guidelines.

Eligibility

Students (PG/PhD)/Faculties/staff etc., under scheduled caste category. Bonafide caste certificate is to be submitted along with the application and forwarded by competent authority.

No. of participants

Maximum 15

Application procedure

Submit duly filled application and forwarded by the competent authority and send to gbmpatho@gmail.com. All details can also be submitted using the google form. Application will be considered on First come first serve basis.

Course Fee

No course fee

Travel & Accommodation

All expenditures for travel, boarding and lodging will be borne under NPGET project. TA is limited to 3-tire AC train fare by the shortest route. However, nominated faculties are free to avail TA as per the eligibility from the parent institute. Accommodation will be provided at Institute Guest house on shared basis.

Important Dates

Application Deadline   : 30.01.2025
Selection of applicants   : 01.02.2025
Participants confirmation : 03.02.2025

Application form

1. Name of the Applicant   :
2. Designation   :
3. Gender   :   Male / Female
4. Caste (SC)*   :   Yes / No
5. Institute/University   :
6. Correspondence Address   :
7. E-mail ID   :
8. Mobile Number   :
9. Educational Qualification   :   (M.Sc./M.V.Sc/Ph.D./Others)
10. Discipline   :
11. Expectation from the training :

The above information provided is true to the best of my knowledge. If selected, I agree to abide by the rules and regulations of the program.

*Attach a self-attested valid caste certificate (SC) Issued by Central / State authority

Date: Signature of the applicant

Recommendation of the Competent authority

Dr/Mr/Ms…………………………is hereby nominated for participating in the Training Program on "Techniques in Molecular Biology" at ICAR-NVEDI, Bengaluru from 17th -19th February, 2025.

Date: Signature and Seal
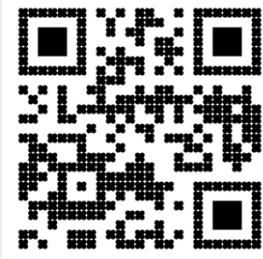
Correspondence
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Mobile: 8971192103

To register for training:
Link or Scan here to apply
https://docs.google.com/forms/d/1LKyDY9_naSy2nEugFzxsKmf6YDycTbBXeNHUwHZIF5U/edit

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