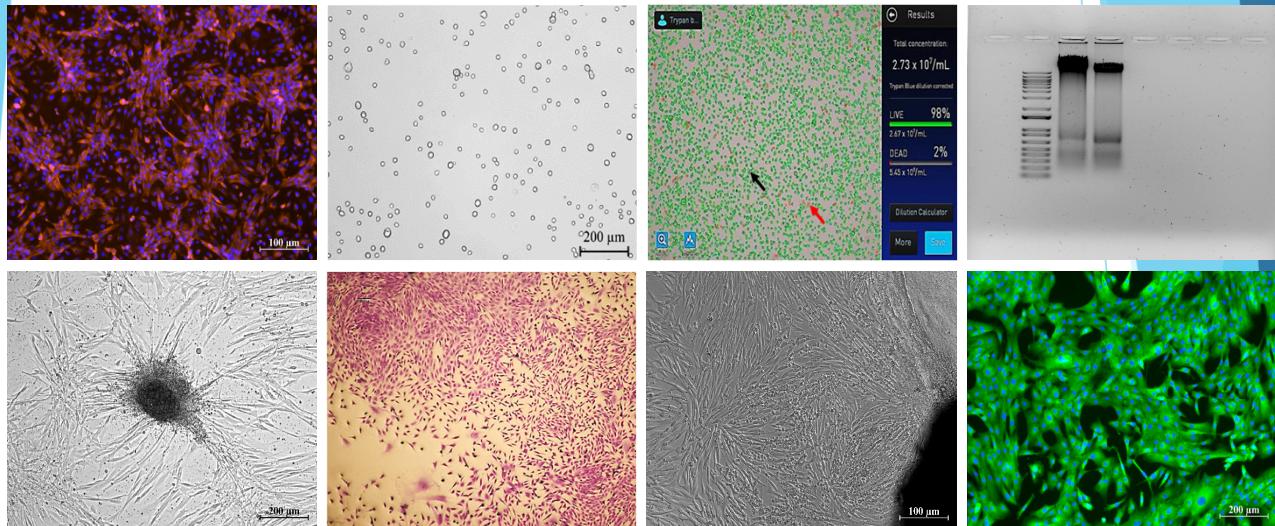


**Training Programme**  
*on*  
**Animal Cell Culture and Molecular Biology Techniques:  
Integrated Approaches**

**09<sup>th</sup> – 13<sup>th</sup> February, 2026**



***Sponsored by***  
All India Network Program on Application of Genome Editing  
Technology for Improvement in Livestock Health and  
Production (AINP-GETILHP)

***Patron***  
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***Organized by***  
**Animal Physiology and Reproduction Division**  
**ICAR - Central Institute for Research on Goats,**  
**Makhdoom, Farah – 281122, Mathura, (U. P.)**  
**Website: <http://www.cirg.res.in/>**



## **About ICAR-CIRG and Animal Physiology & Reproduction Division**

The Institute was established on 12<sup>th</sup> July, 1979 with the vision to develop poor men's cow - goat as a source of livelihood security, poverty alleviation and employment generation. The Institute has acquired and developed modern laboratory facilities over the years to conduct research on Goat Genetics & Breeding, Feed resource development, Nutrition, Physiology, Reproduction, Management, Diagnosis & Prevention of Diseases, Transfer of improved Technologies and Milk and Meat Products technology.

At present the Division has developed impressive facilities for research and teaching in the areas of cell culture techniques, cell line development and maintenance, cryobanking of somatic cells along with high end embryo biotechnological tools like animal tissue/cell culture, *in vivo* embryo and *in vitro* embryo production, animal cloning, parthenogenic embryo production, transgenesis, cryopreservation of gametes, stem cells and somatic cell lines, embryonic, spermatogonial and mesenchymal stem cell production and their application.

### **Location and weather**

The Institute is located at nearly equidistance from two famous tourist places *i.e.* Mathura (25 km) and Agra (32 km). The weather at CIRG during January is average daytime highs around 20-25°C (68-77°F) and cooler nights dipping to 8-12°C (46-54°F), low humidity, and sunny days.

### **About the training**

This training provides integrated theoretical and hands-on exposure to animal cell culture and essential molecular biology techniques. It covers establishment, maintenance, and cryopreservation of animal cells, along with key molecular methods such as RNA isolation, cDNA synthesis, and PCR/RT-qPCR for molecular characterization. The program aims to enhance practical skills and technical understanding for applications in animal biotechnology, reproductive research, and genetic resource conservation.



## **Course contents (theory and hands-on practical)**

Curriculum includes lectures and hands-on sessions on:

- Basics of cell culture, lab setup, and safety guidelines.
- Do's & don'ts in cell culture labs, media preparation, sterility maintenance.
- Primary cell culture, subculturing/passaging and confluence monitoring.
- Assessment of cell morphology and growth characteristics.
- Evaluation of cell viability and proliferation (trypan blue assay).
- Immunocytochemical identification with cell-specific markers.
- Cryopreservation and post-thaw evaluation of somatic cells.
- RNA isolation, cDNA synthesis, and gene expression analysis.
- Collaborative troubleshooting and discussion sessions.

## **Eligibility**

Applicants are invited from the scientists/ teaching faculty/ research scholars/ students working/studying in government/ private institutions/ organizations, having basic knowledge of animal cell culture.

## **How to apply**

Applications in the given format should be sent through the proper channel to the Course Coordinator through email at [spsinghmail1@gmail.com](mailto:spsinghmail1@gmail.com). An advance copy may be sent through email to the Course Coordinator for early registration. **Last date to apply is 30<sup>th</sup> January, 2026 (up to 5.00 PM).**

## **Mode of selection**

The seats are limited. Eligible applications will be considered on a 'first-come, first-served' basis. The total number of participants will be 10 only. A list of candidates will be prepared as per the criteria laid out for the course, and intimation to the selected participants will be sent through email.

## **Financial assistance**

There is no registration or bench fee for ST candidates, and their boarding and lodging will be provided free of cost with shared accommodation in the Institute's facilities. For non-ST participants, a registration fee of ₹5000 will be charged. No T.A. will be provided to any participant.

## **Application form**

**1. Name:** \_\_\_\_\_

**2. Designation:** \_\_\_\_\_

**3 (a) For employees: Present employer and address**  
\_\_\_\_\_

**3 (b) For students: Pursuing degree** \_\_\_\_\_

**University / Institute / College** \_\_\_\_\_

**4. Address for correspondence:**  
\_\_\_\_\_

**5. Mob:** \_\_\_\_\_

**6. Email:** \_\_\_\_\_

**7. Date of birth:** \_\_\_\_\_

**8. Sex:** \_\_\_\_\_

**9. Category:** \_\_\_\_\_

**10. Highest educational qualification (with specialization):**  
\_\_\_\_\_

**11. Teaching/Research/Professional Experience:**  
\_\_\_\_\_

**It is to certified that all the information furnished by me is true to the best of my knowledge.**

**Date:**

**Signature of applicant**

**Recommendations of the forwarding authority with seal:**

**Correspondence**

**Dr. S. P. Singh**

Principal Scientist & Coordinator

Animal Physiology and Reproduction Division

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Email: spsinghmail1@gmail.com