



Short-Term Training Program on Applied Poultry Biotechnology: Bridging Theory and Practice



3rd - 7th February, 2025

(For Scheduled Caste participants only under DAPSC/ SCSP component)

Sponsored by

ICAR-Network Programme on Genome Editing Technology

Organized by

ICAR- Directorate of Poultry Research

Rajendra Nagar, Hyderabad-500030, Telangana

www.pdonpoultry.org



Patron

Dr. R.N. Chatterjee, Director

Convenor

Dr. U. Rajkumar, Pr. Scientist & Head, PGB Division

Course Directors

Dr. K.S. Rajaravindra, Sr. Scientist

Dr. L. Leslie Leo Prince, Pr. Scientist

Course Coordinators

Dr. Aneet Kour, Scientist

Dr. Shanmugam, M. Pr. Scientist

Dr. S. Jayakumar, Sr. Scientist

About the Program

The Training program is organized as part of capacity building for scheduled caste faculty, scientists, and others associated with the research activities in ICAR and other agricultural and animal sciences universities. The program is completely sponsored by the ICAR-Network Programme on Genome Editing Technology for improvement in Livestock Health and Production organized under the aegis of the project entitled "Genome Editing as a tool for skewing sex ratio in Chicken for Welfare and enhanced productivity". The program is designed to incorporate the theoretical and practical aspects of Poultry Biotechnology in particular and animal biotechnology in general. The training is conducted by highly qualified faculty with all the necessary facilities and infrastructure.



ICAR-Network Programme on Genome Editing Technology

In recent years, genome technologies in farm animals have progressed rapidly, from gene identification to genome profiling to genome editing. Advanced genomic technologies at gene levels have led to the identification of genomic loci that are associated with genes that affect economic traits in livestock and poultry. Genome editing tools, particularly CRISPR, offer the best solutions to mitigate the ever-growing demand for animal products at an affordable price. A holistic platform for the application of genome editing technology in animal health and production was established by ICAR with ICAR-IVRI, Izatnagar as the coordinating centre. The program also aims to produce competent human resources in various advanced super specialty areas of animal biotechnology through workshops, trainings, webinars, etc.

About ICAR-Directorate of Poultry Research

The ICAR-Directorate of Poultry Research (DPR) formerly Project Directorate on Poultry (PDP) is one of the constituent research institutes of the Indian Council of Agricultural Research (ICAR), an autonomous organization under the Department of Agriculture Research and Education, Ministry of Agriculture and Farmers Welfare, Government of India. The objectives of the Directorate are to coordinate research at AICRP centers located across the country and conduct research on the development and improvement of chicken lines for commercial and rural poultry production. The ongoing research programmes at DPR are focused on research relevant to societal needs, and application-oriented research towards commercialization. These include the areas of poultry and duck breeding, molecular genetics, GWAS, genome editing, applied nutrition, immunomodulation, disease diagnosis and health management etc.

**Last date for application:
6th January 2025**

Motto of the training

- To acquaint the participants with basics of Biotechnology
- To introduce the participants to the latest cutting-edge technologies in Animal Biotechnology
- To nurture interest and strengthen capacity building/skill development in the participants

Topics to be covered

- a. DNA, RNA and Protein isolation
- b. Primer designing, PCR, qPCR, Agarose gel electrophoresis
- c. Cloning
- d. Cell culture (Bacterial, Fibroblast, Magnum cell culture)
- e. PGC culture and cryopreservation
- f. SDS PAGE and Western Blotting
- g. Transgenic Chicken production
- h. Genome editing in chicken
- i. Transcriptome and Whole genome sequencing
- j. Bioinformatic tools
- k. Biostatistics in Animal Breeding

Eligibility

- Participants must belong to the **Scheduled caste category**.
- ARS Scientists, Faculty from Veterinary and agriculture universities/Colleges, Subject Matter specialists from KVKs/ATARIs, Research Associates/SRFs/JRFs/YPs working in projects
- Bonafide caste certificate is to be submitted along with the application
- Candidates should submit a nomination letter from the competent authority

Registration Form:

Click <https://forms.gle/BUEbZAJWJTJy4aa6>

- Attach:**
- Caste certificate (PDF)
 - Nomination letter (PDF)
 - Recent passport photo (JPG)



Travel & Accommodation:

All expenditures for travel, boarding and lodging will be borne under NPGET program. Travel restricted to 2AC (booked via IRCTC) as per ICAR guidelines and eligibility of the candidates. Accommodation will be provided at Institute Guest house on sharing basis.

For details contact:

Dr. K S Rajaravindra, Senior Scientist,
Email: ksrravindra@gmail.com; Mobile: 94904 48040