



National Training Programme on "Basics of CRISPR Technology"

(Sponsored under SCSP scheme of ICAR-NPGET Project)



March 3-7, 2025

Organized by

Animal Biotechnology Division, ICAR-National Dairy Research Institute, Karnal-132001 (Haryana) INDIA

About Institute (NDRI)

The ICAR-National Dairy Research Institute is a leading research organization dedicated to advancing dairy development in the country through research, education, and extension activities. As a national institute, it focuses on fundamental and applied research to boost animal productivity and create cost-effective technologies that benefit dairy farmers. Additionally, the institute plays a key role in training skilled professionals to address the human resource needs of the dairy sector. Animal Biotechnology Division (ABTD) is one of the prestigious divisions of the Institute, which focuses on three main areas namely reproductive biotechnology, animal genomics & proteomics and structural biology. ABTD has made significant strides in the field of animal cloning. In 2009, the world's first cloned water buffalo calf was produced using a handmade cloning technique. Additionally, in 2023, India witnessed the birth of its first cloned cattle, GANGA, marking a major milestone in biotechnological advancements. This training is under the reproductive biotechnology area, which has major interest in reproductive biotechnologies such as production of genome edited and cloned animals, embryonic and adult stem cells, and cryopreservation of gametes and embryos. In recent years, genome editing tools, such as CRISPR/Cas9, have revolutionized livestock improvement by tailoring the production and health traits. In the field of genome editing, NDRI has achieved early success by successfully produced MSTN and BLG gene knockout buffalo embryos using CRISPR technology.



About the Training

Genome editing techniques are used in modern livestock research and development, and veterinary diagnostics. This training course is intended for the SC community researchers who are seeking basic-level genome editing training to participate in biotechnological research in livestock sciences. Thus, this training will help to fill a skill gap between technical skills and actual applications and those seeking new career opportunities in the biotechnology field. Major Topics: Basics of genome editing, In Silico tools for design and screening application, Cell culture method, Transfection methods, Genome analysis, Setting of genome editing experiments.

Candidates are limited to 10 to ensure low trainee-instructor ratios and a rich educational experience.

Eligibility & How to Apply

Applications are invited from the Scheduled Caste (SC) community researchers, including PhD students and research staff (RAs, SRFs, and YPs) of ICAR/ SAUs and CAUs and other Universities/ institutes. The applicant needs to have M.Sc (life sciences) / M.V.Sc educational qualifications. Priority will be given to BPL and aspirational district students belonging to scheduled caste community. **Interested candidates submit the filled application through email to the course coordinator (training.ebl@gmail.com).** The application needs to be approved by the competent authority of applicant's organization (Mentor/ HoD/ Dean/ Director/ Vice-chancellor). There is no need to submit the hardcopy of application.

Registration Fee: There is no registration fee.

Financial Assistance

The participants will be paid T.A. for to and fro journey by rail/ bus/ public transport by the shortest route as per entitlement (on producing documentary evidence), restricted to AC-II. Accommodation will be arranged free of cost in the Institute's accommodation facilities on sharing basis. (Please do not bring your family members along with you. It will not possible to arrange their accommodation at Karnal during the period).

Chief Patron

Dr. Dheer Singh
Director & Vice-Chancellor

Patrons

Dr. AK Singh **Dr. Rajan Sharma**
Joint Director (A) Joint Director (R)

Co-Patron

Dr. JK Kaushik
HoD & Pri. Scientist

Course Director

Dr. Naresh L Selokar
Sr. Scientist

Course Coordinator

Dr. MK Singh
Sr. Scientist

APPLICATION FORM
National Training Programme on “Basics of CRISPR Technology”

1. Full Name (in block letters) :
2. Designation :
3. Employment status :
4. Present address :
E-mail id, Phone/ mobile
5. Permanent address :
6. Date of birth :
7. Sex: Male/Female :
8. Previous trainings, if any :
9. Mention if you have participated in any training course during the previous years under SCSP scheme
10. Academic record :

Sr. no.	Examination passed	Subject main/subsidiary	Year of passing	Class ranks distinctions etc.	University or Institution	Other Information
1.	Bachelor degree					
2.	Master degree					
3.	Doctoral degree					
4.	Other certificates, Diploma, Degree, if any					

Signature of the applicant

Date

Place.....

11. Recommendation by forwarding authority :

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Signature

Designation

Date

Address

Note: It is mandatory for applicant to submit a soft copy of SC community certificate issued by state/central government and other supporting documents such as an Aadhaar card, BPL and aspirational district documents with the filled application form for consideration. Submit the soft of application to Course Director at the training.ebl@gmail.com before 15th Feb. 2025. The confirmation to selected participants will send before 20th Feb. 2025.