





# Model Training Course

On

Embryo Transfer Training Programme for Augmenting Propagation of Indigenous Dairy Cattle Germplasm

December 04 to 11, 2018

Sponsored by

Directorate of Extension Education (DOE) Ministry of Agriculture & Farmers Welfare Govt. of India

> Chief Patron Dr Amarjit Singh Nanda (Vice Chancellor)

Patrons Dr Harish Kumar Verma (Director Extension Education) Dr Parkash Singh Brar (Dean, College of Veterinary Science)

> **Course Director** Dr Prahlad Singh

Course Coordinator Dr Narinder Singh

Co-Coordinators Dr Sumit Singhal, Dr SS Dhindsa, Dr VS Malik.

Organized by

Department of Veterinary Gynaecology and Obstetrics Directorate of Extension Education Guru Angad Dev Veterinary and Animal Sciences University Ludhiana – 141004, Punjab, India

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# Embryo Transfer Training Programme for Augmenting Propagation of Indigenous Dairy Cattle Germplasm

The indigenous cow has a potential superiority over exotic and crossbred cows due to its ability to survive under harsh climatic conditions of Tropics. To harness the inherent advantages of indigenous cow efforts are on to conserve and propagate the precious germplasm for sustainable milk production. Reproductive biotechniques like Multiple Ovulation & Embryo Transfer (MOET) in association with transfer of embryos to recipients (crossbred, non-descript or low potential cows/heifers of any breed) might expedite the propagation of superior indigenous bovine germplasm. Embryo transfer technology is an efficient tool in preventing disease transmission, easy import and export of genetic material, testing of undesirable traits, production of elite sires and bull mothers. In India, there is a need to strengthen the trained Human resource for effective implementation of Embryo Transfer Technology at farmer and field level for the propagation of elite bovine germplasm.

#### **OBJECTIVES**

- 1. To impart knowledge about embryo transfer technology for propagation of indigenous bovine germplasm.
- 2. To provide a practical platform to discuss about the skill development in embryo production.
- 3. Exposure to advanced technologies leading to an effective embryo production programme.

#### **COURSE CONTENT**

*Embryo Transfer Training Programme for Augmenting Propagation of Indigenous Dairy Cattle germplasm* will include topics related to following broad headings:

- Reproductive bio-techniques and their role in livestock improvement
- Reproductive endocrinology and follicular development based on Ultrasonography (USG)
- Palpation of cervix, uterus, ovaries, follicles and corpora lutea with advanced aids
- Selection of donors and recipients
- Estrus synchronization protocols for embryo transfer
- Superovulation-use of follicle stimulating hormones, mechanisms of follicular maturation, ablation & ovulation
- Heat detection methods
- Preparation use and care of media, instruments and other accessories
- Methods of embryo flushing and recovery
- Evaluation, manipulation and classification of embryos
- Recipient evaluation for embryo transfer
- Techniques of transferring embryos and cryopreservation
- Sanitation of embryos for domestic use and for export

#### **VENUE AND DURATION**

The Model Training Course will be organized at Department of Veterinary Gynaecology and Obstetrics, College of Veterinary Science and Directorate of Extension Education, Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana. The duration of the training will be of eight days from 04-11 December 2018.

#### ELIGIBILITY

The officers/Scientists of State Departments (Animal Husbandry/ Livestock Development Board) will be given first priority and fully funded however the Scientists of SAUs/KVKs/ICAR can be accommodated with the condition that their TA/DA will be borne by the parent institute.

#### **APPLICATION SUBMISSION**

Applications are invited from eligible candidates in the given format and should be sent through proper channel to the Course Director. Forms are also available on the Institute's website (<u>www.gadvasu.in</u>). Advance copy may be sent through email to Course Director for early registration. The last date for receiving nominations is 07 November, 2018. Eligible Applications will be considered on "first come first serve" basis.

#### **SELECTION AND CONFIRMATION OF PARTICIPANTS**

The total number of participants will be twenty. A list of candidates will be prepared as per the criteria laid for the course and will be displayed in the University website along with the intimation to the selected participants through email. TRAVEL, BOARDING AND LODGING

Traveling expenses may be reimbursed on actual basis as per entitlement of the official who attends the training and the participant should produce money receipts/ tickets in support of claim. In case of non-availability of normal reservation, the

reimbursement of tatkal reservation charges may also be allowed to the participants. The provision to meet traveling expenses has been made for participants from the State Development Departments only. In case, the trainees from other organizations viz. ICAR, SAUs, KVKs etc. are desired to participate in MTC, their TA/DA may be borne by their nominating institute. However, all participants are entitled to avail the lodging and boarding and other facilities.

A certificate from the participant's host institute should be produced to the effect that no claim is being made for TA by from any other source/ State Govt. TA certificate from the participants is to be produced to the effect that no TA advance has been received from the sponsoring Department/Agency.

The traveling expenses of the officer not eligible for TA should produce a certificate that the TA will be borne by the institute on behalf of the Ministry of Agriculture, Govt. of India.

The participants will be accommodated in the Scientist Home at Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana; Guest House CIPHET, Ludhiana; and/or nearby facilities.

**HOST INSTITUTE** 

Guru Angad Dev Veterinary and Animal Sciences University, was established at Ludhiana in 9<sup>th</sup> August 2005 and it started functioning from 21 April 2006 for promoting livestock production, health and prevention of disease(s) through integrated teaching, research and extension programme(s). Department of Veterinary Gynaecology and Obstetrics, Guru Angad Dev Veterinary and Animal Science University (GADVASU) Ludhiana is Centre of Advanced Faculty Training (CAFT) under the auspices of Indian Council of Agricultural Research (ICAR, New Delhi). The department has an adequate facility for the conduct of an embryo transfer training along with the facility of a dairy farm and well established Semen Centre. This department has well trained scientists having vast experience in the field of animal reproduction. Almost all faculty members have visited / worked in universities abroad for their PhD/Post Doc/Visiting scientist/ research collaboration. This department has 11 ongoing research projects in hand. Experienced faculty is already engaged in organizing various training programmes under CAFT, refresher courses for veterinary officers and farmers. University has a good number of vehicles for transportation. All the University class rooms/ seminar rooms are equipped with latest teaching aids.

The University is located in the central part of Punjab having a distance of 100 Kms from Chandigarh and 160 Kms from the historic place Golden Temple Amritsar. The participants are advised to bring winter clothes as the temperature in Ludhiana during December will be 12 to 25°C.

IMPORTANT DATES		
Last date for receipt of nomination (Through Proper Channel)	:	07 November 2018
Intimation of Selection	:	08 November 2018
Last date of confirmation from Participants	:	15 November 2018

### **CHIEF PATRON**

Dr Amarjit Singh Nanda Vice-Chancellor Guru Angad Dev Veterinary and Animal Sciences University Ludhiana -141 004, Punjab

#### PATRONS

**Dr Harish Kumar Verma** Director of Extension Education Email: hkvpau@gmail.com Mob. +91 98158 73929

## Dr Parkash Singh Brar

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## COURSE DIRECTOR

Dr Prahlad Singh Professor-cum-Head Department of Veterinary Gynaecology and Obstetrics Email: <u>hodvgo@gmail.com</u>, Mob. +91 946310 4958

#### **COURSE COORDINATOR**

Dr Narinder Singh

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#### **CO-COORDINATORS**

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## APPLICATION FORM FOR PARTICIPATION IN MODEL TRAINING COURSE (To be sent directly to the Course Director)

	Title of Course					
1. 2. 3. 4. 5. 6. 7. 8. 9.	Duration Full Name (in Block Letters) Designation Present Employer and Address Address to which reply should be sent (in Block letters) E-mail ID Phone/Fax/Mob Permanent Address Date of Birth Sex Marital Status Mention if you have participated in any summer/winter/short course etc. under ICAR/other organizations:	From		To		PHOTO
10.	Academic Record: (Degree Onv Examination Subjects Passed Main/Subsidiar Bachelor Degree Master Degree Ph. D.		University or Institute	Year of Passi	ng Class, Ranks, Distinction etc.	
11.	Others Professional Experience Sr. Post Held		Period with Dates			_
12.	Date: Place: Recommendation of forwardin	g Institute			Signature of Applican	

Signature with seal

CERTIFICATE

It is certified that the information has been furnished from the office record and was found correct

Date:\_\_\_\_\_

Signature and Designation of the Sponsoring authority with address