

DEPARTMENT OF BIOTECHNOLOGY Ministry of Science & Technology Government of India

INVITATION FORCONCEPT NOTES ON "FRONTIER AREAS OF LIVESTOCK REPRODUCTION AND RELATED TECHNOLOGIES"

Department of Biotechnology supports programmes in the area of AnimalReproduction, both of strategic and applied nature. Based on the recommendations of an Expert Committee, it has been decided to invite concept notes from the scientists/ researchers working in the area of livestock reproduction and related areas having sufficient expertise on following specific aspects:

- a. Genomic selection to enhance faster genetic gain in indigenous breeds of livestock species.
- b. Perfecting sexed semen production technologies locally.
- c. Indigenous production of biologicals required for ETT.
- d. Optimization of hand guided cloning technique for multiplication of superior males and ovum pick up technique for retrieving oocyte.
- e. Development of transgenic modal animals for the production of human proteins in its milk
- f. Development of suitable cryopreservation protocol for long term preservation of embryos.
- g. Genome editing for enhancing the productivity of livestock.
- h. Identification of genes responsible for silent heat.
- i. Developing genotyping chip for buffalo breeds.
- j. Metagenomics analysis of genital tract of healthy and diseased animal to understand the microbe assisting in normal reproduction and also in infertility.
- k. Identification of newer peptides for augmenting reproduction in ruminants.
- I. Nano particle based tissue/organ specific peptide delivery system.

The concept note received will be examined by the departmental committee constituted for the purpose. Short-listed concept notes will be invited for submission of detailproposals for financial support as per the modalities of the Department.

The soft copy of the concept note as per prescribed proformamay be submittedtoDr. A. K. Rawat, Director (akrawat@dbt.nic.in) before 30th June, 2016.

Proforma for submission of Concept Notes on Animal Reproduction and allied areas

(Maximum five A4 sizepages, use single space and 12 Roman Font)

1. Title of the project:
2. Coordinator/Principal Investigators/Co-investigators:
Name:Address:Telephone:Email:
3. Background of work (provide state-of-art information, including patent search):
4. Leads available/work done by PI/Co-PI:
5. Objectives/work packages:
6. Nature of networking/complementary between the partners including industrial involvement, if any:
7. Methodology in brief:
8. Duration:
9. Expected outcome/output (in quantifiable terms year-wise):
10.Budget:
o Non-Recurring:
o Recurring
o Grand Total (A + B) :
11.References (Give details of any three best papers or patents on the topic by each PI)