

Glimse of technologies developed



Last date of application:

25th April, 2018

Communication to selected participants:

26th April, 2018

Commencement of training:

14th May, 2018

Contact Details

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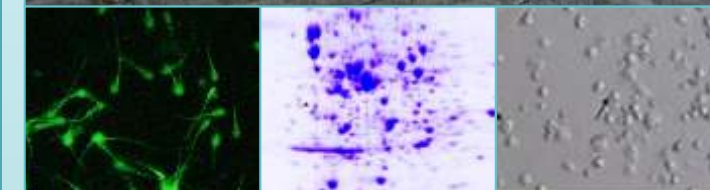
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ICAR-SPONSORED SHORT-COURSE ON MOLECULAR TECHNIQUES IN SHEEP REPRODUCTION

(14.05.2018 to 23.05.2018)



Division of Animal Physiology and Biochemistry

ICAR- Central Sheep and Wool Research Institute
Avikanagar, Via- Jaipur, Rajasthan-304501

ICAR-sponsored Short-Course
On
Molecular Techniques in Sheep Reproduction
(14.05.2018 to 23.05.2018)

About the institute & division

ICAR-Central Sheep and Wool Research Institute, Avikanagar was established in 1962 for carrying out both the basic and applied research in sheep and wool. It is a premier research institute in the country having state of the art research facilities in the areas of animal biotechnology, genetics breeding, animal physiology, biochemistry, reproduction, nutrition, health and others. The institute has developed and commercialized many farmers'-friendly technologies such as Avikasil, a medicated sponge for oestrus synchronization in sheep; Avishaan, a prolific crossbred sheep; Memnaprash, a milk replacer for lambs; Avikaminmix, a mineral mixer for sheep; Complete feed block; silage etc. Besides it has commercialized various woollen handicrafts, carpets, blanket, meat and milk products.

The Division of Animal Physiology and Biochemistry was initially started as Physiology Section in the year 1965. Then, in 1975 the section was upgraded to division to carry out both the basic and applied research in the areas of adaptive and reproductive physiology and biochemistry in sheep. Over the last five decades the division has emerged as one of the leading research centres in the country. A number of externally-funded projects from DBT, NATP, NIAP, NAFBSRA and NICRA have been successfully completed in the division. The division has achieved several milestones such as production of first embryo-transferred lamb, production of 24 embryos from a single ewe by multiple ovulation technique, development of an indigenous low-cost technology for oestrus synchronization in sheep and a soya-lecithin based synthetic diluent for liquid preservation of ram semen, achieving 70% post-thaw motility in the cryopreserved ram semen and others. The division is well equipped with advanced research facilities such as 2 D electrophoresis system, Western blot apparatus, gel doc system, HPLC, PCR, real-time PCR, fluorescent microscope, gamma

counter, cell culture laboratory, programmable cryo freezer and computer assisted semen analyzer etc. The division has well qualified and trained scientific and technical staffs who are working on various aspects of reproduction and adaptation physiology in sheep.

Course contents

- Isolation of spermatogonial stem cells (SSC), preparation of sperm and tissue extracts etc.
- Culture and characterization of SSC
- SDS-PAGE and Western blot analysis
- Immuno fluorescent staining of sperm
- 2 D electrophoresis of sperm proteins
- Radioimmuno assay & ELISA
- Primer designing and PCR
- Molecular Cloning
- Real-time PCR
- HPLC

Eligibility

University faculties or researchers not below the rank of Assistant Professor or Scientists working in the NARS system or any other government institute are eligible to apply for this short-course.

Fees

The training is sponsored by the Education Division, ICAR, New Delhi. There will be FREE boarding and lodging. TA will be provided for the to and fro journey restricted to AC-II tier train fare or bus or any other means of govt. transport. **No air-fare is admissible.** However, participants have to pay a fee of Rs. 50/- (Rupees Fifty only) either in the form of Indian postal order or demand draft drawn in favour of ICAR UNIT CSWRI, payable at Malpura.

Certificate

A certificate will be awarded to the participants at the end of the training.

How to reach

ICAR-C.S.W.R.I., Avikanagar is located in Malpura Tehsil of Dist. Tonk, Rajasthan. It is about 90 Km away from Jaipur on Jaipur-Malpura state highway and connected by Rajasthan roadway buses which are frequently available from Sindh camp bus stand which is about 2 Km away from Jaipur Railway junction.

Weather

The weather at Avikanagar during May is relatively hot with ambient temperature ranging between 25 - 40 °C and relative humidity between 20 – 50%. Though the peak temperature during the day-time varies between 35- 40 °C, the weather during the morning and evening is quite comfortable.

Places of interest

The Pink city Jaipur is only 90 Km away from Avikanagar. Places of attraction are the City Palace, Jantar Mantar, Howa Mahal, Jaigarh fort etc. The holy Ajmer Durgah is about 130 Km from Avikanagar

Organizing Committee

Chairman: **Dr. A. K. Tomar**, Director
ICAR-C.S.W.R.I., Avikanagar

Co-chairman:

Dr. Raghvendar Singh, Head, AP&B

Dr. S. K. Sankhyan, In-charge (HRD)

Course Director:

Dr. Rajani Kr. Paul, Scientist

Co-coordinator:

Dr. Vijay Kumar, Scientist (S.S.)

Faculty

Dr. Raghvendar Singh, Head, AP&B

Dr. S.M.K. Naqvi, Pr. Scientist

Dr. Davendra Kumar, Pr. Scientist

Dr. Vijay Kumar, Scientist (SS)

Dr. R. K. Paul, Scientist

Dr. Kalyan De, Scientist

Dr. Krishnappa B., Scientist

Dr. Sangrathna Bahire, Scientist

Dr. Arpita Mohapatra, Scientist