The main objective of the Laboratory Animal Facility (LAF) is to breed, maintain and supply laboratory animals to institutional scientists. Breeding and experimentation of all Nude and SCID mice is undertaken in IVC cages. During the year 2011, LAF undertook planned breeding of 23 different strains of mice, 1 strain of rat, and 2 strains of hamsters; and supplied 5418 normal mice, 287 Nude mice, 57 SCID mice, 411 rats, 124 hamsters and 4 rabbits to 29 institutional researchers against 89 IAEC sanctioned research proposals. LAF also supplied 12371 normal mice, 1128 rats, and 15 hamsters as either breeding nuclei or experimental animals to 18 different CPCSEA registered outside organizations in the country.

In 2012, LAF tested 417 different animal samples/ food/ water, and bedding material and room air samples for microbiology; 417 for clinico-pathology; and 32 samples for serology of six different rodent pathogens as *Mycoplasma pulmonis* (MP), Rat coronavirus, Pneumonia virus of mice (PVM), Hantan virus, Sendai and Tyzzer’s organism. To check the purity of the animals, 30 and 4 skin grafting in mice and rats, respectively; and 28 samples were checked for biochemical marker tests of seven different markers as Hbb, Idh-1, Mod-1, Gpi-1, Es-3, Akp-1, and Gpd-1. LAF also provided biochemical marker testing services to one each outside organizations for testing 4 mice samples and serology services by testing 8 mice samples. LAF also carried out PCR based tests for genetic purity using 8 microsatellite markers in 44 mice. It has carried out PCR based tests of *MP*, Mouse hepatitis virus (MHV), *Helicobacter hepaticus*, *Helicobacter bilis*, Sendai, Cilia Associated Respiratory (CAR) bacilli, Mouse Norovirus (MNV) and *Pneumocystis Carinii* (PC) for 32 randomly selected mice from 8 different strains. LAF also provided PCR based testing services to one outside organization for checking 3 different rodent pathogens on 8 samples. Totally, 51 blood samples were tested by flow cytometry to assess the T- and B-cell profile of Nude/ SCID as well as control BALB/c and Swiss mice. As a part of genotyping services of Tg and KO mice, LAF carried out genotyping of 128 *ptch* KO mice.

As a part of the embryo freezing program, LAF has collected a total of 3025 8-cell to morula stage embryos from 404 mice of 13 strains named as A/J, BALB/c, CD1, C3H/J, DBA/2, FVB, ICRC, L-gal-3, Ptch, Swiss/ba, Swiss, SENCAR, smo/smo and 78 nos. of SD rat embryos from 8 no. rats. These embryos are frozen in liquid nitrogen by
‘Vitrification’ method with the help of Ethylene Glycol as a cryo-protectant in 160 numbers of Cryo-vials.

STAFF ACHIEVEMENTS DURING THE REPORT PERIOD

A] Articles published in Medline Indexed journals:

Publications

1. Ingle AD and Hosetti BB. Metastatic behavior of human tumour xenografts in immuno-compromised mouse model. Ind J Vet Pathol, 2012, Accepted.


B) Newsletters and Popular Articles for LAF workshop manual

Arvind Ingle

1. “Immunogenetic Markers and Genetic Monitoring of Laboratory Rodents” in ACTREC workshop Manual on ‘Genetic Quality Assessment of Laboratory Animals through Laboratory techniques, ACTREC, Navi Mumbai, pg. nos. 4-8.


3. “Genetic Monitoring of Laboratory Rodents using SNP Technique” in ACTREC workshop Manual on ‘Genetic Quality Assessment of Laboratory Animals through Laboratory techniques, ACTREC, Navi Mumbai, pg. nos. 25-32.

Rahul Thorat

- “Preserving the Original Genotype of Rodent Strains by Embryo Cryopreservation” in ACTREC workshop Manual on ‘Genetic Quality Assessment of Laboratory Animals through Laboratory techniques, ACTREC, Navi Mumbai, pg. no. 33.

Nomination to Natl/ Intl Scientific Body

Arvind Ingle

- DBT Nominee on IBSC of SA-FORD, Taloja, Navi Mumbai, 2012
- Site visitor of AAALAC International- for two Animal Facilities in India. 2012

Appointment as Office Bearer of Natl/ Intl Scientific Society/ Association

Dr. Arvind Ingle

- Executive committee member: Indian Association of Veterinary Pathologists.
- Member, ICLAS Asia Regional Committee.
- President, LASA (India) www.lasaindia.org

Membership of Editorial Board/ Review Panel of Natl/ Intl Journal

Dr. Arvind Ingle

- Reviewer: ‘Veterinary Pathology’ official journal of the American Association of Veterinary Pathologists.
Membership of University Board/ Committee
Dr. Arvind Ingle

- Member: Institutional Animal Ethics Committee, Dr. DY Patil Medical College, Navi Mumbai: 2012.

Organisation of Natl/ Intl Conference/ Workshop/ Training Course
Dr. Arvind Ingle


Overseas Visit as Visiting Scientist or for Training or Meeting Abroad*
Dr. Arvind Ingle


Attendance of Natl/ Intl Meeting in India
Dr. Arvind Ingle

- Attended One day Brainstorming Seminar on “Animal Health, Well Being and Quality- Role of the IAEC”, jointly organized by LASA and CPCSEA, Hyderabad, Feb. 25, 2012 and delivered lecture on “Issues of availability of species and strains of known genetic background”.

Award of MSc / PhD / Other Postgraduate Degree
Dr. Arvind Ingle

PhD- “Establishment of Human Tumor Xenografts in Immuno-compromised Mouse Model”, 2012.

Training Imparted (Name of Supervisor, area of training/ project title, name of trainee, parent institute, city, month and year).

- Dr. Arvind Ingle, “Breeding, management, nutrition and record keeping of laboratory animals”, Mr. Anil P. Tachtode, Terna Medical College, Navi Mumbai: March 12- 13, 2012.