Animal House

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

VFSTR ANIMAL HOUSE FACILITY

Vignan's Foundation for Science, Technology and Research (VFSTR) has established a well-equipped animal house facility with the vision to support the research and training on animals. The facility was approved by Committee for the Purpose of Control and Supervision of Experiments on Animals (CPCSEA), Ministry of Fisheries, Animal Husbandry and Dairying, Government of India, based on the inspection carried out by the CPCSEA Nominee on 11th November, 2018. The facility was inaugurated by the Honourable Chairman of VFSTR, Dr. Lavu Rathaiah on 16.12.2018. The types of animals housed are rats, mice, rabbits and chicken. Optimized housing conditions based on the CPCSEA guidelines are being maintained, such as, Temperature – 25 oC (maintained with air conditioners), Humidity – 60%, Pest control management, Fluorescent lighting, Power backup, Noise free environment, Separate experimental area and wash room and Separate storage area. The facility includes the equipment like autoclave, hot plate, incinerator and stereomicroscope. The animals are being taken care by a fully dedicated animal care taker. Research projects in the areas of Nutritional supplementation, Polyclonal antibody production, Maneuvering of Rejection of allograft, Isolation of T and B cells, Wound healing, Epigenetic modulation of gene expression, Diagnostic kits using raised IgY antibodies and Evaluation of immune potential of herbal extracts. The ongoing projects are:

1. A Mechanistic Approach for development of Multi-Class/Multi-Antigen Subunit Vaccine(s) and Assessment of Immunobiologic Response to Combat S.aureus Infections
2. Evaluation of anti-Outer membrane protein IgY of Shigella species
3. Construction and studies on vaccine potential of chimeric protein molecules comprising immunodominant regions of outer membrane proteins of enterobacteriaceae for application as broad spectrum vaccine against Salmonella, Shigella, E. coli and Proteus.
4. Studies to unfold the immunomodulatory attributes of Thymus vulgaris using Balb/c mouse model system
5. Evaluation of acute oral toxicity, acute dermal toxicity, in vivo antioxidant, anti-diabetic and diabetic wound healing properties of polyherbal formulation
6. Studies on Anti-inflammatory activity of Tinospora cordifolia on Carrageenan or LPS induced-inflammation in Sprague Dawley rat model

Government of India
Ministry of Environment, Forest and Climate Change
Committee for the Purpose of Control and Supervision of Experiments on Animals (CPCSEA)
5th Floor, Vayu Block, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi

CERTIFICATE

This is to certify that the Animal House Facility of Vignan Animal House Facility, Guntur, Andhra Pradesh has been registered with CPCSEA for Research for Education purpose and Breeding for in-house use on Small Animals bearing registration number 2046/PO/ReBi/S/18/CPCSEA.

The registration is valid for five years from 11/12/2018 to 10/12/2023.

(Jerome Minz)
Deputy Secretary (AW) & Member Secretary (CPCSEA)

JEROME MINZ
Member Secretary (CPCSEA)
Min. of Environment, Forest & Climate Change
Government of India
Jor Bagh Road, New Delhi

CODE OF ETHICS FOR ANIMAL HOUSE

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1. We all know that in many research protocols there is simply no alternative to the use of live animals. To develop the research from the available non-animal or *in vitro* models to clear justification in the biology (Drug discovery and physiology of Human system), someone need to work on the animals.

2. All the experiments and protocols performed in the animal house should be performed under the high supervision of an individual who is having adequate training and relevant experience in animal handling.

3. The use of the animals in the biological research should always enhance the human and animal health for a good society.

4. Animal selection for a particular experiment is the major consideration. The supervisor who is working should maintain the animal selection and experiment protocols in that particular project.

5. All the animals, which were procured for the experimental research, are lawfully acquired. The animals utilized in the experiment should be minimized as much as. The investigator has to take whole responsibility to avoid pain, stress and discomfort to the animal.

6. If a procedure will cause more than momentary slight pain or distress to the animal, the pain must be minimized both in intensity and duration through the administration of

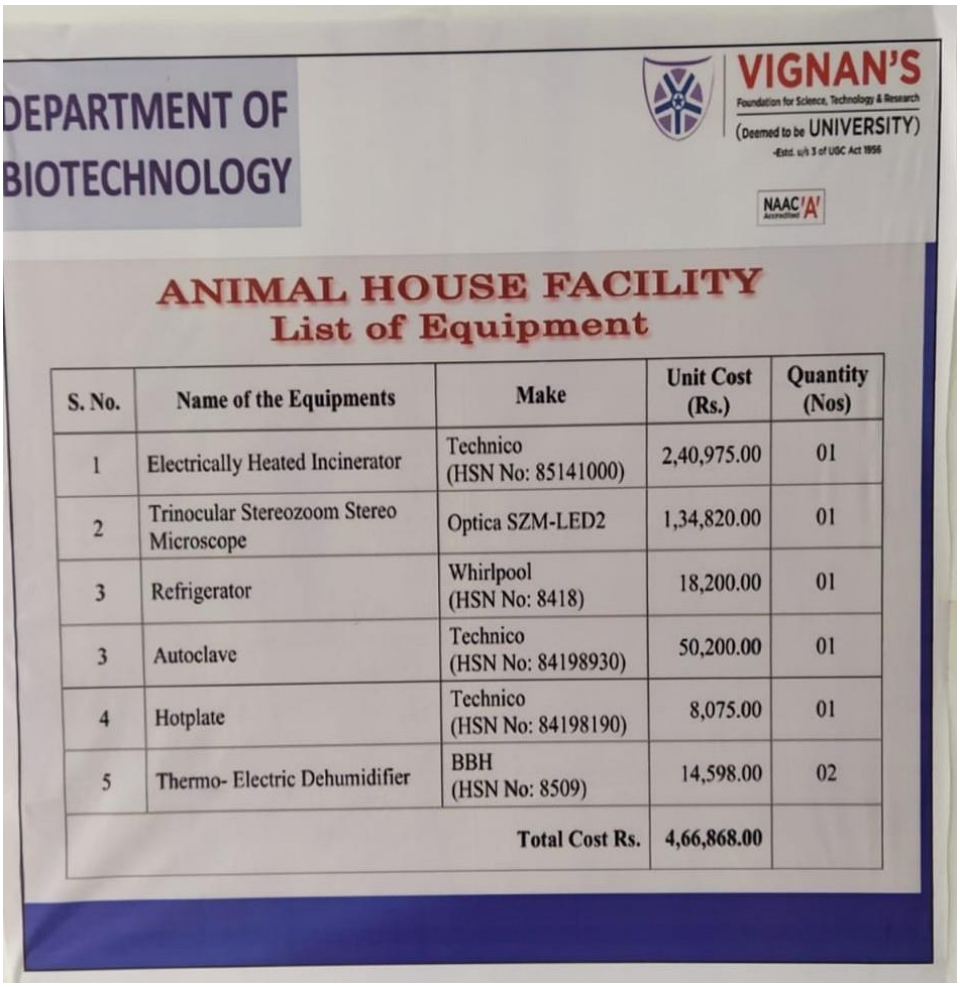
appropriate anesthetics, analgesics, and tranquilizers consistent with acceptable standards of veterinary medicine.

7. The appropriate anesthetic conditions are provided when painful experiments are conducting on the animals.

8. Multiple survival surgeries should not be done on the animal and most of the times the survival surgeries should be avoided until it was highly recommended.

9. It is the responsibility of the investigator to ensure that adequate post-surgical/procedural care is provided to all animals. This care must meet acceptable standards of veterinary medicine and be provided as long as necessary, including during non-duty hours.

Note: All the experimental work and maintenance of the animals in the animal house should strictly follow the Committee for the Purpose of Control and Supervision of Experiments on Animals (CPCSEA), Ministry of Fisheries, Animal Husbandry and Dairying, Government of India,



DEPARTMENT OF BIOTECHNOLOGY

VIGNAN'S Foundation for Science, Technology & Research (Deemed to be UNIVERSITY) -Estd. u/s 3 of UGC Act 1956

NAAC 'A'

ANIMAL HOUSE FACILITY
List of Equipment

S. No.	Name of the Equipments	Make	Unit Cost (Rs.)	Quantity (Nos)
1	Electrically Heated Incinerator	Technico (HSN No: 85141000)	2,40,975.00	01
2	Trinocular Stereozoom Stereo Microscope	Optica SZM-LED2	1,34,820.00	01
3	Refrigerator	Whirlpool (HSN No: 8418)	18,200.00	01
3	Autoclave	Technico (HSN No: 84198930)	50,200.00	01
4	Hotplate	Technico (HSN No: 84198190)	8,075.00	01
5	Thermo- Electric Dehumidifier	BBH (HSN No: 8509)	14,598.00	02
		Total Cost Rs.	**4,66,868.00**	

Inaugural Function

VFSTR ANIMAL HOUSE

Vignan's Foundation for Science, Technology and Research
Deemed to be University
Vadlamudi 522213 A P

Department of Biotechnology
Animal house approved by CPCSEA, MHRD, Govt. of India

Waste management in Animal House

CPCEA Registration No: 2046/PO/ReBi/S/18/CPCSEA

The following steps are taken to manage the waste generated from Animal House:

Source of Waste

1. White rats and White Mice are maintained in the animal house with the permission of CPCEA for experimentation.
2. They are maintained in separate cages of 1 ft depth x 7 inches height x 8 inches width transparent plastic cages with grill and water source for feeding.
3. They are being used for laboratory and research activities in the (i) Biotechnology and (ii) Pharmacy departments by students.

Generation of waste:

1. As the animals are being fed, there arises fecal matter and urine droplets in the rice husk kept as bed in cages.
2. A few animals fight each other and tear the week specimen.
3. At times mother tears away a few pups.
4. During experimentation, the narcotized animals are dissected and ultimately it will be dead.

Steps taken to dispose of generated waste:

1. The used rice husk contaminated with the fecal matter and urine droplets are incinerated in the incinerator arranged at the rear end of the animal house on every two days.
2. The dead animals are closed in the polythene bag and kept for incineration upon observing the dead animals in the cages.
3. The animals used for experimentation are also incinerated on the day of experimentation. The same are recorded.
4. The workbench is cleaned with Dettol soon after the experimentation.
5. Mopping is done on a daily basis in the animal house.
6. The humidity and temperature is maintained with air conditioners.

Outcomes of research activities using Animal House Facility

(CPCEA Registration No: 2046/PO/ReBi/S/18/CPCSEA)

I. Publications

S.No.	Authors	Title of articles	Journal	IF	Area
1	Bobbadi, Suresh; Ch, Bindu Kiranmayi; **Reddy, Prakash**; Kandhan, Srinivas	Analysis of antibiotic Resistance and Virulence Patterns in Klebsiella Pneumoniae Isolated from Human Urinary Tract Infections in India	Letter in applied Microbiology, *73*(5), 590-598.(2021)	2.858	Microbiology
2	Dr.Prakash Narayana Reddy	An efficient method for integration of PCR fragments into adjacent or overlapping restriction sites during cloning.	3 Biotech. 8: 197 (2018)	1.49	Molecular Immunology
3.	Dr.Prakash Narayana Reddy	Evaluation of recombinant multi- epitope outer membrane protein- based *Klebsiellapneumoniae*subunit vaccine in mouse model.	Frontiers in Microbiology, 8:1805, (2017).	4.01	Recombinant Technology

II. PhD awarded

S.No.	Name of the scholar	Name of the guide	Year of award	Title of the thesis
1	Kota N Venkata Swathi Rohini Krishna	Prof.S.Krupanidhi	Awarded 2021	Development and Evaluation of Cross-Reaction Free Diagnostics Against *Staphylococcus Aureus*

III. Placed scholar

S.No.	Reg.No.	Ph.D. Scholar	Placed position
1.	171FG01001	Dr. Kota Rohini Krishna Priya	Senior Research Associate, Reddys lab, Institute of Life Sciences, Hyderabad

IV. Seed Project

S.No.	Date	Name of the faculty	Title	Amount sanctioned Rs
1.	17-7-2019	Dr.M. Indira	Anti-inflammatory potential of *Tinospora cordifolia* on RRBC induced inflammation in Sprague Dawley rat model.	1.90 lakhs

V. Research grant

S.No.	Year of sanction	Title of the project	Name of the faculty	Scheme	Amount Sanctioned in lakh Rs.
1.	2017	A mechanistic approach for --subunit vaccine and infections	Dr. K. Prakash Narayana Reddy	DST-INSPIRE	35.00