

**CENTRAL ANIMAL HOUSE FACILITY (CAHF)
Jamia Hamdard, New Delhi**

(CCSEA Registration Number: 173/GO/ReBi/S/2000/CCSEA, valid up to 2008)

The Central Animal House Facility (CAHF) at Jamia Hamdard is a centrally administered facility for the University that houses small laboratory animals (rodents) for scientific research. The facility is a duly registered facility, registered with the Committee for the Control and Supervision of Experiments on Animals (CCSEA), a statutory body of the Ministry of Fisheries, Animal Husbandry and Dairying, Government of India.

CAHF provides a regulated, ethical, and scientifically sound environment for conducting animal-based biomedical and translational research under the full time Veterinary Officer.

History

The animal facility at Jamia Hamdard is among the oldest experimental animal facilities in Delhi, having been established in the early 1970s and registered with the CCSEA with its creation in 2000.

The premise is spread over an area of 4,300 Square feet.

Objectives of CAHF

The primary objective of the CAHF is to cater to the need of research to researchers at Jamia Hamdard and promote ethical use of small animals (rodents) in biomedical research in accordance with national and international standards, particularly the principles of the 3Rs:

- Replacement
- Reduction
- Refinement

The facility ensures experimental animal welfare, which is integral for maintaining the scientific integrity and research quality.

Animal Housing and Capacity

Currently, CAHF houses small laboratory animals (rodents) and a separate zebrafish facility, with the following approved housing capacity:

- **Mice:**
 - Swiss albino
 - BALB/c
 - C57BL/6
 - Total capacity: ~3,600 mice
- **Rats:**
 - Wistar strain
 - Total capacity: ~2,500 rats

The animal species are housed in separate designated rooms to prevent disease transmission, minimize stress, and avoid inter-species conflict.

Infrastructure and Environmental Control

CAHF is equipped with state-of-the-art infrastructure to ensure optimal animal welfare and experimental reliability. Key features include:

- Individually Ventilated Cage (IVC) systems
- 24-Hour power backup
- Controlled environmental conditions:
 - Temperature: 24–26°C
 - Relative Humidity: 60 ± 10%
 - Automated light–dark cycles
 - 100% fresh air exchange in all animal rooms

- Safe electrical system with adequate lighting and power outlets
- Industrial-scale autoclave for sterilization of feed, bedding, and consumables
- Well-maintained air purification units, thermometers, hygrometers, and sterilization chambers

Laboratory Instruments and Research Facilities

CAHF is equipped with a comprehensive range of modern laboratory instruments to support routine animal experimentation, sample processing, and translational research, including

- Stereozoom Microscope – for gross anatomical observations, dissections, and surgical procedures
- Histology Microscope – for microscopic examination of tissue sections
- Microtome – for preparation of thin tissue sections for histopathological analysis
- Refrigerated Centrifuge – for processing biological samples under controlled temperature
- Analytical Balance – for precise measurement of reagents and samples
- Industrial-scale Autoclave – for sterilization of feed, bedding, instruments, and consumables
- Animal Handling and Restraint Equipment – for routine experimental and clinical procedures
- Refrigeration Units and Deep Freezers – for storage of samples, reagents, and biological materials

These facilities enable investigators to perform day-to-day experimental procedures and laboratory analyses within the animal house premises, enhancing research efficiency and quality.

Veterinary Care and Facility Management

CAHF has a full-time Veterinary Officer, a mandatory requirement under CCSEA guidelines, who is responsible for:

- Animal health care and welfare
- Ethical compliance
- Emergency and clinical management
- Technical support and training of investigators
- Day-to-day management of the facility

Institutional Animal Ethics Committee (IAEC)

An Institutional Animal Ethics Committee (IAEC), constituted as per CCSEA norms, regularly convenes meetings to review, screen, and recommend research protocols involving animals for ethical approval.

Biomedical Waste Management

Handling, segregation, storage, and disposal of animal-related waste is done as per the norms:

- Disposal is carried out strictly in compliance with DPCC and local government regulations
- Waste is handled through authorized vendors
- Records are maintained as per statutory requirements

Training, Workshops, and Capacity Building

CAHF regularly conducts workshops, hands-on training, and awareness sessions for faculty members, research scholars, and students dealing with animal research. These programs focus on:

- Ethical use and handling of laboratory animals
- Animal welfare regulations
- Experimental techniques
- Best laboratory practices

Key Personnel – Officials of the Central Animal House Facility

- (1) **In-Charge, CAHF** (Name: Prof. Shakir Ali)
- (2) **Co-In-Charge, CAHF** (Dr. Mohan Kamthan)
- (3) **Veterinary Officer (Full-time)** Dr. Mohammad Mateen Zehgeer, MVSc & AH



