

Wallace Academic Editing

Laboratory Animal Center of Taipei Medical University Use Regulations

First approved at the research and development meeting
(08/27/2012)

Amended at the research and development meeting
(10/15/2012)

Article 1: According to the Animal Protection Act promulgated by the Council of Agriculture, Executive Yuan (Appendix 1), laboratory animals refer to vertebrates kept for the purpose of scientific research. In addition to commonly seen mammals, laboratory animals include birds, reptiles, amphibians, and fish.

Article 2: The Laboratory Animal Center (hereafter “Center”) is a communal building established by Taipei Medical University to provide an appropriate environment for accommodating animals kept for scientific purposes. To ensure the optimal use of the Center, use regulations have been established and shall be complied with by all users.

Article 3: All teachers, staff members, physicians, and students of Taipei Medical University and its affiliated hospital may use the Center. Students and research fellows who are not teachers must seek and receive permission from their advisors or the principal investigator of the project they are working on before applying for a key card to access the Center. The key card shall be returned before leaving a position of employment or the university (i.e., graduation or termination of study).

Article 4: Users from outside the university shall comply with all regulations stipulated by the university.

1. All users shall participate in a forum on the use of the Center before being allowed to apply for said use.
2. Applications for animal studies shall be subject to a first review by the Center and a second review by the Institutional Animal Care and Use Committee. Animal studies may only be undertaken after it has passed the two reviews.
3. To maintain safety and disease control in the Center, first-time users shall attend a regularly scheduled training course on the techniques of laboratory animal keeping, management, and testing.
4. Users who violate the Center’s regulations shall be required to return their key card and forfeit their right to use the Center.
5. The charge rate for animal keeping services provided to users outside the university shall be defined separately.

Article 5: A user shall provide a signature to indicate agreement to these regulations before applying for use of laboratories in the Center. The time for such use will be scheduled by the Center according to relevant regulations.

Article 6: The Center is open 24 hours a day, 7 days a week for users to conduct experiments at their convenience. After participating in the forum on use of the Center, users shall use their key card to enter and exit the Center. Multiple people's entering on one key card is prohibited.

Article 7: Users shall pay attention to changes in spaces available for use and access routes in the Center. The floor plan will be provided on-site and the access routes published on the Center's website. People other than Center staff are prohibited from entering quarantine areas and areas isolated for cleaning and sterilization.

Article 8: Purchasing and bringing in/taking out animals and equipment:

1. Users shall be responsible for arranging the purchase of animals and making payment for them. The Center will not advance funds for any purchases. To avoid pathogenic microorganisms from being brought into the Center by animals, users are strongly encouraged purchase animals from companies or institutions that have received Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC) accreditation. A quarantine report shall be provided for animals not purchased from such companies or institutions or such purchased animals shall be kept in the quarantine room of the Center. The quarantine schedule will be decided by the Center and the Institutional Animal Care and Use Committee on a case-by-case basis. The purchase of animals with special conditions (certain disease models, genetic modification, and special species or strains) shall be made only after users have confirmed with the Center that an appropriate environment is available for keeping such animals. The Center may prohibit animals being brought into the Center that require an environment or keeping techniques lacking in the Center.
2. Users shall apply for animal housing services by completing the Housing Application Form before purchasing animals from suppliers. In circumstances where users fail to do so, the Center shall reject the animals upon delivery. If the animals require quarantine, users shall complete the Animal Quarantine Record Form. The Center will notify a user of an animal move-in date within three days of determining the availability of space for animal keeping (cages and cage racks) and finishing preparations of the space. In circumstances where a user cannot bring in an animal or animals at the designated move-in date, the housing setup will automatically be given to the next applicant on the waiting list. The Center will not accept any application for animal keeping services made without completing the aforementioned procedures.
3. Delivery boxes with the animals inside shall be sprayed with disinfectant before being brought into the Center. The source and quality of the animals shall be proven with documents attesting that they are free of pathogens and diseases. The spray-disinfected delivery boxes may be taken directly into the designated keeping room; otherwise, they shall be subject to the quarantine procedure and required to meet relevant standards before being delivered to the animal keeping room.
4. The complete quarantine procedure typically takes 10–20 days, and the duration might be extended if necessary. During quarantine, the following will be subject to inspection: the appearance of animals; animal health with respect to the presence of external parasites; and the feces and urine, nutritional status, appetite, and behaviors of animals. Other testing, such as bacteria isolation and culture, serum antibody test, and blood test, may be conducted if necessary. If necessary space, equipment, or technical apparatuses for conducting tests are not available in the Center, the fee for commissioned quarantine shall be paid for by the owner of the animals. Details and procedures of inspections shall be subject to separate rules and regulations.

5. To avoid the spread of pathogens and infections among animals, animals moved out of the Center are generally not allowed to return. Changing animals' housing rooms without permission is strictly prohibited. In the event a user violates the regulations, the animals involved shall be euthanized immediately and the users shall be liable for any consequent infections of other animals.
6. Because independently breeding laboratory animals could lead to crowding in the keeping rooms, an increased possibility of genetic drift, and other problems that might affect experimental data, users are prohibited from breeding laboratory animals of common strains. Users in need of animals of special strains or for special tests shall apply for approval before performing related breeding operations in the Center. For users who have not moved their animals out after the designated period of housing, the Center may terminate the keeping of animals and shall not be liable to users for any compensation.
7. Bringing in or removing any devices or surgical equipment for use in animal testing at the Center may only occur after notifying the Center 7 days prior to said movement and may only be conducted with the approval of the Center. Bringing any equipment not provided by the Center into the specific-pathogen-free area is prohibited. Due to limited space in the Center, equipment that is not needed in the short term shall be moved out from the Center to avoid wasting space. If such equipment is not moved out after notification, the Center is authorized to move the equipment.
8. Each application for animal keeping services is generally for a maximum of 12 weeks and 100 animals. Any application exceeding these numbers must provide justification for the greater scope of animal keeping and shall be subject to review by the Center before approval. Users that cannot move their animals out before the end of the designated keeping service period shall apply for an extension of the period. For users who fail to apply for an extension after being notified of the end of the period, the Center may terminate the keeping services and shall not be liable to users for any compensation.

Article 9: Keeping room allocation and animal management

1. Laboratory animals in the Center shall be kept in their designated keeping rooms and positions according to staff instructions. Changes of keeping positions and rooms and adding cages or cage racks without permission are prohibited.

2. The keeping of all animals in the Center shall be supervised by Center staff in accordance with relevant management principles. Users may self-supervise the following operations:
 - (1) Everyday observation and completion of the Laboratory Animal Management Record Form.
 - (2) Special animal keeping methods that involve the use of devices (e.g., animal feeds, cages, and cage racks) not of the Center's standard specifications.
 - (3) Operations required for reproduction experiments or experiments for the purpose of breeding special strains, such as mating and weaning.
3. Center staff shall euthanize all animals found outside cages whose ownership is unclear and shall not be liable to users for any compensation.
4. Users shall complete the Laboratory Animal Management Record Form upon moving their animals into their animal keeping rooms. This form will be provided in the designated keeping room and/or cage rack, and users shall complete it according to the instructions and the best of their knowledge. This form will serve as a reference for future communication between the Center and users and for the calculation of the keeping service fee. Users shall provide detailed information concerning the times of their tests and the period of animal keeping, which will be used as a reference for the Center to manage its capacity for animal keeping.
5. The Center offers an enriched environment for laboratory animals because the Center is unable to replicate the wild habitat of animals; an enriched environment enhances animal welfare and provides sensory and physical stimulation. All measures that enable the animals to engage in their natural behaviors and that eliminate or reduce irregular behaviors are regarded as environmental enrichment. Animals kept alone (e.g., animals involved in tumor research, sentinel mice, injured or weak animals, and rabbits) shall be provided with said measures. The Center provides the following items for environmental enrichment:
 - (1) Mice: paper houses, nesting sheets, and sterilized wood sticks, which shall be replaced weekly.
 - (2) Rats and hamsters: paper houses, nesting sheets, and sterilized wood sticks.
 - (3) Guinea pigs: sterilized wood sticks or blocks.
 - (4) Rabbits: sterilized wood blocks.

Article 10: Materials and facilities for animal keeping

1. The animal feeds, wood shavings, and cages (including individually ventilated cage) used in the Center shall all be purchased by the Center.
2. The Center will record ingredient information of feeds and material information of batches of wood shavings used for general animal keeping for future reference. Users who wish to develop special formulas of animal feeds, change feeding methods, or change the amount of feed for experimental purposes shall perform such tasks themselves and be fully liable for any costs incurred. Users must apply and receive approval for the use of special feeds or bedding materials to ensure that they conform to Center standards and are unlikely to cause contamination. Users bringing in said items without permission shall be fully liable for paying any compensation for infection incidents.

3. The use of special cages and cage racks (e.g., cages for the observation of vaginal plug in rats or mice and metabolic cage racks) must comply with the Animal Protection Act published by the Council of Agriculture, Executive Yuan. The said cages and cage racks shall be approved by the Center before being brought into the Center.
4. Center staff shall be responsible for the cleaning and replacement of cages. Cages with wood shavings shall be changed 1-2 times weekly. The need to increase or decrease the number of cages shall be reported to the animal keeper; changing the number of cages without permission is prohibited.

Article 11: Contamination management and control in the animal keeping environment

1. Animals with suspected infectious diseases shall be reported to Center animal keepers. To avoid the spread of pathogens in such incidents, animals suspected of being infected shall not be moved. The Center shall quarantine said animals to confirm health status and is authorized to euthanize the animals, isolate animal keeping rooms (areas), and perform disinfection. Concurrently, the Center shall provide notice of such incidents to other users.
2. Because the environment of the Center consists of a large number of users and diverse sources of animals and various animal testing activities, all animal keepers of the Center shall be trained meticulously to adhere to the standard operating procedure and regularly send sentinel animals for inspections to monitor their status of infection. In response to any infection incident, the Center may, after notifying the owner, euthanize any suspected animals and shall not be liable to users for any compensation. Users should evaluate such risks before applying for use of the Center's facilities.
3. Any conditions that are potentially precursors of zoonoses specified by the central government shall be immediately reported to the animal keepers of the Center for confirmation. The Center shall quarantine or euthanize suspected animals, perform full disinfection of areas of suspected infection, and report such incidents to the central competent authority to prevent the spread of pathogens.
4. To maintain a hygienic environment and avoid the cultivation of pathogens, any experiment devices brought into the operating rooms shall be removed after use. Personal belongings shall not be left in the operating rooms. All objects not belonging to the Center found in the operating rooms will be discarded immediately.

Article 12: The management of laboratory animals

1. All users shall aim to minimize the infliction of pain on animals during animal testing.
2. The number of laboratory animals involved in animal testing shall, unless necessary, be reduced to the minimum to minimize the necessity of animal use.

3. If necessary, the Center may host regular training courses or presentations to familiarize users of the Center with techniques relevant to animal testing.
4. Euthanasia of laboratory animals after the end of experiments shall be conducted with approaches to minimize the infliction of pain on animals. If users have any questions related to such practices, they shall contact the staff of the Center immediately.
5. To maintain the cleanliness of the Center, animal bodies or experimental waste that decays quickly shall be sealed in plastic bags provided by the Center and placed in a mortuary chamber. Management of the bodies of animals that have undergone radiation-related experiments and the resultant waste shall be subject to separate regulations.

Article 13: Regulations on communal areas

1. In compliance with relevant regulations of animal welfare and animal protection, all animal testing operations shall be performed in operating rooms. Such operations shall not be performed in front of other animals to avoid inflicting anxiety and pain in other animals.
2. The operating rooms, imaging rooms, and physiological experiment rooms are all communal areas of the Center. Users shall apply and register for the use of these rooms in advance. For use of an operating room, users shall reserve the room in advance on the equipment reservation system and sign in/out using the computer located in the lobby of the Center before/after using the room. The Center records on a daily basis the number of no-shows or failures to sign in/out by research teams having reserved an operating room. A total of three no-shows or failures to sign in/out within a month by a research team will lead to suspension of all equipment reservation accounts registered under the team's principal investigator for two weeks.
3. Equipment in the communal areas shall be disinfected and cleaned after use. Living animals that have undergone testing shall be transferred to the Center's temporary accommodation area and shall not be moved to the original keeping room without permission. Users who wish to use the Center's equipment including individual ventilated cages shall seek and receive permission from Center staff prior to their use. The use and reservation of expensive equipment under the management of the Core Facility Center shall be subject to regulations for equipment management and fees. If any renovation work is undertaken in the center, areas originally assigned to users may be changed or reassigned.

Article 14: The Center may adjust the fees for keeping and related services in accordance with keeping costs. The setting and adjustment of prices shall be first approved of at the research and development meeting and then by the university's president. Users shall refer to the Center's website for the current fees for keeping services of different levels. All fees will be calculated monthly, and all users or principal investigators shall pay their fees by the due date, which shall be done within two months after receiving notification of the dues. For users or principal investigators who fail to pay their fees by the due date, the Center is authorized to euthanize all their laboratory animals after providing them a one-week notice of the imminent action. Users shall remain liable for all unpaid fees even after animals have been euthanized.

Article 15: Any use of the Center's equipment and space that violates these and other relevant regulations and leads to safety concerns in the Center or negative effects on other users' experiments shall be rectified after notification of the violation. Failure to correct such use will result in restrictions on or suspension of rights to use the Center. Use violating the Animal Protection Act that is not corrected in a designated period shall be reported to competent administrative authorities and may result in legal action.

Article 16: The Center shall be exempt from liability for failure to perform agreed-upon keeping services because of events beyond the Center's control, such as floods, fires, wind disasters, and earthquakes.

Article 17: These regulations have been approved at the research and development meeting before implementation; any amendment of these regulations shall be subject to the same procedure.