



The University of Georgia

**Central Animal Facility Handbook
College of Veterinary Medicine
University Research Animal Resources**

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Welcome

This handbook has been prepared to serve as a reference and provides information for current and potential users of the Central Animal Facility (CAF) at the College of Veterinary Medicine (CVM). If you have any questions not covered in this handbook, please contact any of the staff members listed in this handbook. The CAF is one of several facilities operated by the Animal Resources Unit whose mission is to provide and promote optimal laboratory animal care through professional management, education and training. The Animal Resources unit provides two basic functions:

- The safe and effective procurement, quarantine, conditioning, housing, husbandry and veterinary medical care of all animals used in the research and teaching programs.
- Provide technical assistance, advice, and consultation regarding use of experimental animals.

The Central Animal Facility core hours of operation are from 8:00AM to 5:00PM, Mon—Fri. The facility has over 30 animal rooms, comprises approximately 12,000 gross square feet and has the capability of housing multiple species of animals. Additionally, there are animal holding areas located in the ICM wing used primarily for instructional projects in support of the veterinary medical training curriculum. CAF is staffed with both full-time and part-time animal care staff many of which are certified by the American Association of Laboratory Animal Science. The CAF is one of over ten University Research Animal Resources facilities on campus accredited by the Association for Accreditation and Assessment of Laboratory Animal Care, International.

University Research Animal Resources

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Facility Access

For reasons of security, public health, and animal health, only authorized individuals with UGA proximity card access are allowed to enter the Central Animal Facility. Visitors or unauthorized persons may not enter the animal facility without prior approval from Animal Resources and they must be accompanied by a staff member. Children and pets are not permitted in the facility. All CAF users requesting access must:

- Currently be listed on an Animal Use Protocol (AUP)
- Enrolled in the UGA Occupational Health & Safety Program
- Completed or enrolled in UGA IACUC training classes (listed below)

“IACUC 101: Animal Care & Use Compliance” & “Staying Healthy When Working with Animals”

All facility users seeking access to the CAF who do not have a UGA ID proximity card must first get a “Request for Proximity ID” (**PINK CARD**) from the CVM Business Office, Room 239. This pink card must then be submitted to the UGA Card Office in the Tate Student Center. Proximity cards should be obtained at least (3) working days before the card is utilized to resolve any potential access problems. After your UGA ID proximity card is obtained you must fill out the “Request for Animal Facility Access” form. You must list the Principle Investigator (PI) and all Animal Use Protocol (AUP) numbers you are approved to work under on this form. Once you obtain your proximity card and the “Request for Animal Facility Access” form is completed you can contact the Laboratory Animal Facilities Supervisor, Missy Waters to schedule your facility orientation. After completion of your facility orientation the supervisor will make a photocopy of the front and back of your UGA ID proximity card and attach it to the “Request for Animal Facility Access” form for clearance to access the facility.

General Information

Users are responsible for bringing their UGA ID proximity card and key(s) to gain access to the facility and animal rooms. All animal rooms are locked after normal business hours, on weekends and UGA holidays. Cameras, video, or recording equipment are restricted inside the Central Animal Facility without an approved AUP and authorization by the Assistant Director of Animal Resources. Cellular phone or short band radio use is prohibited in all animal rooms.

No food or drinks intended for human consumption should be brought into or consumed in the CAF, except in designated break rooms. No smoking or smokeless tobacco products should be brought into any animal facility or used in any animal facility. The handling of eye lens contacts or applying cosmetics is not allowed in the facility. Do not put up signage on doors or animal room walls without consulting the area supervisor. The use of tape on doors and other surfaces in the animal facility can damages finishes. We can provide magnetic holders, magnetized plastic sleeves holders or can laminate paper materials and help you post signage or other informational material that relates to your research project.

Animal Resources (AR) receives numerous service requests and in order to minimize the possibility of misunderstanding and confusion, all requests for services and transfers must be in writing on the appropriate form. Special needs or requests should be conveyed to the Laboratory Animal Facilities Supervisor or the Laboratory Animal Care Supervisor.

All users of the animal facilities are responsible for ensuring that security and safety standards are maintained at all times. Always lock animal room doors after normal business hours, weekends and holidays.

All animal order requests must be faxed, e-mailed or delivered to the Animal Resources main office located in Room 206, Veterinary Medical Building. You may find detailed information regarding animal procurement, policies, per diems and forms at our website: <http://www.vet.uga.edu/animalresources/>

Entry and Exit procedures

Facility Entry

The Central Animal Facility is located on the 1st and 2nd floors of the Veterinary Medicine Building. There are four proximity card access doors servicing the 1st floor of the facility and two proximity card access doors servicing the 2nd floor of the facility.

When entering the animal facility do not allow others to follow behind you. This undermines the security of our facility and keeps us from identifying individuals entering the facility.

We provide lab coats for your use and there are two lab coat stations located on the 1st floor and one lab coat station located on the 2nd floor of the facility. Some animal rooms have specific Personal Protection Equipment (PPE) requirements; follow the signage instructions listed on the animal room door. Do not wear lab coats from your research lab or the teaching hospital into animal rooms. Do not wear AR supplied lab coats out of the animal facility. To enter the facility you must wear shoes with covered toes. If you are entering a facility, but will not be entering an animal room then no further PPE is required. There are PPE stations located next the lab coat stations which are stocked with gloves, face masks and ear plugs. If you need assistance please contact the area supervisor or one of the staff members.

Entering General Animal Rooms

To enter an animal room you must wear a lab coat or other designated PPE. This practice is to minimize you from carrying allergens and contaminants on your street clothes back to your lab or home, and to protect animals in the facility from the microbes you bring into the facility on your street clothes. Remember, lab coats are required for entry into an

animal room unless otherwise noted on the animal room door signage. Follow the specific PPE requirements before entering an animal room.

Exiting General Animal Rooms

If you are required to use PPE other than a lab coat then follow the posted signage instructions for proper PPE removal and disposal. In most instances all PPE should be removed and discarded in trash receptacles that are located next to each doorway inside the animal room. Always, wash your hands after removing and properly disposing of your PPE.

Entering Mouse Rooms

Animal rooms housing mice employ special procedures to ensure their optimal health. To enter a mouse room you must wear a disposable gown, facemask, head cover, shoe covers and gloves. Each mouse room has a PPE cart located near the entrance door. PPE must be donned before entry into the mouse room.

Exiting Mouse Rooms

After completion of procedures in the mouse room you can remove PPE and dispose in the trash receptacles located next to the doorway inside the animal room. Always, wash your hands after removing and properly disposing of your PPE.

Exiting the Animal Facility

If you wore an AR lab coat into an animal room you must remove it before exiting the facility. Place all used lab coats in the dirty laundry barrels which are located next to all lab coat stations. Always remember to check your pockets for items you may have left in them and remove these items before placing your dirty lab coat in the dirty laundry barrel. Please, for the health & safety of our employees please do not leave sharps such as syringes, capillary tubes, scalpels, etc. in lab coats.

Animal Environments

Macro-environment

All animal room light cycles are scheduled on at 7:00AM and off at 7:00PM unless otherwise outlined on an approved AUP. There is an override switch for each animal room. If you must work in the animal room when the lights are scheduled to be off and utilize the override switch please make sure the switch is turned off after you are finished working in the room. Changing the period of light and dark cycles is disruptive to the animal's normal behavior; this is particularly true for rodent breeding colonies.

All animal rooms are supplied with 100% fresh air with supply and exhaust ventilation exchange rates of 10—15 air changes per hour for each animal room. Temperatures are set according to established parameters for the species.

The environmental conditions in the CAF are monitored by Rees Centron Environmental Monitoring System. This is a computerized system which monitors temperature,

humidity, illumination & air flow in each animal room. This system logs environmental data and also remotely alerts facility personnel around the clock when environmental parameters are out of prescribed ranges.

Housing

The Central Animal Facility houses multiple species of animals. This facility follows all federal regulations and guidelines for the housing of animals in research. There are multiple housing and caging systems used dependent upon the species. All animals are separated by species rather than investigator or department. This facilitates efficient servicing and care, as well as preventing interspecies transmission of certain diseases. The decision regarding the location of each group of animals shall be based on the environmental needs of each animal species and any special requirements essential to the experimental plan. Animals must not be moved from one room to another without approval or permission of the Laboratory Animal Facilities Supervisor.

We attempt to make all reasonable accommodations to meet the needs of the user regarding housing and room assignments. To ensure efficiency of labor, space and caging equipment; room assignments including numbers and kinds of racks, cages and animal species will be determined by the Animal Resources Manager or their designee.

The CAF strictly ensures that all animals are appropriately housed in compliance with the Animal Welfare Statues and the standards outlined in the *NRC Guide for the Care & Use of Laboratory Animals*. As such these areas must be maintained in a clean, safe and orderly manner. Users should not store supplies, equipment and other material in animal rooms. Animal rooms must not be used for major surgery, necropsies or other involved procedures. Minor procedures such as injections or collection of samples may be conducted in the animal room or in one of the procedure rooms. Always remember to clean up after yourself, don't leave blood, animal feces or other bodily wastes from animals on floors, exam tables, sinks, etc.

Environmental enrichment

All animals housed in AR facilities receive environmental enrichment provided by AR to improve the well-being of these animals by increasing species-specific behaviors and reducing maladaptive behaviors. Any deviation from this enrichment program must be outlined and approved in the AUP.

Animal Husbandry and Use

General

AR staff performs daily husbandry and checks on all animals each and every day and twice a day for many species. These checks cannot be counted in a Principal Investigator's AUP as observing or monitoring study animals. Weekend staff completes daily checks and essential husbandry on the weekends and holidays. AR staff performs cage changes and sanitization activities following a regular prescribed schedule. In the event the Principal Investigator or their research staff wishes to provide their own animal husbandry the following conditions must be met, 1) Approval must be granted by the Assistant Director of Animal Resources – Vet Med, 2) An exception to standard husbandry must be approved in the AUP, 3) the P.I. must develop a Standard Operating Procedure in coordination with Animal Resources.

Feeding and Watering

Animals are fed a high quality standard commercially available diet each day or they are checked once or twice a day dependent upon the species to ensure appropriate feed is available. Animals are watered ad libitum using municipal water source. Any deviations from these standard practices must be approved by the Institutional Animal Care & Use Committee (IACUC) and documented in the AUP. Procurement and provision of special diets or treated water must be arranged with the Animal Resources Manager prior to initiation of the study. Animals with feed and/or water restrictions must have the proper signage posted on each cage or primary enclosure which details what type of restrictions, the start and end date and the start and end time of day (AM or PM).

Handling and Identification

Any researcher or their staff may request an animal handling training session from Animal Resources if they feel one would be beneficial. Please contact the Animal Health Technician or Attending Veterinarian regarding animal handling training.

All animals should be identified according to their species, applicable regulatory statutes, or research project considerations. AR can identify animals using microchip implants, ear tag, ear tattoo, bands and other identification methods on a fee basis.

Every animal received into the census has a unique bar coded cage card number that identifies each individual animal. The only exceptions are mouse cages which has a cage card number that identifies the mouse cage (box) itself. All cage cards are the property of Animal Resources and it is advised that you do not write research information or notes on these cage cards but utilize a research log book and reference the cage card number(s) for your records. These cage cards are subject to be removed/replaced because of wear, tear or illegible cage card data.

Breeding and Weaning

Users who maintain mouse breeding colonies are responsible for setting up and managing mating pairs or harem breeding groups. Users must wean and separate all offspring at 21 days of age, as these are considered adults. They must fill out appropriate cage cards referred to as “green cards” which are used only for newly weaned mouse litters which have been separated from their parents. These “green cards” are used to generate new bar coded cage cards and can be obtained from Missy Waters or Susan Russum.

Census Procedures

AR and the animal facility users share the responsibility for maintaining the animal census. All users are required to record (daily) utilizing the IN and OUT column on the census activity sheets (CAS), the number of animals terminated, transferred, or found deceased and note the appropriate disposition in the comments sections. In the case of mouse boxes, all users are required to record mouse boxes (daily) utilizing the IN and OUT column and their appropriate. AR provides these CAS for this purpose and tracks census by AUP, cost center, location, staff and account number. These CAS are located in the animal room log holders positioned next to each animal room door. All CAS are on blue paper stock. Per diem charges begin the day animals are received (IN) into the census. If you are engaged in research which requires you to temporarily take animals out of the animal room and/or facility and they are out of the animal room for less than (1) one calendar day, you will be charged per diem for that day. Animals have to be OUT of the census for (1) one complete calendar day or more before per diem calculation is stopped.

It is AR personnel’s responsibility to maintain a daily census of animal population or boxes (mice), add newly acquired animals to the census, record deceased animals found by AR personnel and record animals euthanized by AR personnel.

It is the user’s responsibility to record on the appropriate census activity sheets, the cage card number of any animal(s) or box (mice) terminated, transferred, or found deceased from a project in the OUT column, and to record the disposition in the comments section when making an entry. These cage cards **MUST** be placed in the “OUT BOX” which is located next to the CAF office room 102. The date the cage card was placed in the “OUT BOX” must be written on the cage card.

Before an animal is transferred from one AUP to another AUP or from one account to another account; this transfer must be documented on a completed Transfer Request Form at least 48 hours in advance of the scheduled transfer date. This form must be completed and submitted to the AR Business Office so the appropriate changes can be made in our data base system regarding AUP number, account or PI changes.

Animal Transportation

Transportation within the Facility

Animals that are being transported within the facility must be transported with care and caution to prevent escapes and protect the health of both animals and personnel. Methods will vary depending on the species of animals. Rodents should be transported in a rodent cage with a filter top preferably the home cage. Exotics, wildlife or other small species should be transported in an appropriate transport cage that will provide a safe secure and comfortable mode of transport. Species such as Cats and Rabbits may be carried by hand in manual restraint or in appropriate transport cages.

Transportation outside the Facility, within the Building

Rodents should be transported in an appropriate rodent cage with a filter top and if transported through public areas within the building the cages should be covered to conceal their contents. If rodents are returned to the facility, the rodent cage must be sprayed thoroughly with an appropriate disinfectant before it enters the animal room. Rodents should be transferred to a clean cage following the instructions of the area supervisor. All dirty rodent cages should be taken to the dirty cage wash room for processing.

Transportation out of the Building

Rodent animals that are being transported out of the Central Animal Facility must be transported in a closed opaque filtered top container, appropriate shipping container or covered cage with filter top. Use of the home cage is preferred, if possible. Rabbits, cats, exotics and other species should be transported in appropriate cages or enclosures that are appropriately sized and designed to provide a safe, secure and comfortable mode of transport.

Animal Health and Veterinary Services

Sick or Dead Animals

All animals in the CAF are observed on a daily basis by trained animal care personnel for signs of illness, injury, or abnormal behavior. Any abnormal behavior or condition is reported to the Animal Health Technician and the area supervisor and appropriate action is instituted in consultation with the Attending Veterinarian. Animals suspect of harboring or found to be harboring a contagious disease may be isolated from the rest of the animal colony at the discretion of the Attending Veterinarian.

Animals found deceased in their home cage must be properly disposed of in the necropsy cooler or submitted for necropsy following submittal guidelines established by the diagnostic lab.

Euthanasia

Euthanasia of all research animals at UGA should follow the American Veterinary Medical Association Guidelines on Euthanasia, June 2007. Only personnel properly trained in euthanasia techniques should euthanize animals. Scheduled euthanasia of animals under an AUP should be consistent with what is described and approved in the protocol. Animals should not be euthanized in the presence of other animals of their species and animals should be treated as gently as possible during any euthanasia procedure to avoid increasing its level of anxiety or stress.

Rodents must be euthanized by trained personnel using appropriate techniques and equipment. The CAF has two procedure rooms (Room R120 & R216A) which has euthanasia stations that provide carbon dioxide (CO₂) gas for humane euthanasia. Federal regulatory statues mandate that a secondary, physical method is required after CO₂ administration to ensure death. Each euthanasia station has detailed instructions for rodent euthanasia and list appropriate secondary methods. If you need help with the operation of the CO₂ euthanasia station please ask for assistance.

Health Surveillance & Monitoring

Animal Resources operates an animal health surveillance program for all rodent colonies. “Sentinel animals” are maintained for this purpose and regular serology tests and parasite evaluations are conducted to ensure all animals maintain a normative health status. We recommend that personnel avoid same-day travel from other animal facilities to CAF. Household pets have potential to be a source of infectious pathogens, especially pet rodents, which possibly could harbor unwanted subclinical infections. If you bred, house, are regularly exposed to or otherwise keep pet rodents (particularly mice & rats) you pose a risk to the health status of the rodents housed at the CAF.

All rodents obtained from sources other than approved commercial vendors must go through a quarantine period. Health data must be provided on these animals prior to shipping to UGA. All shipments must be coordinated by the Animal Resources Manager and approved by the Assistant Director of Animal Resources. This process is critical to protect and ensure the health status of established research colonies.

The health status of non-rodent species is also monitored. AR personnel examine non-rodent mammals as well as ectothermic species upon arrival. Some species may receive vaccinations or routine anthelmintics (dewormers) upon arrival. Some animals, which are housed over a year, receive annual physical exams, and vaccinations and treatments as necessary. Please contact the attending veterinarian for additional information.

Safety & Biosafety

General

The CAF is equipped with fire alarm pull boxes, fire extinguishers and emergency lighting with illuminated exit signs. Familiarize yourself with the emergency exits and the locations of fire safety equipment. CAF has a fire alarm system that in the event of fire an audible alarm will sound and strobe lights will flash. In the event of a fire alarm you will hear an audible alarm. Animal users should always treat fire alarms as an actual fire hazard. Never ignore a fire alarm or continue working once you have been alerted to the alarm. If you are working with animals during a fire alarm event, you need to secure your animals and your work and exit the building promptly.

Emergency contact numbers are posted at the main entrance/exit doors of the facility. Eye wash stations & emergency showers are located in the Central Animal Facility. First aid kits are located in the CAF office Room R102.

In the event of a life-threatening emergency, find the nearest facility phone and dial 911 or the University Police at 542-2200.

Sharps

Sharps containers must be provided by the principal investigator (PI) of each research or instructional project. Each sharps container brought into CAF must be labeled with the PI's name on it. Each PI must supply a sharps container for use on their project and must ensure that these containers are properly processed and disposed of following CVM and UGA policies and procedures governing biohazard and waste disposal.

Proper disposal of sharp instruments is vital in maintaining the safety of every person in the animal facility. Needles should not be recapped and they should be placed directly into an approved sharps container after use. Scalpel blades, razor blades, capillary tubes and microscope slides should also be disposed in an approved sharps container. Sharps containers should never be overfilled, as this presents a danger. Sharps may protrude or become dislodged from the sharps container and personnel may come into contact with used sharps material.

Biological Safety Cabinets Use

All users of Biological Safety Cabinets (BSC) located in animal and procedure rooms at CAF must clean all interior surfaces with Vimoba (high level disinfectant) before using the BSC and after using the BSC. Do not wet or spray into the ceiling area of the BSC as this will potentially damage the HEPA filter. If requested during orientation all BSC users will be given a demonstration on how to properly clean a BSC.