

University Research Animal Resources

Orientation Handbook

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1.0 Introduction

Those who use animals in research or teaching must assume responsibility for the general welfare of the animals in their care. This handbook has been written to assist current and prospective animal users working in animal research facilities under University Research Animal Resources (URAR) to do just that. It should serve as a source of information for investigators, research professionals, and students in research labs about URAR and animal facility policies and procedures.

The Office of Animal Care and Use (OACU) houses two entities, the Institutional Animal Care and Use Committee and University Research Animal Resources. URAR is separate from the Institutional Animal Care and Use Committee (IACUC), which is responsible for the oversight of *all* animal care and use at the University of Georgia. URAR is responsible for providing support for the research and teaching activities at the University by acquiring and providing care to the animals used in those research and teaching activities. In short, the IACUC is the regulatory arm of OACU and URAR is the service arm, beholden to the regulations enforced by the IACUC, in much the same way as an investigator or other animal user is.

This handbook will cover regulations, policies and standards that apply to animal use at the University of Georgia. It will provide information about biosafety, personal safety and occupational health. Animal care, health and transport will be discussed. Specific facilities are covered in appendices to this handbook.

2.0 Contacts for University Research Animal Resources

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3.0 National Regulations and Guidelines:

3.1 Animal Welfare Act

The Animal Welfare Act (AWA) of 1966 and amendments to the original act regulate the purchase, sale, housing, transportation, care, handling and treatment of animals used in research and teaching, for exhibition and those sold by commercial enterprises as pets. The act covers non-human primates, dogs, cats, guinea pigs, hamsters, rabbits, wild mammals, and any other warm blooded animals determined by the secretary of agriculture to be intended for use in research, teaching, testing, exhibition or pets. Rats, mice and birds have not yet been regulated. Livestock used in biomedical research are subject to the AWA.

The United States Department of Agriculture (USDA) enforces the policies of the AWA. The USDA carries out unannounced inspections of facilities housing or using animals subject to the AWA and requires those facilities to submit annual reports that include assurances and information including, but certainly not limited to, the common names and the numbers of animals used, listed by the USDA's use category. Noncompliance with the AWA standards may lead to fines and/or suspension of animal research activities.

More information on the AWA can be found at this link:

<http://www.nal.usda.gov/awic/pubs/IACUC/usdareg.htm>

USDA (<http://www.usda.gov/wps/portal/usdahome>)

3.2 Public Health Service Policy on the Humane Care and Use of Laboratory Animals

The Public Health Service (PHS) Policy on Humane Care and Use of Laboratory Animals requires that institutions receiving PHS funds for research that involves any vertebrate animals must submit detailed information, in the form of an Animal Welfare Assurance, to the Office of Laboratory Animal Welfare (OLAW) regarding the institution's program for care and use of all vertebrate animals. The PHS requires that institutions use the *Guide for the Care and Use of Laboratory Animals* (discussed below) as a basis for their animal care program.

More information on PHS policy and the Guide can be found at this link:

<http://grants.nih.gov/grants/olaw/references/phspol.htm#Public%20Health%20Service%20Policy%20on%20Humane%20Care%20and%20Use%20of%20Laboratory>

Office of Laboratory Animal Welfare (<http://grants.nih.gov/grants/olaw/olaw.htm>)

3.3 United States Government Principles for the Utilization and Care of Vertebrate Animals Used in Teaching, Research, and Training

The Interagency Research Animal Committee developed the US Government Principles. They are a set of nine principles related to the care and use of animals used in research, testing or teaching. They form the basis of the PHS Policy that must be adhered to by all institutions involved in testing, research or training procedures using vertebrate animals.

They can be found at this link:

<http://grants.nih.gov/grants/olaw/references/phspol.htm#USGovPrinciples>

3.4 The Guide for the Care and Use of Laboratory Animals

The Guide for the Care and Use of Laboratory Animals (the Guide) is intended to assist animal users, veterinarians and IACUCs in planning, conducting and overseeing animal research in scientific, humane and ethical ways. The Guide makes recommendations based on published data, expert opinion, and scientific principles. The Guide provides a key component for both the Public Health Service Policy and AAALAC International accreditation.

Copies of the Guide are available electronically through Galileo, and the Science Library has two copies. One free copy is available through the Office of Laboratory Welfare.

More information on the Guide can be found at this link:

http://dels.nas.edu/ilar_n/ilarhome/guide.shtml

3.5 Federation of Animal Science Societies Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching

The Federation of Animal Science Societies Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching (FASS Guide) is the livestock counterpart to the Guide for the Care and Use of Laboratory animals. It makes recommendations for any “warm-blooded vertebrate animal used in agricultural research or teaching for which the scientific objectives are to improve understanding of the animal’s use in production agriculture and that may require a simulated or actual production agricultural setting consistent with consideration of the animal’s well-being.” Livestock used in biomedical research are not covered by the FASS Guide, but are covered by the Guide for the Care and Use of Laboratory Animals.

An electronic copy of the FASS Guide is available at this link:

<http://www.fass.org/page.asp?pageID=216>

3.6 The American Veterinary Medical Association Guidelines on Euthanasia

The AVMA Guidelines on Euthanasia is the main reference document for humane methods of euthanasia for most species, and the PHS Policy and the AWA require that research institutions follow these Guidelines. Methods of euthanasia that are considered acceptable, as well as those that are conditionally acceptable and not acceptable can be found in the AVMA Guidelines on Euthanasia.

An electronic copy of the AVMA Guidelines on Euthanasia is available at this link:
http://www.avma.org/issues/animal_welfare/euthanasia.pdf

3.7 AAALAC, International

AAALAC, International stands for the Association for Assessment and Accreditation of Laboratory Animal Care, International. AAALAC international promotes humane animal care through a voluntary assessment and accreditation program. AAALAC accreditation is based on adherence to all regulations and guidelines required by law, and examination of all aspects of an animal care and use program such as facilities and equipment, professional, technical, and administrative support, and the policies and programs in place for institutional responsibilities, animal husbandry and veterinary care. Among the Laboratory Animal Science field, AAALAC accreditation indicates that a program is meeting the highest standards, and is considered the gold standard.

The Animal Care and Use Program at UGA is AAALAC accredited. The first part of the program to become accredited was the College of Pharmacy, in 1995. In 1999, the College of Arts & Sciences units were accredited, and in 2001, the College of Veterinary Medicine unit was accredited. In 2003, all of the units as a whole, as University Research Animal Resources, achieved AAALAC accreditation.

AAALAC reviews each institution's accreditation status every 3 years, by assessing the program and visiting the facilities. The most recent review for URAR was in September, 2007, so the UGA Animal Care and Use Program will be reassessed next in fall of 2010.

AAALAC, International (<http://www.aaalac.org/>)

4.0 *Institutional and Other Regulations and Guidelines*

4.1 Institutional Animal Care and Use Committee

The Institutional Animal Care and Use Committee (IACUC) is made up of veterinarians, scientists and community members, and is mandated by federal law for institutions that use laboratory animals for research or teaching. The IACUC is charged to oversee animal care and use at the University. Oversight encompasses a number of activities, such as reviewing and approving Animal Use Proposals, performing site visits, and issuing policies regarding animal use.

Animal Use Protocols

The IACUC is charged to review all proposed activities that involve animal use at the University of Georgia and ensure that all activities comply with PHS Policy, the Guide and the Animal Welfare Act. Investigators must write Animal Use Proposals (AUP) that describe the planned experiments and procedures in which they will use animals so that the activities may be reviewed by the IACUC.

Investigators may collaborate with their attending veterinarian to develop the AUP prior to submission. Once the AUP has been submitted to the IACUC, it is reviewed either by designated reviewer or full committee review depending on the AUP's animal use category. Animal use categories are described in the Animal Use Protocol. Investigators submit AUPs via an electronic system, Bioware. Bioware information is located at the following link:

<http://www.ovpr.uga.edu/compliance/oacu/bioware/faqs>

4.2 Reporting Deficiencies

As a part of its responsibilities the IACUC must investigate any reported deficiencies in animal care. Any question or concern about animal care or welfare can be brought to the facility supervisor or the IACUC. The identities of persons reporting concerns are held strictly confidential.

The humane care confidential contacts are as follows:

IACUC@uga.edu

IACUC executive Secretary – 706-542-4426

University Director Animal Care and Use – 706-542-5938

Emergency Animal Care Contact – 706-542-7204

Animal welfare signs with this contact information for reporting concerns are posted in each animal facility.

The policy on reporting concerns can be found at the following link:

<http://www.ovpr.uga.edu/docs/policies/compliance/Reporting-Difficiencies.pdf>

5.0 ***Occupational Health***

The Occupational Health and Safety Program (OHSP) addresses mandates from Public Health Service and National Research Council policies and more importantly, assists the University in providing a safe working environment for personnel who work in instruction or research using animals or biohazardous agents. The Offices of Biosafety and Animal Care and Use run the program jointly and Regional FirstCare Occupational Health Service provides medical care and the tools for medical surveillance of at risk individuals.

The OHSP applies to staff, faculty, students, volunteers and visitors. The program covers any persons at the University of Georgia who work with biohazardous materials, vertebrate animals, animal tissues, fluids, secretions and/or excretions, persons who handle equipment that has come into contact with biohazardous materials, animals or any of the previously listed materials, and persons who routinely enter animal housing facilities. Rights to the confidentiality of a participant's personal health information will be strictly maintained.

Enrollment in the OHSP is required for any persons listed in an animal use protocol and for access to animal facilities.

Further reading and forms are available at the following links:

<http://www.ovpr.uga.edu/compliance/oacu/ohsp/>

<http://www.ovpr.uga.edu/docs/policies/compliance/UGA-OHSP-Policy-2008.pdf>

6.0 Biosafety

6.1 Personal Protective Equipment

Personal protective equipment (PPE) is required in all facilities to protect both the animals and animal users. Clean PPE protects the animals from contaminants a user may be carrying on their clothing or body, such as dander, animal hair, viruses, bacteria etc. Clean PPE also protects the animal user, by keeping contaminants from the animal facility within the animal facility and preventing the user from bringing contaminants back to the lab, office or home.

The specific items of PPE that must be worn will vary depending on the species in use, the type of housing and the agents or materials being used within a facility. Examples of PPE include, but are not limited to; lab coats, gloves, shoe covers, facemasks, and N95 respirators. Specific instructions on required PPE for an animal room can be found on door or room signs. Information on PPE required for specific facilities can be found in the facility specific appendices of this handbook. Any person may choose to wear additional PPE beyond what is required, but all personnel must wear the minimum required PPE for their work area.

Used PPE should always be disposed of properly, lab coats and gowns should go into dirty laundry and disposable PPE should be discarded in the appropriate waste receptacle. Hands should be washed before exiting the animal facility.

6.2 Signage

It is critical to the research going on within the facilities that attention is paid to the signs posted in an animal facility. Signs that instruct the user what PPE is required to enter an animal room will be posted on animal room doors or next to them. Information on what hazards or materials are in use can also found on room door signs.

Signs with contact information for the Attending Veterinarians and emergency numbers are posted in each animal facility, often near the office.

6.3 Standard Operating Procedures

Standard Operating Procedures (SOPs) are used for all husbandry practices and a number of other activities in the animal facility. Adherence to these SOPs makes good research possible. Investigators may request copies of URAR SOPs from facility supervisors.

6.4 Laminar Airflow Change Stations and Bio Safety Cabinets

URAR has made laminar airflow change stations (change stations) and a few types of Bio Safety Cabinets (BSC) available to users amongst its facilities. There are specific uses for each item of equipment.

Change stations are provided in most rodent facilities. They use directional air flow to protect the contents of the work surface from cross contamination and

environmental contamination. They blow protective curtains of clean air across the work surface. It is important to note that the airflow can be disrupted by large amounts of equipment on the work surface or too much movement. Change stations also provide protection to the operator with curtains of directional airflow at the front of the station. Filtration of the exhaust air protects the environment. A change station does not provide adequate protection for work with pathogens higher than biosafety level 2 or easily aerosolized pathogens or immuno-compromised animals.

BSCs provide a higher level of protection than laminar flow change stations. These can be found in the facilities that support animal work that may require a BSC. They provide protection to the user, the environment and the contents of the hood, using airflow and high efficiency particulate air (HEPA) filtration of air blowing over the product and HEPA filtration of the exhaust air. Some BSCs have carbon filtration and are appropriate for work with gaseous anesthesia but not volatile hazardous chemicals. Some BSCs are ducted so that the exhaust air bows directly to the outside of the building instead of recirculating it into the room. These BSCs can be used as fume hoods. BSCs of any type are appropriate for work with higher-level pathogens, those that can become aerosolized and immuno-compromised animals. If your work requires use of a BSC in an animal facility, contact the facility supervisor or your Attending Veterinarian.

6.5 Sharps disposal

Proper disposal of sharp instruments is vital in maintaining the safety of every person in the animal facility. Needles should not be recapped, as this presents a self-puncture hazard, they should be placed directly into an approved sharps container after use. If an animal user feels that they must recap needles they should speak with an Attending Veterinarian. Scalpel blades, razor blades, capillary tubes and microscope slides should also be disposed in an approved sharps container to prevent accidental injury.

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. If a sharps container has become full and has not been replaced, contact the facility's supervisor.

7.0 Facilities Access

7.1 Hours of Operation

Most URAR facilities are operational and fully staffed between 8am and 4pm, Monday through Friday. After hours access is available for most facilities, but may require building access in some cases. Weekend staff completes daily checks, essential husbandry and feedings on Saturday and Sunday.

7.2 Controlled Access

University of Georgia animal facilities on campus are protected by controlled access. An electronic system, referred to as the prox card system, is composed of proximity reader panels that control magnetic locks on animal facility doors. To gain access to an animal facility a person must have a prox enabled UGA ID. Once access has been granted, the card should be held close to the prox card panel, which will read the card and release the magnetic locks and allow access into the animal facility. Gaining prox card access is covered in the next section.

In some instances building access will need to be acquired, please refer to the facility specific index that covers the facility you require access to for further information on building access.

7.3 Requirements for Access

To ensure the safety of the animals, staff and research within URAR's animal facilities there are a few requirements that must be met before prox card access is granted.

First, any person looking to gain prox card access must be listed on a current, approved Animal Use Proposal. The only exceptions to this rule are URAR employees. This rule ensures that anyone entering the animal facility has a reason to be in the animal facility and can be linked back to a Principal Investigator.

Second, any person looking to gain prox card access must be enrolled in the Occupational Health and Safety Program. This rule helps to ensure a safe and healthy working environment. Information on the Occupational Health and Safety Program is available at this link:

<http://www.ovpr.uga.edu/compliance/oacu/ohsp/>

Third, any person looking to gain prox card access must have taken, or be enrolled in the appropriate training courses. Currently, there are two courses required by the IACUC; Staying Healthy When Working with Animals and IACUC 101: Animal Care and Use Compliance. Staying Healthy When Working with Animals is available online, through Bioware.

7.4 ProxEnabled UGA ID procurement and Activation

UGA ID cards are purchased and printed at the Tate Student Center Cashier's Window. Prox enabled cards must be requested in writing with a request form. Obtaining a request from will depend on the facility an animal user will be working in.

Those UGA students, faculty and staff working at the College of Veterinary Medicine (CVM) are required to have a prox card for access to the buildings of CVM. Persons seeking a prox card for vet med access must go to the Business Office, room 239 and get a pink Prox Card request form before going to the Tate Center to have their UGA ID made. ID recipients must return to the Business Office 24 to 48 hours after the card was received to activate building access. For facilities access, the business Office must have an email from Ben Bonner, CVM Animal Resources Manager.

UGA students, faculty and staff looking to gain access to Life Sciences animal facilities who do not have a prox enabled card must contact the Life Sciences Animal Resources Administrative Office. Faculty and staff who work in the Coverdell building will have had to procure a prox enabled UGA ID through the building administration, because its after hours access is by proximity reader. If you are unsure whether your card is prox enabled or not, please visit a facility supervisor or the Life Sciences Manager.

Facilities access for Life Sciences facilities must be requested through the facility supervisor. Supervisors will provide a Facility Access Request Form to animal users seeking access, make a copy of the front and back of the prox enabled UGA ID and give an orientation to the facility. After the form is filled out and orientation has been given, facility access should be granted in 24-48 hours.

Facilities access will not be provided if the requirements for access have not been met.

7.5 Policies regarding Visitors, children, pets and photography

7.5.1 *Visitors:*

Visitors can be quite disruptive to the animals and to the daily work schedule of the staff. It is preferable to have advance notice given to the Facility Supervisor of the facility to be visited or the Program Manager. Visitors to any animal facility must be accompanied at all times by URAR personnel.

Visits from media personnel must be arranged with the Office of Animal Care and Use. Administrative URAR personnel must accompany all media personnel during visits.

7.5.2 *Children:*

Children are not permitted to enter any of the URAR animal facilities with out written permission from the Director, a Manager, or an Assistant Director. This policy is to prevent possible exposure of children to any of the various agents and materials found within animal facilities.

7.5.3 *Pets:*

To prevent exposure of research animals to potential pathogens, pet animals are not permitted in any of the animal facilities.

7.5.4 *Photography:*

Photographic and video equipment can be disruptive to research animals; bright lights and noise associated with most recording equipment can affect photoperiods and induce stress related reactions. The use of any photographic or video equipment by anyone in the animal facilities must have prior approval through the administrative offices of the branch in question.

8.0 Safety

8.1 Hazard Awareness

The animal facility can house many hazards. Animal users should be aware and practice caution when working in the animal facility. All animals should be handled with care as any animal can inflict scratches or bites, and other various injuries can occur when handling larger animals, such as livestock. Autoclaves and recently autoclaved material can cause burns. Water from cage washers can cause scalds. Heavy equipment, such as animal caging racks, is in use and can cause crush injuries. Wet floors may pose slipping hazards.

8.2 Fire Alarms

Fire alarms vary between facilities. Not all fire alarms will be audible; some may simply be strobe lights in the hallways. You will need to check the facility specific appendix for the facility you will be working in or ask the facility supervisor. In the event of a fire alarm, you will need to secure your animals and your work and exit the building in a timely fashion.

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.

8.3 Inclement Weather

In the event of inclement weather, such as a tornado, some facilities will need to be evacuated to a tornado shelter, while others can serve as shelters. Facilities that are above the ground floor will need to be evacuated to an appropriate tornado shelter. In most buildings the interior basement hallways serve as a tornado shelter.

More details are available in facility specific appendices.

8.4 Emergency Contacts

In the event of a non life-threatening emergency within the animal facility, please have the nearest available person contact the facility supervisor and inform them that there has been an emergency. You will need to refer to your facility appendix for supervisor contact information.

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

8.5 Emergency Operations Plans

Emergency operations plans for each facility can be found in the facility offices in the care of the facility supervisor. Emergency operations plans include contact lists, hazard risk assessments, emergency meeting locations, campus maps, and action plans for various situations.

9.0 Housing and Husbandry

9.1 Lighting

Animals receive the appropriate amount of lighting, both in intensity and timing according to the Guide for the Care and Use of Laboratory Animals (the Guide). The amount of lighting may be changed in intensity or timing with an approved animal use protocol. Certain facilities have rooms with alternate lighting, such as reverse light cycle, already set up.

9.2 Caging and Enclosures

Animals are housed in enclosures that provide the space required by the Guide for their species, at a minimum. All cages used to house animals are checked to be sure they are secure and have no protrusions or sharp edges. Species appropriate bedding material is provided in cages that require bedding or allow for it. Caging and bedding types available to an animal user will depend on the species used and the facility housing the animals. Please refer to the facility specific appendix that corresponds to the facility of interest to determine what caging is available there.

9.3 Feed and Water

Palatable, in-date feed appropriate to the species is provided to all animals under the care of URAR. The manufacturer or miller of feed will vary depending on species and facility, although many of the diets provided are milled and manufactured by Purina. Investigators must provide study diets.

For many species, URAR staff will feed the animals or maintain their ad libitum feed at an appropriate level. Specific feeding procedures required by an approved Animal Use Protocol will require a meeting with the attending veterinarian and/or facility supervisor.

9.4 Observation by URAR staff

URAR staff performs daily checks on the animals and their housing at least once a day, and for many species twice a day. These checks cannot be counted in an Investigator's AUP as observing or monitoring study animals. The staff observes animals for any obvious health or behavior concerns and also ensures that feed and water are available as directed. Sickness or behavior concerns are reported to the facility supervisor and the attending veterinarian.

Animal care staff performs cage changes or cleanings regularly, unless the Investigator has arranged to perform their own husbandry, is required to perform their own husbandry because of specified chemical use, or an approved exception to standard husbandry is included in the animals' AUP.

9.5 Environmental Enrichment Policy

There is an environmental enrichment policy that applies to all animals used for teaching or research at the University of Georgia. This policy states that environmental enrichment is intended to improve the well being of animals used in research and teaching by increasing species-specific behaviors and reducing maladaptive behaviors. Species-specific environmental enrichment is provided by URAR staff and is provided unless withholding of enrichment is justified in an approved AUP. URAR staff will work with the Investigator on providing study appropriate enrichment.

The Environmental Enrichment SOP is located here:

<http://www.ovpr.uga.edu/docs/policies/compliance/Environmental-Enrichment-SOP.pdf>

10.0 Animal Health

URAR provides for the safe and effective procurement, quarantine, conditioning, surveillance, and veterinary medical care of all animals used in the research and teaching programs. Protecting and enhancing the health of the animals drives several aspects of our animal care program.

10.1 Biosecurity

The URAR biosecurity program is designed to prevent animal infections from entering the animal facilities.

One of URAR's main goals is to maintain the healthy status of animals housed in the facilities, because the animals' health is vital to their welfare and to the quality of the research. Any outbreak has the potential to damage research projects, with animal, time, and economic loss.

Therefore, several protective measures are in place to minimize the risk of infection within the animal colonies. Examples are restricted access, PPE requirements, sanitation methods, cage handling procedures, and the use of laminar flow hoods. URAR requires that these procedures be followed to protect everyone's animals and research.

10.2 Sentinel program for rodents

The Rodent Health Surveillance Program, or Sentinel Program, surveys the health status of animal colonies in order to identify unexpected infections. It is important to discover any unexpected infection outbreaks, so that the infection can be controlled or eliminated in the rodent populations, in order to minimize spread to other colonies. For rodent colonies that will be in the animal facility for more than 3-4 weeks, sentinel rodents will be placed in the room with the colony. The sentinels are exposed to colony animals' dirty bedding for a standard period of time, then the sentinels are euthanized and a blood sample is obtained to check for antibodies to specific pathogens of concern. The animals are also tested for parasites (ex. mites, pinworms).

10.3 Health monitoring for other species

The health status of non-rodent species is also monitored. Qualified URAR 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.

10.4 Quarantine

When rodents are imported from other research institutions, they must be quarantined upon arrival at UGA to protect the health of the animal residents of the

URAR facilities. Research institutions typically do not monitor their animals' health status as rigorously as do commercial vendors from which we purchase most rodents, so the health status of imported rodents is more questionable. To acquire rodents from another university, the researcher must submit a "Request to Import Animals from Non-Commercial Vendor" form. Then the URAR attending veterinarian assesses the health status reports acquired from the source institution, and if there is no evidence of a microbial agent of concern, the animals have a standard quarantine in the Coverdell Rodent Vivarium Quarantine Room. During quarantine, sentinels are exposed to the imported rodents and then tested for pathogens of concern. Quarantine lasts 5-6 weeks. The cost (sentinels and testing) depends on the number of rodents imported, but usually costs approximately \$285 per 10 cages of imported mice, plus per diems for the imported mice. If testing reveals no evidence of pathogens, the imported rodents are released from quarantine. If there is evidence or suspicion of infection, the attending veterinarian will devise a plan of action with the importing researcher. This link explains quarantine in more detail, and includes the "Request to Import Animals from Non-Commercial Vendor" form.

<http://www.ovpr.uga.edu/docs/forms/urar/URAR-Mice-Importation.pdf>

10.5 Veterinary care

Veterinary care is available for all animals used for research and instruction. All animals are checked daily by Animal Resources Animal Technicians, and any abnormalities are reported to the Veterinary staff. The veterinary staff consults with the researchers to determine the most appropriate treatment or intervention. Veterinary care is also available on weekends and holidays. Researchers who note any abnormality are required to report the problem to the Animal Resources staff, or the Veterinary staff directly. On weekends or holidays, if Animal Resources staff is not available in the facility, researchers must call the Supervisor on call or the Veterinarian on call to report veterinary concerns. The Supervisor and Veterinarian on call each weekend and holiday, and their contact information, are posted in the animal facilities, usually in/near the office, or by the phones. During facility orientation, you will be shown the exact location of this posted information in your specific facility.

10.6 Euthanasia Policies

Federal regulations require that euthanasia of all research animals follow the standards of the American Veterinary Medical Association (AVMA) Guidelines for Euthanasia. [http://www.avma.org/issues/animal_welfare/euthanasia.pdf]. All methods of euthanasia for research must be approved by the IACUC.

10.6.1 *Rodents*

The "UGA IACUC Policy on Rodent Euthanasia Using CO₂" specifically describes the only approved method of euthanizing rodents with CO₂. [<http://www.ovpr.uga.edu/docs/policies/compliance/C02-Euthanasia.pdf>] The CO₂ must flow into the chamber/cage at a specific rate, replacing 20% of the air volume per minute.

Signs explaining the policy and the appropriate flow rates for different cage sizes are posted at all CO2 euthanasia stations in the animal facilities.

10.6.2 *Non-rodent Species*

Researchers may contact their attending veterinarian for advice and regulatory information regarding euthanasia of any species. The veterinary staff is also available to euthanize animals for the researcher.

10.7 Veterinary Contact Information

The UGA Attending Veterinarians are:

Dr Chris King

Attending Veterinarian for Savannah River Ecology Laboratory, SREL, Poultry Science, and Center for Food Safety.
Room 608 Boyd G.S.R.C.

cking@uga.edu

P: 706-542-5933

F: 706-542-5638

Dr Stephen Harvey,

Attending Veterinarian for Laboratory Animals at the College of Veterinary Medicine, Poultry Diagnostic and Research Center, and Oconee County Farm.

Room 206, College of Veterinary Medicine

sbharvey@uga.edu

P: 706-542-4173

F: 706-542-3897

Dr Leanne Alworth,

Attending Veterinarian for Colleges of Arts & Sciences, Pharmacy, Agricultural and Environmental Sciences, and Family and Consumer Sciences, the D.B. Warnell School of Forestry and Natural Resources, the Odum School of Ecology, and Environmental Health Sciences (School of Public Health).

Room C 126 Life Sciences Bldg.

alworth@uga.edu

P: 706-542-6084

F: 706-542-0149

11.0 Animal Transport

11.1 Within Facility

Care must be taken when moving animals from room to room within a facility. Methods will vary depending on the species of study animals. Rodents and other animals housed in shoebox caging should be moved in their regular caging with a wire bar lid or bonnet to prevent escapes. Rodents kept in suspended housing can be moved in their home cages, but the cages should be covered with a bonnet or lid during transport.

Rabbits may be carried by hand in manual restraint, or in opaque rat boxes. Most animals housed in cages that can be wheeled, should be moved in their home caging to new rooms. Dogs may be walked to new rooms on leashes.

Capuchins and livestock, such as cows, pigs or horses, should be moved according to facility standard operating procedures, please consult with your facility supervisor to receive copies of those documents.

11.2 Out of Facility, within building

Animals may need to be moved from their room to a lab or workspace in the building, but outside the animal facility. Animals leaving the facility should be in shoebox caging with a bonnet closing the cage or an appropriate shipping container. Shoeboxes should be placed in an opaque bag or covered so that passersby cannot see the animals. Shipping containers do not need to be covered, as they are opaque and do not reveal their contents.

Rabbits, cats, dogs and other mammals should be kept in mobile kennels or other appropriate transport cages. Exotics, wildlife, or other small animal species should be transported in an appropriately sized and designed transport cages that will provide a safe, secure, and comfortable mode of transport. Transport cages and mobile kennels will need to be covered to shield them from view.

11.3 Out of Facility, out of building, on campus

Animals may need to be moved from their room to a lab or workspace in a separate building from the animal facility. Animals leaving the facility should be in shoebox caging with a bonnet closing the cage or an appropriate shipping container. Shoeboxes should be placed in an opaque bag or covered so that passersby cannot see the animals. Shipping containers do not need to be covered, as they are opaque and do not reveal their contents. Rabbits, cats, dogs and other mammals should be kept in mobile kennels or other appropriate transport cages. Exotics, wildlife, or other small animal

species should be transported in an appropriately sized and designed transport cages that will provide a safe, secure, and comfortable mode of transport. Transport cages and mobile kennels will need to be covered to shield them from view. All animals in transport caging or home cages that need to be moved by vehicle must be moved in a vehicle with air conditioning.

Hoofstock must be transported in an appropriate and safe trailer. Gates should function safely and properly. Floors should be checked for overall support integrity. Floor should be firm, stable, and safe to transport animals. There should be no sharp edges or protrusions.

Animal Resources will move animals from one facility to another for Investigators with enough lead time and proper notification of the Facility Supervisors or Program Manager.

11.4 Out of Facility, out of building, off campus

Animals may need to be moved from their room to a lab or workspace in a location of campus. Animals leaving the facility should be in shoebox caging with a bonnet closing the cage or an appropriate shipping container. Shoeboxes should be placed in an opaque bag or covered so that passersby cannot see the animals. Shipping containers do not need to be covered, as they are opaque and do not reveal their contents. Rabbits, cats, dogs and other mammals should be kept in mobile kennels or other appropriate transport cages. Exotics, wildlife, or other small animal species should be transported in an appropriately sized and designed transport cages that will provide a safe, secure, and comfortable mode of transport. Transport cages and mobile kennels will need to be covered to shield them from view. All animals in transport caging or home cages that need to be moved by vehicle must be moved in a vehicle with air conditioning.

Hoofstock must be transported in an appropriate and safe trailer. Gates should function safely and properly. Floors should be checked for overall support integrity. Floor should be firm, stable, and safe to transport animals. There should be no sharp edges or protrusions.

Animal Resources will move certain species of animals from on-campus AR facilities to locations off campus for Investigators with enough lead time and proper notification of the Facility Supervisors or Program Manager.