



# Policy Manual

**Lab Animal Medicine**  
**“We Care For Our Animals As If Human Lives Depend On It”**

The Department of Laboratory Animal Medicine (DLAM) is committed to providing UNTHSC faculty, staff, students and other partners with high quality, cost-effective research bio-resources. DLAM has a dedicated and experienced staff that contributes to the HSC’s exemplary program of animal care and use. DLAM provides veterinary and personnel training and expertise in laboratory animal medicine and technology.

DLAM is dedicated to support the University’s research and teaching goals, to promote and assure humane care and use of animals through compliance with the Animal Welfare Act, Office of Laboratory Animal Welfare, Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC) International and University policies for the humane care and use of animals.

DLAM advises and educates researchers, staff, students, and other professionals on animal experimentation issues and promotes best practices for the responsible use of animals.

Our primary concern is the welfare of the animals used in the facility. We maintain vigilance in ensuring that the animals experience proper care and handling with minimal discomfort or pain, as well as live in an enriching environment. We adopt and abide by the American College of Laboratory Animal Medicine’s Position Statement regarding animal experimentation.

There are state-of-the-art facilities totaling approximately 40,000 square feet of mostly rodent space. DLAM is equipped to house multiple species and strains, including immunocompromised and genetically modified animals. DLAM provides husbandry and veterinary care for animals 365 days per year.

All rodent housing is on HEPA filtered ventilated racks with polycarbonate cages. Animal housing rooms have a HEPA filtered cage changing station to help further reduce occupational exposure to allergens. All animal housing rooms have full lighting and temperature/humidity controls to ensure proper environmental regulation. Environmental conditions are monitored several times a minute, 365 days a year. All areas are secure and monitored by campus police.

## FOUNDATION

The Animal Welfare Act (AWA) was first passed in 1966 to address the concerns of the American public regarding the acquisition and use of animals in research. To ensure adherence to the Act, Congress established a self-oversight mechanism for all research institutions; this oversight is through the Institutional Animal Care and Use Committee (IACUC). The 1985 Amendments to the AWA and concurrent changes in the Public Health Service Policy of Use of Animals by Awardee Institutions (PHS Policy) increased the oversight responsibilities of the IACUC. Today, every institution conducting animal-based research, teaching or testing, must establish an IACUC to oversee the institution's animal care and use program. The IACUC's membership and responsibilities are mandated and defined by federal law and carried out through local policy.

The HSC's Animal Care and Use Program encompasses all animals used by HSC for research, testing, education, or any other purpose. In addition to the IACUC, the Program is composed of community members (non-affiliated) and members of the HSC community who use animals. Often research investigators view the IACUC and Department of Laboratory Animal Medicine (DLAM) as synonymous; each is autonomous. The DLAM is under the purview of the Committee in much the same way as researchers are. It is Veterinarians' responsibility to carry out the Program for the IACUC and DLAM, providing support to the research and teaching programs of the HSC through acquisition and care of animals used by the HSC community. In simple terms, the IACUC is the regulatory arm of the program and the DLAM is the administrative.

The use of animals in research and teaching is a privilege carrying with it unique professional and moral obligations to ensure that animals are treated humanely and in accordance with the policies of the UNTHSC, the regulations of the Animal Welfare Act, and other laws and policies of the federal government and other agencies. The ultimate responsibility for compliance with regulations that affect the care and use of animals lies with the animal users themselves; thus, it is of paramount importance that each user has knowledge of the regulatory requirements and local policies. Every person using animals, whether investigator, technician, student, or instructor, must be aware of and abide by their attendant obligations to assure that animals in the University's programs are used in a humane manner.

It is also necessary for all who perform animal research, teaching, or testing, to ensure that animals are utilized only if the information gained promises to contribute to understanding of fundamental biological principles or to the development of knowledge expected to benefit humans or animals. The tenets of the "3Rs" approach to animal research, "Replacement, Reduction, and Refinement" should be always followed. Animals should only be used when the researcher's best efforts to find an alternative model have failed. When there is no acceptable alternative, researchers should employ the most humane methods, using the smallest number of appropriate animals necessary to obtain statistically valid results. Only when research is performed appropriately and humanely can there be assurance of the continued use of animal models in the quest for knowledge.

## **LAB ANIMAL FACILITY POLICIES**

Welcome to the Department of Laboratory Animal Medicine  
The University of North Texas Health Science Center at Fort Worth

### **Access to the facilities: RES; IREB; CBH**

Keys and access cards are only granted upon successful completion of the following:

- Online Citi training: Care and Humane Use of Animals and species-specific modules.
- DLAM Training:
  - Online Canvas Policy Training
  - Vivarium Tour (in person)
  - DLAM Animal Handling (in person)
  - DLAM Surgery (for those conducting survival surgeries)
  - DLAM Bio methods (optional and available upon request)
- A Medical History Questionnaire.
- Personnel have been added to the protocol by the PI.

After completing the required training, you may request access to DLAM-controlled areas on campus. Please email DLAM@unthsc.edu with the following information:

1. The PI you are working with.
2. Department
3. Name of Department Head
4. Employee ID number on badge
5. The building and rooms to which you need access.

**PLEASE ALLOW DLAM TO COMPLETE THE REQUEST FORM AND ROUTE IT FOR SIGNATURES.**

DLAM does not control access to rooms anywhere outside the vivarium. Please make access requests to additional rooms or labs through your department.

DLAM will complete the request form and send it through DocuSign for your signature, that of your department head, and the DLAM Facility Manager. We will then route the form to BadgeAccess@unthsc.edu and copy you on it. Please retain this form for your records, if you need to contact that office for further help. They will notify you by email when you have access, and with information on picking up keys, if needed.

### Laboratory Apparel

To enter the lab animal facility, you must be dressed accordingly. The following attire is required for safety and security reasons:

- Always have your ID badge visible. Without a badge, you will be denied access to the facility by DLAM personnel. Your badge shows proof you can access this secure area.
- Always have on a CLEAN lab coat, clean set of scrubs, or clean PPE when entering the facility.
- Wear solid shoes, preferably rubber-soled shoes (i.e., tennis shoes). No open toed, or open backed shoes. This is for your safety - there is constant traffic of cages, carts and cage racks, and the animal room floors, and hallway are mopped frequently to maintain sanitation.
- Please avoid wearing heavy colognes or perfume. The scents may upset or change the behavior of the animals. Behavioral studies may be on-going.
- Smoking: If you are a smoker, remove your lab coat before taking your smoke-break. The smoke residue on your clothes can upset or change the behavior of the animals.

### Occupational Health & Safety

- **Do not enter other animal rooms:** When working in your animal room, please do not enter other animal rooms. This prevents cross contamination. There are several diseases that are zoonotic between different species of rodents that could result in the death of a colony.
- **Gloves:** Handle all lab animals with gloves - this protects you from animal allergens and protects the animals from potential exposure to disease causing organisms on your hands.
- **Working with potential Zoonotic species:** You must follow all guidelines set forth by the Department of Lab Animal Medicine in the proper handling and use of any species that may be potentially zoonotic. This is for your protection as well as the protection of the animals.
- **Do not enter the "Clean Cage Wash Area":** If you need clean caging look in the blue bio-bubble or ask a DLAM staff member. This room holds caging for all the animals in the facility; limiting access to this room helps prevent cross contamination.
- **Clean up after yourself: Please be courteous and leave the room as you have found it. Dispose of needles, syringes, etc. properly. Clean up bedding, enrichment, debris that may have fallen on the floor during working with the animals. There are trash cans, brooms and dust pans in each room. Leaving your room in disorder may result in additional charges to your per diem, (i.e., excessive cleaning fees)**
- **Do Not place cages on the floor:** This is a hazard and should never be done.
- **Sharps containers:** Be sure to place all sharps (needles, scalpel blades, etc.) into a sharps container before exiting the room. Leaving sharps in the rooms endangers other laboratory workers as well as DLAM personnel. Please bring a sharps container (DLAM can supply you with one) into the room if you need one. The procedure rooms are equipped with sharps containers.
- **Bites and Scratches:** If you get bitten or scratched by an animal in the animal facility, wash the area with soap and water and report the incident to your supervisor. For further information check [UNTHSC's Occupational Health Website](#).
- **Allergies:** This is the most common health problem associated with lab animals. Wearing proper PPE (mask, gloves, lab coat) will help prevent symptoms. If you develop allergies at any time while working with the animals, please notify your supervisor.
- **Cell phones and Cameras must be turned off while in the Animal Facility.**
- **Fire Alarms:** When the fire alarm sounds, please cease your work and exit out the door leading to the docks until the all-clear is sounded.

- **Pay attention to warning labels and signs:** Please pay attention to signs and labels on doorways, rooms, bottles, etc. They are there for your protection as well as that of the animals in the vivarium.

### **Animal Health & Husbandry**

- **Animal Health/Sick animals:** The health of each animal in the facility is assessed daily. If you notice your animals have become ill (not eating, drinking, weight loss, etc.), notify DLAM personnel immediately.
- **Dead animals:** If you find one of your animals dead in your room, please place the dead animal in a glove (small animals) or a black bag (large animals) and notify a DLAM staff member for proper disposal. If DLAM personnel find one of your animals dead, the investigator will be notified.
- **Assessing Animal Health:** Things to look for when assessing rodent health include:
  - Activity level - lethargic
  - Behavior – vocalizing, self-trauma, aggressive
  - Food/Fluid intake – decreased feces/urine.
  - Eyes – red staining
  - Fur – unkempt, soiled fur
  - Posture – hunched.
  - Respiratory – opening mouth, labored breathing.
  - Other – seizures, tremors, tumors, infection of wounds, paralysis

These are signs that the animal may be in pain. Notify the Animal Health Technician of any of these conditions via email.
- **Cage Changes/Room cleaning schedule:** All animal rooms and caging are changed/cleaned a minimum of every 14 days. Some rooms require weekly or even daily changes. The schedule for your animal's cage change is posted on the room door. If you have any concerns or questions with the schedule of your room maintenance, contact Facility Manager at 817-735-2039 or ena.gutierrez@unthsc.edu
- **Feeding:** DLAM personnel will free feed (Ad Libitum) a pelleted lab animal diet to all rodents, rabbits, mice, guinea pigs unless animals are on restricted diet and a special care card has been placed on their cage. If you have any questions concerning the feeding of your animals, please contact Facility Manager at 817-735-2039 or ena.gutierrez@unthsc.edu
- **Cage cards:** Please do not remove cage cards or write on them outside of the "Notes" section. These identify the animal, species/strain, principal investigator, and the protocol. Extra cards for your notes and information can be placed behind the cage card in the cage card holder. We provide various pre-printed cards for your use such as breeder cards and treatment cards. Ask DLAM personnel if you need one of these cards. If you separate animals, please fill out a Cage Card Request or email dlam@unthsc.edu for more cage cards – **all animals must always have a cage card.**
- **Animal Transfers:** When animals need to be transferred to a different protocol, investigator, or room, an electronic Animal Transfer Request should be filled out in iLab.
- **Animal density requirements:** DLAM adheres to the standards set forth in the *Guide for the Care and Use of Laboratory Animals*. A table listing the recommended space allocations for laboratory animals can be found in *The Guide*. Many cage options are available, and the number of animals allowed per cage is depends on many factors and study considerations. For

specific questions regarding the housing of the animals on your protocol, please contact Facility Manager at 817-735-2039

- ***Movement of animals in cages in the animal room:*** If you need to separate animals at any time, the animal(s) being moved must have a cage card (see cage card section above). Please make sure the new cage has food and water. If you pair animals for mating, please add a “Litter Watch” card on the cage. Male animals should never be housed together after they have been separated, especially after mating – they will fight.
- ***Sentinels:*** There are sentinel animals in each of the animal rooms. They are indicated by bright pink cage cards. These animals are placed in each room by DLAM for monitoring the health status of each room. Please do not handle these animals or use them. These animals or their blood is animal numbers on each protocol. DLAM staff will then approve the transfer request and move the animals along with printing new cage cards, if necessary. Sent off every 15 weeks to test for pathogens.
- ***Dirty or soiled caging:*** If you have dirty caging in your lab, or empty tubs in your animal room, please place them in the Bio Bubble with the red covers. If you find a flooded tub, please notify DLAM personnel.
- ***Using pups:*** If you are breeding rodents on your protocol, all pups must be counted. Email the breeding form, from the DLAM website, to [dlam@unthsc.edu](mailto:dlam@unthsc.edu) at the end of each month. The form is required even if the number of pups is zero. Please keep a record of pups and turn these in to the DLAM inboxes or email them to [dlam@unthsc.edu](mailto:dlam@unthsc.edu) monthly.
- ***Breeding:*** Breeding records must be turned in to DLAM on a monthly basis, emailed to [dlam@unthsc.edu](mailto:dlam@unthsc.edu)

### **Euthanasia**

- ***Method of euthanasia:*** Animals can only be sacrificed by the approved methods outlined by the American Veterinary Medical Association and in your protocol. Any deviation from this can result in the loss of facility privileges or protocol suspension. **Always follow your protocol.**
- **Policies for Euthanasia:**
  - ❖ If you need animals sacrificed, please complete an ***Animal Euthanasia Form*** (green sheet); also mark the cage card of the animal to be sacrificed with an “X.” These can be found the entry to the animal facilities or ask the DLAM staff for one.
  - ❖ If you have sacrificed animals in your lab they should be placed in a bag and given to DLAM personnel for proper disposal. Please call 817-735-0561 or 817-735-2017 to request one of the DLAM staff to meet you at the carcass freezer on the dock.
  - ❖ If you have a number of animals to be sacrificed after testing, you can complete a Euthanasia form if you want DLAM staff to euthanize them for you. The DLAM staff member will then perform the euthanasia procedure. There is a charge for this service procedure rooms equipped with a CO2 euthanasia system are available to reserve via ilab. Please, complete the CO2 usage log each time our tanks are utilized. At no time are the animals to be left unattended. If you wish to do the euthanasia.
  - ❖ See the Anesthesia, Analgesia and Euthanasia hand-out for more information on euthanizing animals. The Principal Investigator will show lab members how to properly euthanize according to the approved protocol.

### **Performing Procedures on Animals**

- ***Training:*** The Principal Investigator (or other lab staff) is responsible for showing lab staff how to properly do all procedures that are approved on the protocol.

- **Reminders:**
  - Always follow the protocol.
  - Ask questions, and, when in doubt, seek assistance.

### Anesthesia

- Anesthesia may be used for procedures other than surgery, if approved on protocol or by IACUC.
- If an animal is anesthetized, a Surgery/Post-op Record must be completed and turned in to the Animal Health Technician (see Anesthesia, Analgesia, Euthanasia hand-out).
- If you use Isoflurane, the animals will wake up quickly. If you use an injectable, the animals take longer to wake, and they must be kept warm and directly supervised by until they are awake.

### Transporting Animals

- **Transportation carts/cages:** Animals must be transported in cages with a secure wire cage-top, micro isolator top, and Tyvek cover for each individual cage (rodents), or transportation cages covered with a Tyvek cover (provided by DLAM, for a fee) to reduce stress and exposure of animal allergens to non-animal workers. DLAM provides carts for investigator use only in the DLAM facility. **Do not remove these carts from the animal facility for any reason.** Your lab must provide carts for transport to and from your lab. DLAM provides the Tyvek covers for the cages and carts. For sanitary reasons, please assure that the animals are in a clean cage before transporting.
- **Animals to and from the lab:** Only animals that are housed in the conventional halls can be moved to and from the lab freely. Animals that are housed in the barrier hall or containment halls in IREB/ CBH buildings (requires additional access) **cannot** be moved to and from the lab. Once the animals are removed, they cannot be returned.
- **Transport of Live animals to and from any of the other buildings must only be done by DLAM staff.** You will need to complete an animal transfer request in iLab. You must give at least 24 hours' notice for these transports.
- **Housing animals outside the vivarium:** Animals cannot be housed in your lab over-night (24hrs) unless it is approved in the research protocol. Animals found to be in your lab without authorization can result in loss of facility access privileges or protocol suspension. If animals are to be housed overnight in your lab, they must have access to food and water, and be housed properly, adhering to cage space/animal number requirements. If animals will be housed for 12 hours in your lab, notify a member of DLAM so our staff can verify the animal's health and provide feed and/or water, if necessary.
- **Freight elevator:** The freight elevator is for the use of transporting animals and biological materials. The passenger elevator is only to be used in the event the freight elevator is out of service. Unauthorized use of the passenger elevator can result in the loss of facility access or protocol suspension.

### Working with animals outside the vivarium

- It is important to follow the same policies and procedures when you are working with your animals in your lab outside the vivarium, i.e., clean lab coat, gloves, mask.
- The same policies and procedures for the handling and use of your animals also apply when you are working with your animals in your lab outside the vivarium.
- Keep your lab clean: No food or drink is allowed in your lab.



- Keep your lab locked at all times, especially when animals are present in the room.
- No animals should be left unattended.
- If you have animals recovering in your lab it is recommended that you cover the cage with a drape in case non-animal workers such as facilities personnel enter the lab to make a repair or check environmental controls.
- A cleaning log must be kept in the lab to maintain a record of when the lab and equipment the animals come in contact with was last sanitized.

### **Training**

- Procedures specific to your protocol will be taught to you by your lab.
- Surgery training is mandatory if you will be performing surgery. There is a surgical presentation. Please contact the Veterinary Technician at [tito.nelson@unthsc.edu](mailto:tito.nelson@unthsc.edu) for more information and for scheduling. You can also request this training online using the following address <https://www.unthsc.edu/research/animal-research/animal-research-training-request/>
- DLAM has training available, if needed, to train you in handling, surgical, blood and tissue collection techniques, anesthesia, and euthanasia. Contact the training coordinator at [Katey.Mask@unthsc.edu](mailto:Katey.Mask@unthsc.edu) for more information and scheduling.

### **Facility Security**

- Have your ID badge visible when inside the vivarium.
- No unauthorized visitors are allowed in the vivarium, including after hours and weekends, unless approved by the Director of the Department of Lab Animal Medicine or his designee.
  - Visitors **must** sign in at the DLAM office, RES-127 or office at IREB-141. Visitors include anyone who has not had DLAM training.
- ***Do not let others use your badge/keys.*** Do not allow someone who has not had policy training access to the vivarium without assistance.

### **Concerns with the Animal Care and Welfare**

If you have any concerns or questions dealing with the care, use and or handling of the animals in the vivarium please bring it to the attention to any of the following:

Dr. Daniels- 817-735-2017

IACUC office- 817-735-2533

Ethics Line- 844-692-6025

Others listed on emergency poster in labs and in animal facility.

Your name will be kept confidential.

### **Protocol Reminders**

- Animals can only be ordered on approved protocols.
- You must be listed on the protocol before you do procedures on a protocol.
- Read and understand the protocol.
- Do not do procedures that are not listed on the protocol.
- Do not use drugs that are not listed on the protocol.
- If you need to change something on a protocol, contact the IACUC office to add an amendment. The amendment must be approved before a new procedure can be started.

## **DLAM Staff**

DLAM staff is trained in the care and use of laboratory animals and can play an important role in your research. Our facility requires that all DLAM staff working with animals become AALAS (American Association for Laboratory Animal Science) certified. This ensures that our staff is skilled and knowledgeable in the many aspects of the laboratory animal science environment.

- Lab staff is available Monday – Friday, 7:00 am – 5:00 pm.
- Limited staff is available on weekends. Contact Facility Manager or Supervisor for immediate assistance.

An emergency contact list is posted in the vivarium entry and hallways. Listed below is our staff and contact numbers:

### **Egeenee Q. Daniels, DVM**

**Director and Attending Veterinarian**

**Phone: 817-735-2017**

**E-mail: [egeenee.daniels@unthsc.edu](mailto:egeenee.daniels@unthsc.edu)**

**Office: RES 127C**

### **Lacy Bowen, MBA**

**Assistant Director**

**Phone: 817-735-2013**

**Cell: 817-995-0211**

**E-mail: [lacy.bowen@unthsc.edu](mailto:lacy.bowen@unthsc.edu)**

**Office: RES 127D**

### **Ena Gutierrez, BS, RLATG**

**Facility Manager**

**Phone: 817-735-2039**

**Cell: 682-557-9519**

**E-mail: [ena.gutierrez@unthsc.edu](mailto:ena.gutierrez@unthsc.edu)**

**Office: RES 127E**

### **Apple Sims, BS, MA, RLATG**

**Facility Supervisor**

**Phone: 817-735-2098**

**Cell: 817-966-3973**

**E-mail: [apple.sims@unthsc.edu](mailto:apple.sims@unthsc.edu)**

**Office: IREB 141**

### **“Tito” Nelson, RLAT,RVT**

**Veterinary Technician**

**Phone: 817-735-0590**

**E-mail: [tito.nelson@unthsc.edu](mailto:tito.nelson@unthsc.edu)**

**Office: RES 127F**

**Katey Mask, ALAT**

**Training Coordinator**

**Phone: 817-735-2010**

**E-mail: [Katey.mask@unthsc.edu](mailto:Katey.mask@unthsc.edu)**

**Office: RES 002A**

**Larry Mackey, RLAT**

**Quality Assurance/Compliance**

**Phone: 817-735-0580**

**E-mail: [larry.mackey@unthsc.edu](mailto:larry.mackey@unthsc.edu) or [dlam@unthsc.edu](mailto:dlam@unthsc.edu)**

**Office: CBH 649**

**Susie Jordan, BA**

**Senior Administrative Coordinator:**

**Phone: 817-735-2017**

**E-mail: [susie.jordan@unthsc.edu](mailto:susie.jordan@unthsc.edu)**

**Office: RES 127**

**Attendants/Technicians**

All the DLAM staff can be contacted at **817-735-0561 or 817-735-2017**

**Weekend Personnel**

The weekend staff member. If you need assistance on the weekends between 8 AM – 2 PM, contact the Facility Manager or Assigned weekend personnel (Phone list are posted by all phones in the facility).

**IACUC Staff**

**Christina Aguilar CPIA**

IACUC (Institutional Animal Care and Use Committee) Coordinator. Please visit the website: <http://www.hsc.unt.edu/IACUC/index.cfm> for information regarding IACUC policies, procedures, forms, and other information.

**Ph: 817-735-2533**

**E-mail: [christina.aguilar@unthsc.edu](mailto:christina.aguilar@unthsc.edu)**

## **Additional Resources**

### **Internal Resources**

- [The University of North Texas Health Science Center at Fort Worth \(unthsc.edu\)](http://unthsc.edu)
- [Lab Animal Medicine – Research and Innovation \(unthsc.edu\)](http://unthsc.edu)
- [IACUC Procedures and Guidelines - Research and Innovation \(unthsc.edu\)](http://unthsc.edu)
- [Home – Environmental Health and Safety Office \(unthsc.edu\)](http://unthsc.edu)

### **External Resources**

- [AAALAC](http://aaalac.org)
- [American Association for Laboratory Animal Science \(aalas.org\)](http://aalas.org)
- [AALAS Learning Library](http://aalas.org)
- [Charles River Laboratories | Every Step of the Way. \(criver.com\)](http://criver.com)
- [Guide for the Care and Use of Animals | OACU \(nih.gov\)](http://oacu.nih.gov)
- [ENVIGO +](http://envigo.com)
- [The Jackson Laboratory \(jax.org\)](http://jax.org)
- [PHS Policy on Humane Care and Use of Laboratory Animals | OLAW \(nih.gov\)](http://olaw.nih.gov)
- [Institute for Laboratory Animal Research | National Academies](http://nationalacademies.org)
- [Genetically Engineered Rodent Models | Humanized Mice | Taconic Biosciences](http://taconic.com)
- [USDA APHIS | Animal Welfare](http://aphis.usda.gov)