LABORATORY ANIMAL CARE UNIT
University of Tennessee Health Science Center
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Import/Export Program

Contact: Dr. David Hamilton, Veterinarian
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Purpose: To outline the procedures and requirements for the importation of rodents to the UTHSC vivaria and the exportation of rodents from UTHSC to other institutions.

Animal Import

With regards to the importation of rodents to any area of the UTHSC campus, sources of animals fall into one of three general categories:

1) Approved supplier – Commercial vendor. This is an animal vendor such as Jackson Labs and Charles River Laboratories from whom we can import animals and place them directly into one of our housing areas upon arrival. These vendors have intensive breeding and health surveillance programs and provide high quality research rodents. Animals from these vendors are considered free of rodent pathogens.

2) Approved supplier – Non-commercial vendor. This category includes all animals that originate from other research institutions (e.g. from one investigator to another). This category also includes mice that originate from organizations such as the MMRRC and MMHHC. Even though health information is required prior to shipment, these animals are not considered “free” from rodent pathogens and must go through a quarantine period before being housed in a UTHSC vivarium.

3) Non-approved supplier. This is an animal source from which we will not accept animals under any condition. This is usually due to the health status of the animals.

Animal Import Procedures

**Prior to the importation of any animals, you must have an approved ACUC protocol which states your preferred housing location**

**Housing of rodents in a laboratory for > 24 hours requires special IACUC approval and laboratory inspection**

***Many genetically modified animals are considered intellectual property and require a Materials Transfer Agreement (MTA). If receipt of these animals requires an MTA, that must be routed to Research Administration for signature***
1) **Animals from an approved commercial vendor:**

To order and import rodents from an approved commercial vendor (e.g., Jax, Harlan or CRL), simply submit an online animal requisition through ACAP at: [https://uthsc.tera.tennessee.edu/acap/](https://uthsc.tera.tennessee.edu/acap/)

ACAP, the animal ordering and management system, automatically tracks the number of animals remaining on your protocol and advances your order through the system and onto the vendor. You will be notified when your animals arrive and they will be housed in the room outlined in your ACUC protocol.

2) **Animals from a non-commercial vendor:**

The LACU routinely assists investigators in the importation of animals from other research institutions. Prior to importation, all requests undergo a careful evaluation of current health monitoring reports and housing conditions from the facility of origin and we conduct a risk assessment analysis based on currently accepted veterinary practices for infectious diseases. Following import, rodents will undergo a quarantine period that consists of housing and care under strict biosecure quarantine conditions by trained technicians. Imported animals will be directly tested for rodent pathogens via collection of biological samples including feces, coat swabs, blood or oral swabs. Alternatively, sentinel animals can be placed in the same quarantine cubicle as the imported animals and undergo comprehensive health surveillance using traditional and advanced diagnostic testing.

It is important for the investigator to plan ahead as there are numerous steps that have to be completed by both the sending and receiving institutions. As well, space in the quarantine facility in the Coleman building is limited and requests are processed in an “as received” basis. It can take several weeks to several months from the time of initial request until the animals are shipped, to fulfill the requirements of the sending institution and arrange shipment.

Questions regarding intellectual property rights and material transfer agreements (MTA) should be referred to the UTHSC Office of Research.

There may be airline travel restrictions due to extremes in weather. Most airlines will not accept animals for travel if the ambient temperatures at the shipping and receiving airports are outside their shipping guidelines (usually <32°F or >80°F). This occurs practically every summer in Memphis and these restrictions may delay receipt of animals.

**Steps for importing rodents:**

1. a. The investigator must submit an online Animal Requisition Form ([https://uthsc.tera.tennessee.edu/acap/](https://uthsc.tera.tennessee.edu/acap/)).
   b. The person placing the order should choose the vendor “Other-Import to UT”.
   c. In the box designated “Special Requirements” indicate the name and contact information for the sending investigator and clearly describe any special husbandry and care instructions that are unique for the strain/stock requested.
   d. If animals are to be used acutely (e.g. euthanized upon arrival), this should also be indicated in the “Special Requirements”.
   e. Preferred Housing Building should be marked as: **Coleman Quarantine 139**

2. The investigator should also send an e-mail to Dr. David Hamilton (dhamilt7@uthsc.edu), describing the planned shipment, intended use of the animals, numbers of animals needed, and housing preference following quarantine. With this information, the veterinarian at the sending institution will be contacted to request health surveillance information from the colony of origin. The health surveillance testing must be current and thorough, or additional testing might be required prior to shipping. Some shipments may be refused, due to presence of infectious disease within the colony of origin. Rederivation by an outside company is an option with these animals.

3. Animals are to be shipped to:

   Ms. Stacey Barnett
   Room B106 Coleman Building
   University of Tennessee Health Science Center 956 Court Ave.
   Memphis, TN 38163
Quarantine Procedures for Rodents

All imported rodents (except from approved commercial vendors), which will be housed in LACU animal facilities, usually undergo a standard quarantine period, prior to release to the investigator. The length of the quarantine period may vary, depending on risk assessment and interim testing results. Availability of quarantine space is limited due to small size of the facility. Requests for quarantine should be made in writing/email and be accompanied by a completed animal requisition.

1. Healthy rodents approved for shipping will be received and housed in the quarantine area at the Coleman building. Quarantine is usually a minimum of 4-8 weeks following receipt.

2. All mice/rats will be treated prophylactically for pinworms with Fenbendazole impregnated feed (Harlan Teklad 2018S). Mice/rats will be treated for fur mites with topical Moxidectin applied to the back of the neck. This will be done 3 days after arrival and repeated 4 weeks later.

3. If biological samples are not collected directly from the imported animals, then a pair of sentinel mice/rats will be placed within the isolation cubicle, and receive dirty bedding from the imported cages for a period of at least 8 weeks. At the end of this time, the sentinels will be euthanized and undergo parasitological testing and gross necropsy evaluation. Blood will be collected and the sera will be submitted to an outside laboratory for serologic testing against a panel of infectious agents. Swabs of the imported mice/rats and their cages will also be collected and PCR tested for the presence of fur mites. Additional testing of the imported animals may occur, as needed basis.

4. Imported rodents will remain in quarantine until negative health monitoring results are received.

5. If sentinel animals show positive test results during the quarantine period, the imported mice/rats will remain in quarantine. Each case will be individually evaluated to determine the most appropriate course of containment and elimination of the pathogen(s).

6. Investigators may not work with their animals while they are in quarantine.

7. Breeding of animals in quarantine may be permitted with veterinary approval.

Quarantine Costs

Effective July 1, 2016, the following charges will apply to all shipment of rodents imported into UTHSC:

Quarantine Service Charge: $460.00
Includes facility charge, risk assessment, animal order fee, veterinary time, cost of sentinel animals and routine diagnostic testing of the sentinel animals (necropsy, parasitology, PCR and serology).

Shipping Costs: Varies, based on site of origin

Technical Services: $37.50 per hour
Matings, weaning, colony management, tail snips, etc.

Additional Diagnostic Testing: Cost + 30%

Per Diem (per cage): $1.35 per day (mouse)
$1.78 per day (rat)
**Animal Export**

The LACU routinely assists investigators in the exportation of animals to other research institutions. The process is similar to imports, but reversed. For exports, LACU will send the health information for your animals to the receiving institution’s veterinarian, who will review the information before allowing importation to their facility.

Procedures:

1) To begin the export process, first notify Dr. David Hamilton ([dhamilt7@uthsc.edu](mailto:dhamilt7@uthsc.edu)) of your plans to ship, and provide him with the location in which the animals are currently housed. Give plenty of notice as the entire approval procedure can take many weeks. This is particularly true for international shipments. **Our preferred ship-out day is Tuesday.** This allows enough time to ensure that animals arrive at their destination before the following weekend.

2) Provide the address to which the animals will be shipped and a contact person (usually the veterinarian or shipping coordinator) at the receiving institution. Also inform LACU of who will pay the shipping expenses. If the receiving institution is paying, then LACU needs their account number with one of the animal couriers (e.g. World Courier). If you are paying the fee, then LACU can use one of their accounts and bill the fee to your LACU account. Please let LACU know which account number you want charged.

3) LACU will then contact the receiving institution’s veterinarian and send the latest health information for your animals. Once LACU receives approval to ship, a mutually agreeable date will be set. Prior to shipment (usually the day before) you must clearly identify/lable the boxes containing the animals you want shipped. LACU staff will box the animals into approved rodent shipping containers and provide the animals with adequate food and water. Boxes will be securely closed and labeled to identify the animals located in each section of the shipping container. The LACU will also arrange a pickup time with the shipping company and complete any necessary paperwork. An email is sent out to you and the receiving institution once the animals are picked up.

***We will not ship 1) male and female animals together in the same shipping compartment, 2) pregnant animals or 3) animals with litters/offspring, unless we receive prior written authorization from the receiving institution.***

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**Export Costs**

The cost for exporting animals to other institutions varies, usually depending on the number of animals being shipped and the required preparation time. Below are the fees that are incorporated into exports:

1) technician time (boxing of animals, communicating with receiving institution, etc) $37.50/hr

2) shipping crates (each crate can contain up to 4 compartments with up to 5 mice per compartment) $30.00 each

3) shipping crate dividers $4.00 each

4) gel food (supplies both nutrition and water and is placed in each compartment) $1.25/package

5) courier fees varies with the number of crates and the destination

If you have any further questions please contact one of the people listed above for more information.