

SOP #: 403.01Title: SOP - Animal Transportation (Rodents)  
Approvals: \_\_\_\_\_

Attending Veterinarian \_\_\_\_\_

Date: 10/11/12

Assistant Director LAR \_\_\_\_\_

Date: 10/11/12

## 1. Purpose

1.1 Transportation from one location to another can be stressful to laboratory animals and can increase the potential for disease transmission or injury. The Guide states that "all transportation of animals, including intra-institutional transportation, should be planned to minimize transit time and the risk of zoonoses, protect against exposure to environmental extremes, avoid overcrowding, provide food and water when indicated, and protect against physical trauma. Some transportation-related stress is inevitable, but it can be minimized by attention to those factors."

1.2 The purpose of this SOP is to:

1.2.1 Provide guidance on how to safely and effectively transport laboratory rodents.

1.2.2 Define the minimum requirements for the transportation and relocation of laboratory rodents consistent with the Guide for the Care and Use of Laboratory Animals.

## 2. Responsibility

2.1 ACF Personnel

## 3. Definitions

3.1 ACF - Animal Care Facility

3.2 Guide – Guide for the Care and Use of Laboratory Animals.

3.3 ACUP – Animal Care and Use Protocol.

3.4 Approved research laboratory – Lab listed in the approved in ACUPs where animal manipulations are performed.

3.5 PPE – Personal Protective Equipment (e.g. gloves, lab coat/gown, shoe covers, hair bonnet, safety goggles).

3.6 SPF – Specific Pathogen Free.

3.7 EH&S – Environmental Health and Safety.

3.8 OHP - Occupational Health and Safety Program.

3.9 IBC – Institutional Biosafety Committee.

3.10 rDNA – Recombinant DNA.

#### 4. Guidelines

4.1 To ensure that regulations and concerns are addressed regarding animal transport, the Animal Care Facility at Florida International University has established the following general guidelines:

4.1.1 All methods of transporting animals must provide for the health and welfare of animals.

4.1.2 Animals may be moved by the investigator or personnel listed on the approved Animal Care and Use Protocol (ACUP) from an animal housing room in the ACF facilities to an approved research laboratory on the FIU campus.

4.1.3 Unless specific IACUC approval has been granted and written in the approved ACUP, rodents of the genus *Mus* and *Rattus* cannot be housed outside their animal holding rooms for longer than 24 hours. Any other rodents and warm blooded mammals may not be housed outside their animal holding rooms for longer than 12 hours.

4.1.4 Transportation of animals must be done in a direct and timely manner, avoiding public areas as much as possible. In selecting the route, care should be taken to utilize the least congested areas and to avoid human areas (non-lab areas), whenever possible.

4.1.5 In the case of the new vivarium, the freight elevator should be utilized in the movement of animals between floors. Passenger elevators should not be used unless the freight elevators are not functional because of the exposure of non-research personnel to animal allergens and potential biohazards associated with laboratory animals.

- 4.1.6 Animals must not be transported with any other animal, substance, or device that may potentially cause injury to the animal being transported.
  - 4.1.7 Enclosures containing animals must be secured and carefully handled. The enclosures must be maintained in a manner that will prevent them from tipping or falling and must be handled in a manner that will minimize any physical trauma or distress to the animals.
  - 4.1.8 Temperature extremes must be avoided when animals are transported. While the caging will insulate animals, exposure to extreme ambient temperatures can have adverse effects. When temperatures fall below 40°F (4.4°C) or above 85°F (29.4°C), special precautions (in addition to the environmentally controlled vehicles used for transportation) may need to be taken.
  - 4.1.9 Transportation of animals must also comply with the applicable local and state laws regulations.
- 4.2 Rodent Cage Preparation and Transportation to Labs
- 4.2.1 The preferred method for transporting rodents is by using a transport cage provided by ACF in which food and drinking gel will be provided.
  - 4.2.2 Alternatively, rodents can be transported in their current husbandry cage complete with feed and water source. Drinking bottles are to be inverted to keep them from dripping during transportation.
  - 4.2.3 If excessively soiled, place the rodent in a clean cage before transporting to the lab.
  - 4.2.4 Provide food and a source of water when rodents will be held within the transport container for longer than 4 hours.
  - 4.2.5 Transport cages must be secured with a wire top lid, and then covered with a filter top. Filter tops are secured with one or two rubber bands.
  - 4.2.6 Provide adequate ventilation (note: stacking rodent cages does not provide adequate ventilation).
  - 4.2.7 The animal's cage card must accompany the animal throughout the transportation, unless it is taken to the lab for terminal procedures, in which case the cage card is handed to the facility for processing. Secure cage card holder or other ID to the cage(s) (e.g. if needed tape card holder to cage or only top edge of cards to card holder if needed so card information is not damaged upon tape removal!).
  - 4.2.8 Cover cage with a non-transparent/non-translucid plastic bag or a cloth bag. Animals must never be viewable to the public during transportation.

4.2.9 Spray interior and exterior surface of bag with an ACF approved disinfectant.

4.2.10 Transfer cage(s) in one of two ways.

4.2.10.1 Clean transportation cart (preferred method).

4.2.10.1.1 Do not double stack cages on the cart to prevent tipping/falling.

4.2.10.2 Hand-carry.

4.2.10.2.1 Only one cage should be carried by hand.

4.2.10.2.2 Stairs should be avoided to prevent falls or drops with cages.

4.2.11 Remove bag IMMEDIATELY upon arrival at the lab to ensure proper ventilation.

#### 4.3 Transportation of Animals between Campuses

4.3.1 Transportation of animals to and from the Main Campus (MMC), to Engineering and Computing Center (ECC) must be performed in an environmentally controlled vehicle. Movement of animals between facilities must be approved by the ACF Director or Assistant Director or designee.

4.3.2 Cargo areas of vehicles used in the transportation of laboratory animals are sanitized to prevent contamination of future animal transportation. Sanitation is performed by designated staff.

4.3.3 Scheduling transportation of animals should be done couple of days in advance by contacting either the Director of Assistant Director of ACF to schedule delivery.

#### 4.4 Transporting Live or Dead animals Containing Radioactive Isotopes

4.4.1 Investigators planning to transport live animals containing radioactive materials from one location to another must receive approval from the Radiation Safety Officer for procedures and approval.

4.4.2 An approved IACUC and radiation safety protocol is required for the use of any amount of radio-active material in animals. Special transportation requirements must be addressed in such protocols and the ACUP with specific guidance and approval from the Radiation Safety Officer.

4.4.3 Warning labels are required on enclosures used to transport live or dead animals that have been exposed to radioactive hazards. The specific hazard must be identified.

#### 4.5 Transporting Animals Treated with Specific Pathogens (Human or Murine) and/or Carcinogenic Material

- 4.5.1 The transportation of animals that are to be dosed at one location and moved to another needs to be particularly evaluated by the Institutional Biosafety Committee (IBC) and the IACUC to ascertain that proper containment is used to minimize occupational exposure to persons involved with the move, and to minimize environmental contamination.
- 4.5.2 Small laboratory animals that have been exposed to human or murine pathogens, rDNA or toxic/carcinogenic substances and are actively shedding the hazardous material must be transported in closed systems. Transportation needs of exposed larger animals will have to be evaluated on a case-by-case basis by the University Veterinarian in consultation with EH&S and/or the corresponding committees.
- 4.5.3 Warning labels are required on enclosures used to transport live or dead animals that have been exposed to chemical or biological hazards. The specific hazard must be identified.
- 4.5.4 Cages that have animals inoculated with infectious or chemical hazards must be transferred to a clean transport cage within the room, while leaving the dirty cage within the animal holding room. If the cage, following transport, contains animals that may still pose a hazard, the transport cage should be labeled with the investigator's name and protocol number and returned to the original housing room with the hazard label contained as approved.
- 4.5.5 Carcasses of contaminated animals must be handled according to the guidelines of the FIU EH&S and approved by the IBC for handling medical pathological waste or for disposal as chemical waste, respectively. Contaminated animal carcasses that are being transported for pathological examination also need to be placed in double plastic bags (primary barrier) and then into a cardboard box (secondary barrier) and must be accompanied by a detailed history of the type and amount of hazardous material.

#### 4.6 SPF Rodents

- 4.6.1 SPF rodents should always be transported in a micro isolator cage (with a filtered top) with the water bottle reversed to avoid flooding. Upon return to a housing area, the rodents should be transferred to a new clean cage with the water bottle correctly placed with the sipper tube located inside the cage and below the wire bars. The transport cage must not be returned to the rack, but rather returned to the facilities' point of collection for soiled caging equipment.

#### 4.7 Personal Protective Equipment (PPE) During Animal Transport

- 4.7.1 The appropriate use of PPE protects both research animals from human pathogens and cross contamination of humans with animal pathogens and allergens. People

who are in direct contact with research animals must cover their street clothing and exposed body surfaces with appropriate PPE to reduce the risk of contamination through contact or aerosolization.

- 4.7.2 The appropriate disposal of PPE is necessary so that the PPE does not act as a fomite for transmitting pathogens and allergens. For example, if PPE is worn while disinfecting incoming shipping containers, the PPE should be disposed of before moving on to other tasks.

## 5. References

5.1 The Guide for the Care and Use of Laboratory Animals – 8<sup>th</sup> Edition (NRC 2011)

5.2 University of Texas at San Antonio – Animal Transportation SOP