# Approved IACUC Policy Index

<table>
<thead>
<tr>
<th>Policy Number</th>
<th>Policy Name</th>
<th>Additional Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>Offspring &amp; Non-Traditional Procurement</td>
<td></td>
</tr>
<tr>
<td>002</td>
<td>Identification and Genotyping</td>
<td></td>
</tr>
<tr>
<td>003</td>
<td>Animal Transportation</td>
<td></td>
</tr>
<tr>
<td>004</td>
<td>Use of Expired Medical Materials in Animals</td>
<td></td>
</tr>
<tr>
<td>005</td>
<td>Animal Adoption</td>
<td>• Animal Adoption Form</td>
</tr>
<tr>
<td>006</td>
<td>Exceeding Animal Numbers for Approved Protocol in Non-USDA Species</td>
<td></td>
</tr>
<tr>
<td>007</td>
<td>Euthanasia of Rodents with Carbon Dioxide</td>
<td></td>
</tr>
<tr>
<td>008</td>
<td>Cage Identification</td>
<td></td>
</tr>
<tr>
<td>009</td>
<td>Change or Addition of Principal Investigator to Approved Protocol</td>
<td>• Addition of Co-Principal Investigator to Approved Protocol Form</td>
</tr>
<tr>
<td>010</td>
<td>Anesthesia Requirement for Retro-Orbital Blood Collection of Rodents</td>
<td></td>
</tr>
<tr>
<td>011</td>
<td>Purchasing Animal Organs, Tissues, or Antibodies from Outside Vendors</td>
<td></td>
</tr>
<tr>
<td>012</td>
<td>Housing Animals in Laboratories</td>
<td>• Satellite Housing Request - Form #F-02</td>
</tr>
<tr>
<td>012A</td>
<td>Requirements for Mammalian Satellite Housing</td>
<td>(Reference LAMS website for Housing Log - FM601.1)</td>
</tr>
<tr>
<td>012B</td>
<td>Requirements for Ectothermic Satellite Housing</td>
<td></td>
</tr>
<tr>
<td>013</td>
<td>Allowing LAMS to Provide Technical Service</td>
<td></td>
</tr>
<tr>
<td>014</td>
<td>Submission of Protocol Updates</td>
<td></td>
</tr>
<tr>
<td>016A</td>
<td>Rodent Survival Surgery</td>
<td></td>
</tr>
<tr>
<td>016B</td>
<td>Non-Rodent USDA-Regulated Animal Survival Surgery</td>
<td></td>
</tr>
<tr>
<td>016C</td>
<td>Ectotherm Survival Surgery</td>
<td></td>
</tr>
<tr>
<td>017</td>
<td>Labeling and Storage Requirements for Secondary Containers</td>
<td></td>
</tr>
<tr>
<td>018</td>
<td>Guidelines for Regulatory Reporting of Non-Compliance, Adverse Events, and Assessment of Penalties</td>
<td></td>
</tr>
<tr>
<td>019</td>
<td>Use of Pharmaceutical Grade Drugs in Vertebrate Animals</td>
<td>• Addendum B Form Instructions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Addendum B: Use of Non-Pharmaceutical Grade Compounds</td>
</tr>
<tr>
<td>020</td>
<td>Use of Analgesics</td>
<td></td>
</tr>
<tr>
<td>021</td>
<td>Specifications for Satellite Animal Procedure Areas</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Satellite Procedure Location Request - Form #F-01</td>
<td></td>
</tr>
<tr>
<td>022</td>
<td>Requirement for Safety Office Approval Prior to IACUC Protocol Approval</td>
<td></td>
</tr>
<tr>
<td>023</td>
<td>Modifications to an Animal Protocol</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Request for Limited Modification - Form #P-05</td>
<td></td>
</tr>
<tr>
<td>024</td>
<td>Transfer of Animals to Outside Institutions</td>
<td></td>
</tr>
<tr>
<td>025</td>
<td>Zebrafish and Medaka Use</td>
<td></td>
</tr>
<tr>
<td>027</td>
<td>Requirements for Limited Access to Animal Housing Areas During Studies</td>
<td></td>
</tr>
<tr>
<td>028</td>
<td>Transfer of Animals to LAMS Holding Protocol</td>
<td></td>
</tr>
<tr>
<td>029</td>
<td>Transfer of Animals between UC Approved IACUC Protocols</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Temporary Animal Transfer Records</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Temporary Transfer Card</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Request for Temporary Transfer of USDA Species Between UC Approved IACUC Protocols - Form #P-06</td>
<td></td>
</tr>
<tr>
<td>030</td>
<td>Environmental Enrichment and Social Housing of Laboratory Animals</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Addendum A: Withholding Enrichment or Single Housing</td>
<td></td>
</tr>
<tr>
<td>032</td>
<td>Post-Approval Monitoring</td>
<td></td>
</tr>
<tr>
<td>033</td>
<td>Storage and Location of Animal Diets</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Storage of Animal Diets Outside LAMS - Form #F-03</td>
<td></td>
</tr>
<tr>
<td>034</td>
<td>Food or Fluid Regulation Requirements for Rodents</td>
<td></td>
</tr>
</tbody>
</table>
University of Cincinnati  
Institutional Animal Care & Use Committee

Offspring & Non-Traditional Procurement Policy

PHS Policy implicitly requires that institutions establish mechanisms to document and monitor numbers of animals acquired and used, including any animals that are euthanized because they are not needed. Not complying with these regulations could jeopardize your protocol status. The IACUC is authorized to take action to preserve compliance with federal regulations, including suspensions or termination of animal research of non-compliant investigators.

Reporting Offspring to the IACUC Office

1. A report of the number of animals (offspring, field capture, or non-traditional procurement), for each pain category is required to be submitted to the IACUC office monthly if you are currently breeding/procuring animals or quarterly if you are not currently breeding/procuring animals.
   
a. The Non-Traditional Procurement of Research Animals form can be found on the IACUC website www.researchcompliance.uc.edu/iacuc or through this link: Offspring Reporting. The completed forms can be emailed to IACUC@ucmail.uc.edu, faxed to 558-3539, or sent through campus mail to location 0572.
    
   b. The completed form must be submitted on a monthly basis if breeding is ongoing. Tables, handwritten reports or attachments will not be accepted.

Consequences of Not Reporting Offspring

1. If the IACUC office has not received a report they will send a notice to the PI via email to remind the PI that a report has not been received.
2. If the IACUC office has not received a report after the first notice, they will send a second notice to the PI via email to remind the PI that a report is required. The IACUC has mandated that the PI’s Department Chair be copied on the 2nd notice.
3. If the IACUC office has not received an report after the second notice, they will send a third notice to the PI via email to remind the PI that an report is required. The IACUC has mandated that the PI’s Department Chair be copied on the 3rd notice.
4. If a response is not received by the time the 3rd notice is sent to the PI, the incident will be reported to the committee as noncompliance and may jeopardize the status of the protocol.

Tips for Offspring Reporting

1. Animals are to be reported in the pain category they will be used. Refer to the approved protocol section 13a. The following is a list of examples for each pain category.

   a) Category C procedures involving no more pain/distress to animals than that associated with an injection
Examples:
   i. Breeding animals
   ii. CO2 or anesthetic overdose that results in the euthanasia of the animal
   iii. Injection of nonirritating substances, such as intradermal, subcutaneous, intramuscular, and intraperitoneal
   iv. Noninvasive physiologic measurements such as indirect blood pressure or rectal temperature
   v. Phlebotomy from peripheral veins that does not require cut down
   vi. Behavioral observations

b) Category D procedures involving pain/distress to animals for which appropriate anesthetic, analgesic, or sedative drugs will be used

Examples:
   i. Terminal Surgery is considered a painful procedure which is alleviated by anesthesia. This includes tissue harvest, cervical dislocation or decapitation while under anesthesia.
   ii. Survival Surgery where appropriate anesthetics and analgesics are used. Most procedures, even minor surgeries, require the use of pre-operative and/or post-operative analgesics.

c) Category E procedures involving pain/distress to animals for which the use of appropriate anesthetics, analgesics, or tranquilizing drugs would adversely affect the procedures, results, or interpretations of the experiments.

Examples:
   i. Food or water deprivation beyond that necessary for normal pre-surgical preparation.
   ii. Prolonged Restraint greater that the required for an injection.
   iii. Noxious electrical shock that is not immediately escapable.
   iv. Paralysis or immobility in a conscious animal.
   v. Freund’s Complete Adjuvant used for antibody production may cause results ranging from momentary or slight pain to severe pain depending on the product, procedure, and species. Due to the variability it is generally treated as painful.

2. Common mistakes with reporting numbers:
   a) Reporting everything as Category C because no invasive studies have been performed on the animals yet. Report the category the animal will be used in; not the category the animal currently falls into.
   b) Reporting the animals in a category not approved on the protocol. Please check the protocol to make sure you are reporting in the correct pain category.
Identification and Genotyping

1. Individual Identification of Research Animals

   a. Permanent individual animal identification

   Permanent individual animal identification should be consistent with one of the following procedures. Identification methods do not need to be listed in the approved protocol if they appear in the table below. Photography may be acceptable for some ectotherms. Please consult with the veterinarian if your procedures deviate from those listed below.

<table>
<thead>
<tr>
<th>Species</th>
<th>Acceptable Identification Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amphibians</td>
<td>beads, tattoo, toe clipping, microchip/transponder/PIT tag, photography</td>
</tr>
<tr>
<td>Birds</td>
<td>leg band, microchip</td>
</tr>
<tr>
<td>Cats</td>
<td>microchip, collar tag, tattoo</td>
</tr>
<tr>
<td>Chinchilla</td>
<td>ear punch, ear tag, microchip, tattoo,</td>
</tr>
<tr>
<td>Dogs</td>
<td>microchip, collar/tag, tattoo</td>
</tr>
<tr>
<td>Fish</td>
<td>fin clipping</td>
</tr>
<tr>
<td>Gerbils</td>
<td>ear punch, ear tag, microchip, tattoo</td>
</tr>
<tr>
<td>Goats</td>
<td>ear tag, microchip, tattoo, collar/tag</td>
</tr>
<tr>
<td>Guinea Pigs</td>
<td>ear punch, ear tag, tattoo, microchip</td>
</tr>
<tr>
<td>Hamsters</td>
<td>ear punch, ear tag, tattoo, microchip</td>
</tr>
<tr>
<td>Mice</td>
<td>ear punch, ear tag, tattoo, microchip, toe clip* notch</td>
</tr>
<tr>
<td>Rabbits</td>
<td>ear tag, , tattoo, microchip</td>
</tr>
<tr>
<td>Rats</td>
<td>ear punch, ear tag, tattoo, microchip</td>
</tr>
<tr>
<td>Reptiles</td>
<td>toe clipping, microchip/transponder/PIT tag, photography</td>
</tr>
<tr>
<td>Sheep</td>
<td>ear tag, collar/tag, tattoo, microchip</td>
</tr>
<tr>
<td>Swine</td>
<td>ear tag, ear notch, tattoo, microchip</td>
</tr>
</tbody>
</table>

   *Toe Clipping of Mice*

   According to the *Guide for the Care and Use of Laboratory Animals*: “As a method of identification of small rodents, toe-clipping should be used only when no other individual identification method is feasible. It may be the preferred method for neonatal mice up to 7 days of age as it appears to have few adverse effects on behavior and well-being at this age (Castelhano-Carlos et al. 2010; Schaefer et al. 2010), especially if toe clipping and genotyping can be combined. Under all circumstances aseptic practices should be used. Use of anesthesia or analgesia should be commensurate with the age of the animals (Hankenson et al. 2008).”

   When toe clipping is performed on altricial animals (7 days or younger) for the purpose of both identification AND to obtain tissue for PCR, additional justification and IACUC
University of Cincinnati
Institutional Animal Care and Use Committee

approval is not required.

c. **Temporary Identification**

Non-toxic, permanent markers can be used to temporarily mark the fur, tail or skin of the animal. This ink, depending on the location, usually lasts 3 - 4 days without the need to remark. This method does not require IACUC approval.

2. **Genotyping**

When tissue is needed for genotyping purposes, mice and rats may be tail clipped or ear punched. Altricial mice may be toe clipped. When any of these methods is necessary, the guidelines in this policy must be adhered to unless the IACUC has approved an exception to this policy. Breeding and/or genotyping must be listed in the protocol; however, the specific procedures listed below do not need to be listed in the approved protocol.

a. **Tail Clipping of Mice and Rats**

Tail clipping is defined as removing up to 5 mm (2 mm typically is sufficient) of the tip of the tail without removing vertebra. Cutting into vertebrae is **NOT** permitted. Anesthesia is not required for animals under 21 days of age. Animals 21 days of age or older MUST be anesthetized. The use of topical anesthetics/hemostatic agents (e.g., Kwik Stop with benzocaine) is highly recommended for all ages.

b. **Ear Punching of Mice and Rats**

Ear punching is defined as excising a small portion of tissue from the ear/s. Ear punching may be performed with or without anesthesia.

e. **Toe Clipping of Mice**

- Toe clipping may be performed on altricial mice (after toes are no longer webbed and no older than post-natal day 7) when the toe clip segment(s) will be used **BOTH** for identification and genotyping purposes.
  - If mice are to be toe **AND** tail clipped, additional justification and IACUC approval must be obtained.
- Toe clipping procedure:
  - Aseptic technique is to be followed
  - Sharp clippers or instruments are to be used
  - Personnel performing the procedure are to be trained
  - One toe per pup preferable (minimize pain and/or distress) with a maximum of one toe per foot
University of Cincinnati  
Institutional Animal Care and Use Committee  
- Only the distal/third phalanx should be removed, not the entire toe (first, second, and third phalanx)  
- Hind toes preferable over forefeet  
- Forefeet – do not remove the hallux ("dew claw” or “thumb”)

References (Toe Clipping)

Animal Transportation Policy

This policy applies to animals that are being transported outside of the Laboratory Animal Medical Services (LAMS) facilities. Measures must be taken to protect the animals in transport, personnel working with the animals, and other individuals who may be exposed to the animals or cages. For animals used in biological, chemical or radiological studies, additional safety requirements may apply (consult with applicable safety office).

1) **Non-rodent USDA species must be transported by LAMS.**

2) **The following steps are to be followed when removing animals from LAMS facilities and transporting them within the same or interconnected building(s):**

   a) Containers used for transport should be clean and should limit exposure to allergens, waste products, or odors, while providing sufficient air for normal respiration.

   b) Proper identification must accompany the animal.

   c) Service elevators must be used where available.

   d) Containers must be secured to prevent escape of the animal.

   e) Up to 3 containers may be carried by hand. If 3 or more containers are to be transported, a cart is required.

   f) **Rodents**

      i) Solid top lids may be used if transportation and holding of animals will be 30 minutes or less. If greater than 30 minutes, a filter top cage or breathable shipping crate must be used.

      ii) All containers must prevent public viewing during transport.

      iii) Upon arrival to the destination, animals should have access to food and water (if species appropriate) unless restriction has been stipulated and approved in the IACUC protocol.

   g) **Aquatic and semi-aquatic and terrestrial ectotherms** are transported in species specific appropriate secured containers.

3) **The following additional steps are required when transporting animals outside of a building:**

   a) During times of extreme temperatures animal transport may be detrimental to animal well-being and, therefore, may not be possible unless an appropriately heated or cooled means of transportation is available (Guide). Precautions should be taken to help ensure that appropriate, species-specific ambient temperatures within the cage are maintained (e.g., additional nesting material provided, heat source, or transporting within a thermally insulated container).

4) **General criteria for a transport vehicle include:**
a) Whenever possible, a dedicated animal transport vehicle should be used (e.g. LAMS vehicles). If a personal vehicle must be used, IACUC office must be notified.
b) The heating/cooling system of the vehicle must maintain the inside temperature of the vehicle at an appropriate temperature (based on species) prior to loading the animals (e.g. 65-75°F for laboratory rodents).
c) The animal containers should be positioned in the vehicle so that airflow is not blocked and the containers will not tip or slide.
d) Attention should be paid to protect animals from direct sunlight to avoid cages overheating.
e) Animals should not be left in the vehicle any longer than what is necessary to transport them to their destination.
f) In the event a vehicle malfunctions in transit, animal welfare is a priority.

REFERENCES:

Use of Expired Medical Materials in Animals

The USDA’s Animal Care Policy #3 states that the “use of expired medical materials such as drugs, fluids, or sutures on regulated animals is not considered to be acceptable veterinary practice and does not constitute adequate veterinary care as required by the regulations promulgated under the Animal Welfare Act. All expired medical materials found in a licensed or registered facility are to be brought to the attention of the responsible official. The facility must either dispose of all such materials or segregate them in an appropriately labeled, physically separate location from non-expired medical materials.” The Office of Laboratory Animal Welfare (OLAW) recommendations agree with Animal Care Policy #3.

The University’s Institutional Animal Care and Use Committee concurs with these policies and finds the use of expired drugs and materials in research animals an unacceptable threat to animal welfare. Therefore, research staff should check their inventory of drugs and supplies on a monthly basis and discard all items upon their expiration date. If an expired item can be used in experiments not involving animals, the item must be marked clearly “FOR IN-VITRO USE ONLY- NOT FOR USE IN ANIMALS” and stored in a physically separate location in the laboratory. If expired items are not clearly marked, the IACUC will assume they are being used in animals and find the laboratory not in compliance with this policy.
University of Cincinnati
Institutional Animal Care & Use Committee

Animal Adoption Policy

When feasible, the IACUC permits the adoption of healthy animals as an alternative to euthanasia. All adoptions must be approved by the University of Cincinnati Animal Adoption Committee.

1. University of Cincinnati Animal Adoption Committee
   a. The charge of this committee is to ensure all UC animal adoptions are done in compliance with federal, state and UC Policies. In addition, the committee shall consider animal well-being and personal safety.
   b. Membership limited to three persons appointed by the Attending Veterinarian
      i. One Laboratory Animal Medical Services (LAMS) veterinarian (Chair)
      ii. One LAMS staff member
      iii. One non-LAMS UC staff member

2. Adoption Requirements
   a. Animals must be clinically and behaviorally normal.
   b. All animals will receive appropriate vaccinations before adoption. Felines, canines, and ferrets must be spayed or neutered prior to adoption.
   c. Any tattoo must be obliterated prior to adoption.
   d. All regulatory and medical paperwork including the UC Animal Adoption form(s) must be satisfactorily completed prior to release from UC.
   e. Final signature of approval and release for adoption for each animal must be done by the Chair of the adoption committee.
   f. This release will include an examination of the adoption candidate(s) by a LAMS veterinarian prior to release.

3. Prohibited Adoptions*
   a. Animals will not be adopted for
      i. Petting zoos or similar venues,
      ii. Food sources for other animals or humans,
      iii. Re-sale, or
      iv. Breeding stock (and resultant sales of offspring).
   b. Transgenic animals may not be adopted.

4. This policy applies to only warm-blooded animals.

* Prohibitions exclude farm animals which have not undergone experimental manipulations.
Exceeding Animal Numbers for Approved Protocols in Non-USDA Species

In accordance with regulatory guidelines, the IACUC does not consider an increase of 10% or less of the approved number of animals to be a significant modification. In the event that the PI exceeds the approved number in the protocol, the IACUC office can increase the number by up to 10% of the allotment in the currently approved protocol. The PI is required to contact the IACUC office when approaching the approved animal allotment if requiring additional animals.

Anything in excess of the 10% increase must be submitted as a modification to increase the animal allotment. The modification must justify the increase over the originally approved number. Failure to modify the protocol will result in the animals being transferred to LAMS holding protocol and will be reported to the IACUC at the next convened IACUC meeting.
Euthanasia of Rodents with Carbon Dioxide

In accordance with the AVMA Guidelines on Euthanasia of Animals, the following requirements must be met when rodents are euthanized with carbon dioxide gas (CO2).

**Population Density in Euthanasia Chambers**
The IACUC defines the maximum number of rodents permitted in a cage for euthanasia as twice the number of rodents allowed to be housed in a particular cage. For example, no more than 4 adult mice may be placed in a standard shoebox cage for housing; therefore, no more than 8 adult mice may be placed together in a standard shoebox cage for euthanasia.

**CO2 Source**
Carbon dioxide must come from compressed gas. The use of dry ice is prohibited. **CO2 Grade** Medical-grade or technical-grade carbon dioxide must be used. The use of industrial-grade gas is prohibited.

**Flow Rate**
Euthanasia system must provide an optimal flow rate for CO2 which will displace 10% to 30% of the chamber or cage volume/min (a flow meter and flow regulator may be required for non-commercial systems). Chambers should not be pre-charged with CO2 and should be emptied and cleaned between uses.

- For LAMS maintained chamber, flow meters are preset by LAMS to provide the proper flow rate. Do not increase the flow rate. The home cage is recommended but if euthanasia cannot be conducted in the home cage, chambers should be emptied and cleaned between uses.

- For PI maintained euthanasia chambers, the PI is responsible ensuring that at the flow meter is calibrated for the chamber size in use.

**Ensuring non-recovery**
A physical method to ensure non-recovery must be performed after euthanasia with CO2. This procedure is described in the approved IACUC protocol and must be adhered to for each animal euthanized. Carcasses must be disposed of properly in a timely manner.
Cage Identification Policy

The IACUC, LAMS, and researchers must be able to identify animals at all times. In order to comply with the recommendations in *The Guide for the Care and Use of Laboratory Animals*, the IACUC requires the following information be listed on cage identification cards:

- Principal Investigator Name
- IACUC Protocol Number

The following information, while not required by the IACUC, is useful to both LAMS and researchers and should be listed on cage cards or should be readily available:

- Species (also strain or stock for rodents)
- Sex
- Source of the animal (such as vendor name, in-house bred, etc.)
- Date of Birth or Arrival Date

It is the Principal Investigator’s responsibility to ensure that each cage can be clearly identified. All cages with animals left unattended must be identifiable by the above information. This includes unattended metabolic and behavioral apparatus.

In animal-use locations where bar-coding has not yet, or will not be implemented, the information may be provided for the entire room or entire rack as outlined below:

- If all cages in an animal-use room are under one protocol, then each cage does not require a cage card unless the animals’ information differs.
- If all cages on a rack (on one or both sides) are under one protocol, then each cage does not require a cage card unless the animals’ information differs. The Principal Investigator is responsible for the cages placed on the rack.
Change or Addition of a Principal Investigator to an Approved Protocol

The Office for Laboratory Animal Welfare (OLAW) identifies the change or addition of a Principal Investigator (PI) as a significant change that requires IACUC review and approval.

In order to change the PI of an approved protocol (i.e. replace approved PI with another), the protocol must be revised accordingly and submitted to the IACUC office as a protocol modification that will undergo IACUC review.

In cases where a PI is added to an approved protocol (i.e. addition of a co-PI), the following steps are required:

- An “Addition of a co-Principal Investigator to an Approved Protocol” form must be submitted.
- An “Addition of Personnel” form for the co-PI must be submitted if the co-PI is not already approved to work under the protocol.
- The IACUC Chair will function as the designated reviewer.
- The signed approval letter will be sent to Principal Investigator and co-PI.
Anesthesia Requirement for Retro-orbital Blood Collection of Rodents

Current state-of-the-art veterinary medical practice is in agreement with the requirement to make anesthesia mandatory for rodents undergoing retro-orbital blood collection, as this procedure is considered inhumane unless the rodents are under surgical-level anesthesia. Therefore, the University of Cincinnati Institutional Animal Care and Use Committee requires that all rodents be anesthetized prior to the collection of blood by the retro-orbital bleeding technique.
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Institutional Animal Care and Use Committee

Policy for Purchasing Animal Organs, Tissues, or Antibodies Outside Vendors

The purchase of standardized, commercially available reagents produced from animals does not normally require IACUC notification or approval. The same is true for tissues and organs procured from organ banks and slaughterhouses.

However, the IACUC Office must be notified when custom-made antibodies are to be generated or when special organs or tissues not normally banked are to be purchased. In that case, the IACUC Office will analyze the situation to see if IACUC review of a protocol modification is required. In most cases, if the outside institution is AAALAC accredited and has an assurance on file with OLAW, IACUC review will not be needed.

When in doubt about a particular tissue or reagent, contact the IACUC Office for assistance. The IACUC Office phone number is 558-5187.
University of Cincinnati
Institutional Animal Care and Use Committee

Policy on Housing Animals in Laboratories

Applicability
This policy applies to all vertebrate species held in a satellite housing area at the University of Cincinnati. In accordance with PHS Policy and the USDA Animal Welfare Act Regulations, the IACUC defines satellite housing areas as:

- Any area in which USDA covered species (e.g. hamsters) are held over 12 hours.
- Any area in which non-USDA covered species (e.g. mice, rats, ectotherms) are held over 24 hours.

Regulatory Requirements
The IACUC is required to inspect satellite housing areas at least every six months to monitor compliance with the requirements of the *The Guide for the Care and Use of Laboratory Animals* and Animal Welfare Act Regulations, if applicable. In addition, LAMS staff will monitor all satellite housing areas to ensure the adequacy veterinary care and husbandry.

Principal Investigators must ensure compliance with IACUC Policy #012A “Requirements for Mammalian Satellite Housing” or Policy #012B “Requirements for Ectotherms Satellite Housing”.

Environmental parameters and husbandry procedures must comply with the standards in the most current version of *The Guide for Care and Use of Laboratory Animals* and with LAMS standards for animal housing rooms.

Obtaining IACUC Approval
- Submit a Satellite Housing Request (available at [http://researchcompliance.uc.edu/iacuc/](http://researchcompliance.uc.edu/iacuc/)) with scientific justification to house animals outside of LAMS animal facilities
- The IACUC must inspect and approve the space before housing.
- The PI must ensure both IACUC and LAMS have unrestricted independent access to the area.
- A 24 hour temperature alarm system which alerts LAMS of temperature excursions is required for all satellite housing locations. LAMS must track trends regarding temperature and humidity changes.
- Windows are not preferred, but if present must be covered with an opaque material.
- A sanitizable shelf (e.g. plastic, stainless steel) must be used if more than one level of cages is desired; cages may not be stacked on top of another.
- A LAMS satellite housing log must be maintained in the satellite housing area. Logs must be maintained so long as the satellite housing area is approved and available for inspection.

The following signage is required:
- Approved Satellite Housing Request
- Signage should be posted inside the room and not in public areas.
- The primary room door must be locked when personnel are not present in the housing area.
University of Cincinnati
Institutional Animal Care and Use Committee

Requirements for Mammalian Satellite Housing

These requirements accompany IACUC Policy #012 regarding housing animals in laboratories. Unless other arrangements have been made with LAMS management staff, the Principal Investigator is responsible for ensuring these tasks are completed and documented as outlined below. The following requirements apply when animals are present in housing areas such as chemical fume hood, bio-bubble, and specialized housing/caging equipment.

The following tasks are to be performed daily and documented in the Mammalian Satellite Housing log:

- Ensure each cage is identified according to IACUC Policy #008.
- Observe the animals’ health by checking each animal for illness, death, births, and injuries including fight wounds. Promptly report all health problems to LAMS veterinary staff.
- Document when animals are NOT present in the housing area by writing “area empty” in the comment section of the housing log. Daily observations are not required when animals are not present. When animals are returned, daily record keeping must resume.
- Change any soiled cages as needed and return all dirty cages to LAMS within 24 hours.
- Ensure the housing area is neat, organized, clean, and free of debris.
- All boxes and cleaning utensils such as brooms must be stored off the floor.
- Ensure the floor has been swept around the housing area and mopped if necessary.
- Check for vermin in the housing area, if present promptly report to a LAMS facility supervisor.
- Empty trash as necessary.
- If the area has not been checked for a period of 24 hours or more and animals are present, this must be reported to the IACUC.
- Document the following items on the Mammalian Satellite Housing log:
  - Date and time of entry
  - Animal health observation
  - Adequate food and water supply
  - Additional comments
    - Comments should include but are not limited to additional husbandry tasks, procedures performed, and documenting “area empty” when animals are not present in the housing area.
  - Initials

The following tasks are to be performed when cages are present for longer than 7 days and documented in the Mammalian Satellite Housing log:

- Cages must be changed (cage, wire lid, filter top, water bottle, and sipper tube).
  - For standard cages, obtain clean caging from LAMS. Clean caging is to be loaded onto a clean cart and covered with a shroud for transport to the satellite area.
o For non-standard cages, it is recommended that LAMS tunnel washer be used for sanitization rather than manual sanitization. Contact the LAMS facility supervisor or LAMS training coordinator for assistance if manual sanitization is the only appropriate method for cleaning the non-standard cages.

o Return all dirty caging to LAMS on a shrouded cart within 24 hours.

The following tasks are to be performed at least **monthly** and documented in the Mammalian Satellite Housing log:

- Housing areas must be sanitized which includes chemical fume hoods, bio-bubbles, racks/shelving units, and specialized caging/housing equipment. Specialized caging/housing equipment should be sanitized between each study cohort and may need to be done more frequently.
- To ensure proper sanitization, the housing area must be tested with a Charm swab and in accordance with the LAMS policy on manual sanitization.
- Submit the Charm swab to the LAMS facility supervisor office within an hour after performing the test and between M-F from 8am to 2pm excluding holidays. Contact LAMS facility supervisor or LAMS training coordinator for assistance in obtaining, using, and submitting the Charm swab. If the results are not passing then the sanitization process must be repeated until a passing count is attained.
- The light timer must be checked to ensure proper cycling.

The following requirements will be monitored weekly by the LAMS management and/or husbandry staff:

- Animal cage condition
- Animal health observation
- Condition of the room and housing area
- Completion of mammalian satellite housing log
  - Issues identified must be reported to LAMS supervisor.
University of Cincinnati
Institutional Animal Care and Use Committee

Requirements for Ectothermic Satellite Housing

These requirements accompany IACUC Policy #012 regarding housing animals in laboratories and provides guidance based on the Guide for the Care and Use of Laboratory Animals (8th edition). Unless other arrangements have been made, the Principal Investigator is responsible for ensuring the care and maintenance of all ectothermic species, as delegated by LAMS. The PI must provide specific-lab training for personnel working with these species.

The variety of needs for fish and aquatic or semiaquatic reptiles and amphibians is as diverse as the number of species considered. Substances, conditions and practices commonly used in the care of mammals may harm ectothermic species. Particular consideration should be given to the housing systems used and the methods for maintaining the ectothermic environment.

A written, description of husbandry procedures must be approved by LAMS and posted in the appropriate housing area. Husbandry procedures must follow the Guide’s requirements and the description must include the items outlined below:

1) Task Schedule
   • Frequency of tasks performed including record maintenance (e.g. daily, weekly, monthly, annually, and as needed)

2) Feeding
   • Type of food, method of preparation and vendors, as applicable
   • Amount, frequency, and method of feeding

3) Environment
   • Room temperature and humidity ranges
   • Water quality parameters (e.g. temperature, pH, water flow, conductivity, nitrogen waste products, etc.)
     o Acceptable ranges
     o Method of testing and frequency of monitoring
   • Type of enrichment, substrate, and the amount of substrate (e.g. gravel, peat moss, etc.)

4) Housing
   • Housing density (e.g. individual or group; indicate the number of individuals per group)
   • Type of housing (e.g. tank or cage)
   • Type of life support system for aquatic
     o Water system (e.g. circulation type; static, flow-through, recirculating)
o Water source (e.g. RO, distilled water, charcoal-filtered municipal water, etc.)
o Filtration (e.g. biological, chemical, mechanical, mechanical-bead filter, etc.)
o Size of the biofilter (e.g. manufacturer, surface area, size, etc.)
• Chemicals routinely added to the water (e.g. removal of chlorine/chloramines)

5) Animal Handling
• Methods for capturing animals
• If nets are used, describe how they are sanitized

6) Receiving
• Receiving and unpacking procedures

7) Sanitization
• Macroenvironment (housing room)
  o Methods for cleaning (e.g. steam, fogging, hand wash, etc.)
  o Frequency of cleaning
  o Types of cleaning agents used
• Microenvironment (animal enclosure)
  o Methods for cleaning (e.g. hand wash, cage wash, etc.)
  o Frequency of cleaning
  o Types of cleaning agents used

Records must be maintained for all tasks performed including feeding, environmental parameters, housing parameters, and husbandry.

References:
University of Cincinnati
Institutional Animal Care and Use Committee

Policy for Allowing LAMS’ Staff to Provide Technical Service

Prior to approving a protocol, the University of Cincinnati’s Institutional Animal Care and Use Committee reviews the qualifications of all individuals working with animals. This is done to ensure that all individuals have the appropriate training and experience needed to perform their animal procedures correctly. If new personnel wish to begin working with animals under a previously approved protocol, their qualifications are also reviewed by the IACUC before the new personnel may begin animal work.

Under some circumstances (e.g. sick leave, vacations, unexpected resignations, etc.) an investigator may need technical assistance from trained personnel before the IACUC would have time to review the new assistant’s qualifications. In order to prevent disruption of a study, the IACUC has approved the following policy:

At the discretion of LAMS management or veterinarians, LAMS’ husbandry and veterinary staff are permitted to work under IACUC approved protocols without prior notification of the IACUC or listing LAMS personnel on a protocol.

LAMS management or veterinary staff will ensure LAMS personnel are proficient in the procedures or received adequate training prior to providing technical service.

When an investigator plans a project in which LAMS’ personnel will be incorporated as part of the research team, the LAMS personnel and their qualifications should be documented in the protocol submission as is done for non-LAMS personnel.
Submission of Protocol Updates

To avoid protocols expiring with animals in-house, the IACUC strongly recommends the submission of protocol updates 3 months prior to the expiration of the protocol. This ensures that sufficient time is available for both the preliminary review and the IACUC review. It does NOT guarantee approval as changes or additions may be required.

Protocol updates should be submitted to the IACUC Office for preliminary review. This process simply ensures the protocol is in adequate condition for IACUC review. It is preferred that protocols be submitted via email and the signature page mailed.
Policy for Mouse, Rat, Hamster, & Gerbil Survival Surgery

Applicability:
- These guidelines apply to all survival surgical procedures performed on mice, rats, hamsters, and gerbils at the University of Cincinnati.
- An IACUC-approved protocol is required prior to performing any surgical procedures.

Regulatory Principles:
- All survival surgery must be performed using aseptic technique.

Definitions:
- **Survival Surgery** – a surgical procedure from which an animal is expected to regain consciousness.
  - **Major** - any surgical intervention that penetrates and exposes a body cavity; any procedure that has the potential for producing permanent or significant physical or physiological impairment.
  - **Minor** – any surgical intervention that neither penetrates nor exposes a body cavity or produces permanent or significant impairment of physical or physiological function.
  - **Multiple** – surgical procedures conducted as separate anesthetic events.
- **Aseptic Surgical Procedure** – surgery performed using procedures that limit microbial contamination.
  - **Patient** – removal of hair and preparation of the surgical site with an appropriate skin disinfectant.
  - **Surgeon** – don required surgical attire and maintain asepsis.
  - **Instruments** – must be sterilized (e.g., steam, ethylene oxide or other approved sterilant) and maintained on an aseptic field.
- **Sterilization** – the process whereby all viable microorganisms are eliminated or destroyed.
- **Disinfection** – the chemical or physical process that involves the destruction of pathogenic organisms. Disinfectants are effective against vegetative forms of organisms, but not necessarily spores.

Required Surgical Attire:
- Dedicated surgical attire such as a clean lab coat, surgical scrubs or disposable gown (“street clothes” alone are not permitted).
- Mask.
- Sterile surgical gloves.
- **Note:** Hair bonnet/cap is recommended.

Pre-Operative Procedures:
- Surgery must be conducted in a clean, uncluttered, minimal-traffic portion of the lab dedicated for surgery. Non-animal procedures may not be performed in this dedicated space during the surgery.
• Pre-emptive analgesics must be used unless otherwise noted in the IACUC-approved protocol.
• Animals must be surgically prepared as described in the IACUC-approved protocol.
  o Hair removal must be performed in an area separate from the surgical area.
• Surgeons should wash with soap and dry their hands before aseptically donning sterile surgical gloves.
• Begin surgery with instruments that have been steam or gas sterilized and handle instruments aseptically.
  o Sterilization indicators, such as autoclave tape, should be used on all sterilized packs.
  o The date of sterilization must be noted on each instrument pack.
    • If the pack is damaged OR not used within 6 months of the sterilization date, it must be re-sterilized.
• Instruments must be handled aseptically and maintained on a sterile field
• For multiple surgeries conducted in a single session, one sterile surgical pack cannot be used for MORE THAN 5 ANIMALS.
• When instruments are used between animals during the same surgical session, they must be sterilized between each procedure. The following methods are recommended:
  o Glass bead sterilization - clean instruments prior to submersion into beads.
    ▪ Only the instrument tips are sterile.
    ▪ Ensure tips have cooled prior to touching tissue.
    ▪ Replace glass beads annually – per manufacturer recommendation.

Monitoring the anesthetized animal
• The animal must be maintained at an appropriate depth of anesthesia before the surgical procedure is initiated and must be monitored for surgical plane of anesthesia (negative response to a painful stimulus) throughout the procedure.
• Monitor the animal’s vital signs (e.g., depth and rate of respiration) throughout surgery.
• Note: Anesthetized animals should never be left alone during the procedure

Post-Operative Procedures:
• All post-operative monitoring is the responsibility of the research staff unless prior arrangements are made with LAMS veterinary staff.
• After surgery, move the animal to a warm, dry area and monitor until sternal.
• Post-operative analgesics must be used unless otherwise noted in the IACUC approved protocol.
• The general condition of the animal must be evaluated and any abnormalities promptly reported to LAMS veterinary staff. The following frequency of post-operative observations is required:
  o Minor surgery- Observe at least one day post-operatively.
  o Major surgery- Observe daily for at least 3 days post-operatively.
• Sutures and/or staples are to be removed 10-14 days after surgery unless otherwise noted in the IACUC approved protocol.

Surgical Records
• Surgical records must be maintained for all survival surgeries.
• For animals surviving **6 hours or less** following recovery, the following information must be documented on the LAMS bar coded cage card:
  o Date
  o Time
  o Procedure performed
  o Surgeon’s initials
• For animals surviving **greater than 6 hours** following recovery, the **LAMS surgery/procedure cage card must be used**.
  o The cage card record must be complete.
  o The cage card must remain on the cage throughout the lifespan of the rodent.

**Records for Surgically Manipulated Animals by the Vendor**
• The following information must be documented on the LAMS bar coded cage card
  o Date of surgery
  o Procedure performed
  o Vendor performing the surgery (e.g., CRL, JAX)
• Skin staples/sutures must be removed 10-14 days post-operatively.

**References:**
University of Cincinnati

Policy for Non-Rodent USDA-Regulated Animal Survival Surgery

Applicability
These guidelines apply to all survival surgical procedures performed on non-rodent USDA-regulated animals (all animals excluding laboratory bred mice and rats; birds; ectotherms) at the University of Cincinnati.

Regulatory Principles
All survival surgery must be performed using aseptic techniques throughout the procedure.

Required Surgical Attire
- Mask
- Bonnet or surgical cap
- Shoe covers
- Sterile surgical gloves
- Sterile surgical gown

Required Surgical Equipment
- Sterilization indicators (e.g., autoclave tape, steam sterilization strips) are to be used on all sterilized equipment.
- Sterilization and expiration dates (max. 6 months) must be noted on sterilized equipment.
  - If beyond 6 months from the sterilization date – must be re-sterilized.

Pre-Operative Procedures
- Animals are fasted according to the approved IACUC protocol.
- Team members are to arrive prior to requested surgery table time.
  - Failure to arrive within a reasonable time period as determined by LAMS veterinary staff – surgery will be canceled and rescheduled (minimum of 48 hours).
- Pre-emptive analgesics, anesthetics, and surgical drugs are administered according to the approved IACUC protocol or as prescribed by the veterinarian.
- Initial patient preparation (e.g., hair removal, rough scrub) should be performed in an area separate from where surgery is performed.
- Experimental drugs are supplied by the research staff with advance notification to LAMS veterinary staff.
- Surgeon’s scrub - 5 minute scrub (hands and lower arms) or comparable prior to donning surgical attire.

Operative Procedures
- Final patient surgical preparation (per approved IACUC protocol) is performed in the surgery room.
- Surgical plane of anesthesia must be maintained throughout the procedure.
  - Anesthetist must be present at all times.
- Animal's vital signs are monitored at least every 15 minutes.

**Post-Operative Procedures**
- Daily post-operative monitoring and care (including provision of analgesics) must be provided (approved IACUC protocol or veterinary instruction).
- Animal is to be moved to a warm, dry area and continuously monitored until sternal.
- Any surgical complications must be immediately reported to LAMS veterinary staff.
- Suture and/or staple removal is the responsibility of the research staff unless prior arrangements are made with LAMS veterinary staff.

**Records for USDA-Regulated Animals**
Records for survival surgeries must be maintained and must include:
- Date of surgery
- IACUC protocol number
- Principal Investigator's name
- Surgeon's name(s) or initials
- Animal species
- Animal identification
- Pre-procedural health assessment (e.g. weight, temperature, attitude)
- Analgesics and anesthetics administered, including dosage, route, and time administered
- Any drugs or supportive fluids administered
- Description of surgical procedure
- Surgical start and stop times
- Vital parameters (e.g., temperature, heart rate, respiratory rate, mucous membrane color)

**Requirements for Surgically Manipulated Animals by the Vendor**
If animals have been surgically manipulated by the vendor prior to receipt at the University of Cincinnati (excluding routine castration), a copy of the animal's individual animal health record must be obtained from the vendor.
Applicability:
- These guidelines apply to all survival surgical procedures performed on ectotherms at the University of Cincinnati and Shriner’s Hospital for Children. Ectotherms include but are not limited to snakes, lizards, geckos, and salamanders.
- An approved IACUC protocol is required prior to performing any surgical procedure.

Regulatory Principles:
- All survival surgery must be performed using aseptic procedures.¹
- Survival surgery is any surgical procedure where the animal is expected to awaken from anesthesia, including those in which the animal is expected to survive a short period of time.

Required Surgical Attire:
- Dedicated surgical attire such as a clean lab coat or surgical scrubs (“street clothes” alone are not permitted).
- Mask.
- Sterile surgical gloves.

Pre-Operative Procedures:
- Surgery must be conducted in a clean, uncluttered, minimal-traffic portion of the lab dedicated for surgery. Non-animal procedures may not be performed in this dedicated space during the surgery.¹
- Pre-emptive analgesics must be provided in accordance with the approved IACUC protocol.
- Animals must be surgically prepared as described in the approved IACUC protocol.
- Surgeons should wash and dry their hands before aseptically donning sterile surgical gloves.
- Begin surgery with sterile instruments and handle instruments aseptically.
- Sterilization indicators, such as autoclave tape, should be used on all sterilized packs.¹
- The date of sterilization must be noted on autoclaved packs. These packs should be used within 6 months.
- It is recommended that one sterile surgical pack be used for no more than 5 batch surgeries. Instruments may be used for batch surgeries conducted within a surgical session provided they are maintained clean and disinfected between animals. The following methods are recommended:
  - Glass Bead Sterilization- instruments should be cleaned prior to submersion into beads.
  - Immersion in chemical sterilant- instruments must have proper contact time according to manufacturer recommendations for high level disinfection; instruments must be rinsed with sterile water or sterile saline after immersion before using in animals.¹
Operative Procedures:
- The animal must remain in a surgical plane of anesthesia throughout the procedure.
- Monitor the animal's vital signs throughout surgery.
- Close surgical wounds using appropriate techniques and materials.

Post-Operative Procedures:
- All post-operative monitoring is the responsibility of the Principal Investigator and his/her staff unless prior arrangements are made with LAMS veterinary staff.
- After surgery, move the animal to a warm area and monitor it during recovery.
- Post-operative analgesics must be provided in accordance with the approved IACUC protocol and documented in the surgical record.
- The general condition of the animal must be evaluated post-operatively and any abnormalities must be promptly reported to LAMS veterinary staff. The following frequency of post-operative observations are recommended:
  - Minor surgery- Observe one day post-operatively.
  - Major or invasive surgery- Observe daily for 3-5 days post-operatively.
- Surgical sutures and/or staples are to be removed 10-14 days after surgery unless otherwise noted in the approved IACUC protocol.

Surgical Records
Surgical records must be maintained for all survival surgeries. These records may be maintained in a surgical log or on a surgical cage card. Records must be legible and written in English. The use of LAMS-endorsed surgical logs or surgical cage cards is strongly recommended. The records must contain the following information:
- Date of surgery
- IACUC protocol number and Principal Investigator’s name
- Surgeon’s name or initials
- Animal species
- Animal identification
- Anesthetics administered, including dosage based on weight and route
- Analgesics administered, including dosage based on weight, route, and time given
- Description of surgical procedure (write “Sx” or “surgery” before the surgical procedure if abbreviations are used)
- Post-procedural care as noted above
- Cage identification card records must indicate the date of the procedure, the type of procedure performed, and the surgeon’s initials
- All surgical records must be available for inspection for the life of the animal. The records may be discarded or archived after the death of the animal.

Requirements for Surgically Manipulated Animals by the Vendor
If animals have been surgically manipulated by the vendor prior to receipt at the University of Cincinnati or Shriner’s Hospital for Children, the date of surgery must be written on the cage card. The surgical staples/sutures must be removed 10-14 days post-operatively.
Frog Oocyte Collection
Multiple survival surgeries for frog oocyte collection may be approved by the IACUC if there is adequate scientific justification.

The total number of laparotomies should be limited and will depend on the condition of the animal and quality of the oocytes as well as the life span of the animal and the duration of egg production. Up to five recovery surgeries (the 6th would be terminal) per animal are acceptable. Animals must be properly identified to ensure compliance with this policy. There should be at least 4 weeks between surgeries and the procedure should only be done if the animal is physically normal with complete healing from the previous surgery. This will minimize the distress experienced by any individual frog while reducing the total number of frogs required for this procedure.

References:
2. Guidelines for Egg and Oocyte Harvesting in *Xenopus laevis*. 2007 Revision. ARAC Guidelines, 
University of Cincinnati
Institutional Animal Care and Use Committee

Labeling and Storage Requirements for Secondary Containers

Applicability
This policy applies to secondary storage containers in all animal use areas, including satellite procedure locations and LAMS facilities. This includes secondary storage containers used for all drugs, compounds, and chemicals. IACUC will inspect these areas at least every 6 months as required by the Office of Laboratory Animal Welfare (OLAW). While monthly inventory of laboratory supplies is ideal, quarterly inventory is strongly recommended.

Labeling Requirements
To meet OSHA requirements as enforced by AAALAC, all secondary containers containing drugs, compounds, or chemicals used in animal procedure or housing areas must be clearly and completely labeled with the following information:

- Name of the substance(s) exactly as written on primary container
- Concentration of the primary substance(s)
- Date of expiration (date made alone is not acceptable)
- Label the container “in-vitro” or “in-vivo”, the latter includes all oral, injectable, inhalant, or topical drugs and compounds used with live animals

Sterility Requirements
It is important to ensure all drugs and compounds that are stored in a secondary storage container over 24 hours for future use as an in-vivo injectable are kept sterile.

Red top Vacutainers or comparable sterile storage devices, such as pre-sterilized complete serum vials with an aluminum seal and rubber septum, are recommended. Note that syringes are not an acceptable container for sterile storage of injectables for animal use. Syringes may only be used to store in-vitro compounds (e.g. mineral oil for microscope). Note that it is not acceptable practice to re-use needles chronically installed in the secondary container since this practice compromises sterility. Furthermore, it is not acceptable to insert a used needle into the secondary container. Only sterile needles may be used to penetrate the rubber lid of the sterile secondary container. Drugs or compounds for oral administration only do not require sterile storage.

Filter Sterilization
If crystals or precipitates are visible or are a possible issue for the drug or compound used, or if there is concern that the primary mixture cannot be considered sterile, filter sterilization through a 0.2 micron filter is required. For example, filter sterilization is required for Avertin but not for secondary storage of Ketamine/Xylazine mixtures.
University of Cincinnati
Institutional Animal Care and Use Committee

Guidelines for Regulatory Reporting of Non-Compliance, Adverse Events, and Assessment of Penalties

This document is intended to provide guidance to both the investigators and the Institutional Animal Care and Use Committee (IACUC) with regard to how issues of non-compliance at the University of Cincinnati’s Animal Care and Use Program will be managed.

1. Incident Specific Non-Compliance

The Public Health Service Policy on Humane Care and Use of Laboratory Animals (revised August, 2002) “PHS Policy” categorizes non-compliant conduct into two categories: “minor” and “significant.” As defined by PHS Policy, a “significant deficiency is one which, consistent with this Policy, and, in the judgment of the IACUC and the Institutional Official (IO), is or may be a threat to the health or safety of the animals.”

Significant deficiencies (non-compliances) that were determined by the IACUC and the IO to have been a threat to the health or safety of the animals must be reported promptly to the Association for Assessment and Accreditation of Laboratory Animal Care, Inc. (AAALAC), the Office of Laboratory Animal Welfare, (OLAW), and the United States Department of Agriculture (USDA) if applicable.

In addition, serious or continuing noncompliance with the PHS Policy and/or the Guide for the Care and Use of Laboratory Animals (the Guide), and any suspension of an activity by the IACUC may also constitute a significant deficiency even though the health and safety of the animals may not have been threatened. The IACUC, through the IO, is responsible for reporting all such deficiencies. Failure by the University of Cincinnati to submit the required reports can result in the loss of AAALAC accreditation, termination of the PHS Assurance which is required to receive federal funding, termination of the USDA registration, and possible legal action by the federal regulatory agencies.

Non-compliance not posing a threat to the health and safety of the animals still requires prompt attention and resolution, but does not require reporting to the agencies cited above.

Examples of non-compliance based on the standards of AAALAC, OLAW, and the USDA:

A. Significant non-compliance that is reportable

1. Insufficient anesthesia, insufficient analgesia, inappropriate post-operative care, or improper euthanasia which results in pain or distress to the animal, or premature euthanasia of an animal due to failure by the investigative research staff to provide adequate veterinary medical care.

2. Conditions that jeopardize the health or well-being of animals, including natural disasters, accidents and mechanical failures, resulting in actual harm or death to animals.

3. Conducting animal-related activities or procedures without IACUC approval, or beyond the expiration date of the protocol established by the IACUC.

4. Use of surgery or housing area(s) which have not been approved by the IACUC, or beyond the expiration date of the protocol established by the IACUC.

5. Implementation of any significant change to IACUC approved protocols without prior IACUC approval.

6. Exceeding the allotment of animals without prior IACUC approval.

7. Participation in animal-related activities by individuals who have not been determined by the IACUC to be appropriately qualified and trained.
8. Failure to maintain appropriate animal-related records (e.g., identification, medical, husbandry) 
9. Failure to ensure death of animals after euthanasia procedures (e.g. failed euthanasia with CO2) 
10. Failure of personnel to carry out veterinary orders (e.g. treatments) 
11. Treatment of sick animals without prior consultation with veterinary staff 
12. Any items categorized below as “significant non-compliance that is NOT reportable” or “minor non-compliance”, which result in pain, distress or premature euthanasia of an animal 
13. Any items categorized below as “significant non-compliance that is NOT reportable” or “minor non-compliance”, which constitute continuing noncompliance at the IACUC’s discretion 

B. Significant non-compliance that is NOT reportable 
1. Repeated overcrowding of cages and animal pens, without prior IACUC approval 
2. Failure to use aseptic technique during the performance of survival surgery 
3. Use of expired drugs or use of non-pharmaceutical grade drugs without prior IACUC approval 
4. Unapproved transfer of animals from one protocol to another 
5. Improper transportation of animals 
6. Participation in animal-related activities by individuals who are qualified and have been appropriately trained but were not added to the appropriate protocol 

C. Minor non-compliance that is NOT reportable 
1. Improperly labeled secondary containers 
2. Failure to adhere to housing or procedure area specifications as defined by IACUC Policy (e.g. cleanliness) 
3. Expired drugs found in the laboratory and not labeled “For In-vitro Use Only—Not for use in Animals” 
4. Mill dates or Expiration dates not properly labeled on feed containers 

2. Penalties for Non-Compliance 
When determining the appropriate penalty to impose or to recommend, the IACUC may consider all of the following factors: 
- Extent to which the incident(s) were self-reported by the Principal Investigator (PI) or staff 
- Proactive corrective action(s) taken in response to the incident(s) 
- Extent to which the incident(s) represent a continuing, or repeated violation 
- Extent to which harm to an animal resulted from the incident(s) 

While the IACUC will consider self-reporting and proactive corrective actions taken by the investigator in evaluating the non-compliance, these will not impact on reporting to regulatory agencies. 

The IACUC will consider the length of time between incidents of non-compliance when developing corrective action and when declaring a series of incidents a continuing non-compliance. 

The IACUC may at its discretion impose any of the corrective actions listed below separately or in combination in order to ensure compliance. 

A. Corrective Actions for Significant Non-Compliance 
- First Offense: 
  - Procedures stopped immediately by LAMS vet or emergency meeting of the IACUC 
  - A letter to the PI from the IO or Chairperson outlining the problem and requesting a detailed plan of corrective action, unless corrected during inspection 
  - PI required to appear before the IACUC to present plans for corrective action 
  - Notification to the PI’s department chair or division director
Possible retraining of laboratory personnel
Possible suspension of protocol and or loss of animal use privileges

- Second Offense:
  - Retraining of laboratory personnel
  - PI required to appear before the IACUC to present plans for corrective action
  - Probable loss of animal use privileges
  - Possible suspension of protocol and or loss of animal use privileges

- Third Offense:
  - Probable suspension of protocol and or loss of animal use privileges

Note: Any suspension of a protocol would affect all personnel in the laboratory performing procedures. In some instances, an individual’s animal use privileges to work on any protocol may be revoked.

B. Corrective Actions for Minor Non-Compliance
- First Offense:
  - An email notification on behalf of the IACUC chairperson to the PI outlining the problem and specifying desired corrective action(s)
- Second Offense:
  - A letter from the IO to the PI outlining the problem and specifying desired corrective action(s)
- Third Offense:
  - A letter to the PI outlining the problem and requesting a detailed plan of corrective action, unless corrected during inspection, and a plan for verification
- Fourth Offense:
  - Continuing incidents of minor non-compliance may be upgraded to a significant non-compliance, and would be subject to the penalties and reporting requirements outlined in that section

3. Programmatic Deficiencies
- Failure to correct situations identified in previous IACUC semiannual evaluations as significant deficiencies in a timely manner
- Shortcomings in the programs of veterinary care, occupational health, training, or with the IACUC that are identified during semiannual program review and not corrected within the institutionally determined time frame

The IACUC semiannual evaluations are intended to be tools for institutional self-identification and correction of facility and program deficiencies and therefore are not required to be submitted to OLAW. However, serious problems may be identified during the course of IACUC semiannual evaluations that also qualify for prompt reporting.

A. Corrective Actions for Programmatic Deficiencies
- Programmatic deficiencies must be categorized as acceptable, minor, or significant.
- The corrective action for a significant deficiency must include a reasonable plan to correct the issues as well as a date by which the issue will be corrected.
- Significant programmatic deficiencies must be reported to the applicable regulatory agencies if the deficiency jeopardizes the health and welfare of the animals, or if the institution is unable to meet the correct by date.
1. PHS Policy, IV.B.3
2. AAALAC Rules of Accreditation, Section 2, Standards, Paragraph 7
3. PHS Policy, IV.F.3
4. 9 CFR 2.31(c)3
5. PHS Policy V.A.,B.,C., 9 CFR 2.38(k)
6. Chapter 3 of the Guide
7. Chapter 2 of the Guide, see IACUC Policy # 001
8. PHS Policy, IV.C. and 9 CFR 2.31
9. Ibid.
10. PHS Policy IV.B.7
11. PHS Policy IV.B.7, see IACUC Policy #006
12. PHS Policy IV.C.1.f
13. NOT-OD-05-034
14. Ibid.
15. 9 CFR 2.33(b)(3) and Chapter 3 of the Guide
16. 9 CFR 2.31(d)(ix), see IACUC Policy #016
17. USDA Policy #3, see IACUC Policy #019
18. PHS Policy, IV.C. and 9 CFR 2.31
19. Ibid.
20. Chapter 3 of the Guide, see IACUC Policy #003
21. 29 CFR 1910.1200, see IACUC Policy #017
22. Chapter 2 and 4 of the Guide, see IACUC Policies #012 and #021
23. Chapter 3 of the Guide, see IACUC Policies #4 and #17
24. PHS Policy, IV.F.3 and NOT-OD-05-034
25. Ibid.
Use of Pharmaceutical Grade Compounds in Vertebrate Animals

Pharmaceutical grade compounds are to be used for all vertebrate species based on the
Public Health Service Policy (PHS Policy), the United States Department of Agriculture
(USDA) regulations, and The Guide for the Care and Use of Laboratory Animals (current
edition). The use of non-pharmaceutical grade chemical compounds in experimental animals
(including rats, mice, birds) under certain circumstances has been, and will continue to be, a
necessary and acceptable component of biomedical research.

Their use should be based on:

- Scientific necessity
- Non-availability of an acceptable veterinary or human pharmaceutical grade product
- Specific review and approval by the Institutional Animal Care and Use Committee
  (IACUC)

In preparing and reviewing proposals to use non-pharmaceutical grade compounds,
investigators and IACUCs should consider a number of related animal welfare and scientific
factors including safety, efficacy, and the inadvertent introduction of research complicating
variables. While issues such as sterility, pyrogenicity, stability, pharmacokinetics and quality
control can be assumed to have been addressed during the course of producing
pharmaceutical grade compounds, the same cannot always be said for substances produced
in the research laboratory using non-pharmaceutical grade chemical compounds (e.g. saline,
glucose, etc.). Cost savings alone is not an adequate justification for using non-
pharmaceutical compounds in animals (e.g. Halothane, etc.).

In order to obtain IACUC approval for the use of non-pharmaceutical grade products,
Addendum B: Use of Non-Pharmaceutical Grade Compounds must be completed.
Although the potential animal welfare consequences of complications are less evident in non-
survival studies, the scientific issues remain the same. The principles and need for
professional judgment outlined above still apply.

The use of non-pharmaceutical grade compounds in vertebrate species must be explicitly
detailed in the IACUC protocol and IACUC approval gained prior to use of the drug. Note
that all secondary containers must be labeled according to IACUC policy #017.
University of Cincinnati  
Institutional Animal Care and Use Committee  

Policy for the Use of Analgesics

Introduction
Animals can experience pain and distress. It is the ethical and legal obligation of all personnel involved with the use of animals in research to reduce or eliminate pain and distress in research animals whenever such actions do not interfere with the research objectives. The Institutional Animal Care and Use Committee (IACUC) has the delegated responsibility and accountability for ensuring that all animals under their oversight are used humanely and in accordance with a number of Federal Regulations and policies\textsuperscript{1-5}. Key to fulfilling the responsibilities for both the Principal Investigator (PI) and the IACUC are:

- Understanding the legal requirements,
- Being able to distinguish pain and distress in animals from their normal state, and
- To relieve or minimize the pain and distress appropriately.

Regulatory Requirements
The IACUC must assure that all aspects of the IACUC protocol that may cause more than momentary pain and/or distress are addressed; alternatives to painful or distressful procedures are considered; and that methods, anesthetics and analgesics to minimize or eliminate pain and distress are included when these methods do not interfere with the research objectives. A written scientific justification is required to be included in the IACUC protocol for any painful or distressful procedure that cannot be relieved or minimized.

The obligation to reduce pain and distress does not end with the review of the IACUC protocol. It is the responsibility of the animal care staff, the research staff, the IACUC, and LAMS veterinary staff to continue to monitor animals for pain, distress, illness, or mortality during the course of the research study. Animals should be monitored for evidence of pain or distress, and should be administered analgesics or have procedures instituted to relieve it, unless scientifically justified. Observations and actions taken to relieve pain or distress must be documented. The animals should be observed a minimum of once daily or more often based on professional judgment. These documents must be available to the IACUC and LAMS veterinary staff. If it is necessary to make significant changes in the IACUC protocol, the PI must submit a modification to the IACUC and receive approval prior to initiation.

Summary
The relief of pain and distress in research animals is ethically sound, humane, and promotes good science.

References
5. NIH Policy Manual 3040-2, \textit{Animal Care and Use in the Intramural Program}.

\textit{This policy was adapted from the National Institutes of Health’s ARAC Guideline “Pain and Distress in Rodents and Rabbits: Responsibilities, Recognition and Alleviation”}.
Specifications for Satellite Animal Procedure Areas

Security:
Animals must be attended by an approved animal user for that protocol (i.e. approved animal user in the area) or held in a locked laboratory. As stated in the Guide for the Care and Use of Laboratory Animals, facilities should have security features, such as card-key systems, electronic surveillance, and alarms. Therefore, in open labs (e.g. CVC, Vontz), the card readers must be locked.

Cleanliness:
The area must be kept clean (i.e. free of dirt, blood, bedding, etc.) if being used on an ongoing basis. Procedure areas must be wiped down with an antimicrobial agent before and after animal use to minimize allergens and possible exposure to microorganisms/infectious agents. Specialized caging/equipment should be sanitized between study cohorts and tested with an ATP test in accordance with the LAMS policy on manual sanitization. More stringent restrictions are required for survival surgery. Please reference OLAW’s CD-ROM “Training in Survival Rodent Surgery”.

Occupational Health and Safety:
All personnel exposed to animals in the procedure area must be covered under the University’s Occupational Health and Safety Program.

Justification:
Justification (for use of area- not procedures) must be provided to perform protocol procedures on live animals outside of LAMS core facilities. It must be based on necessity for the science (i.e. science cannot be carried out in LAMS). For example, equipment cannot be secured in LAMS, transported and/or stored in LAMS, animals must be continuously monitored as part of the study, etc.

Returning animals:
Animals must be returned to LAMS in accordance with the IACUC protocol and IACUC Policy #012. All dirty cages must be returned to LAMS within 24 hours to minimize researchers’ exposure to allergens.

Suggestions:
- If gas anesthetics are used, it is recommended that a scavenger system or chemical fume hood be used in the room. A chemical fume hood may also be necessary when using other chemicals.
- A space for secured compressed gas tanks, such as CO2
- Sealed benches that can be sanitized
- A sink with hot and cold running water be available in the room
- If controlled substances are used in the room, a secured lockable area should be available (e.g. locked cabinet, mounted lock box)
- Investigators must review IACUC Policy #012 to ensure the procedures being performed in the room cannot be defined as housing (animals held in the satellite area overnight with the exception of USDA covered species, which is over 12 hours)
University of Cincinnati
Institutional Animal Care & Use Committee

Requirement for Safety Office Approval
Prior to IACUC Protocol Approval

In order to comply with AAALAC accreditation requirements and Public Health Service Policy (PHS Policy), the IACUC cannot approve pending protocol actions until approval is obtained from the necessary safety office (i.e. Radiation Safety Office, Institutional Biosafety Committee, and/or Department of Environmental Health & Safety). Pending IACUC protocol actions may be reviewed concurrently with the safety office, but IACUC approval will be withheld until the appropriate safety office(s) approval is obtained. In the meantime for new or updated protocols, animals may not be ordered and animals in-house may not be used.

For protocol modifications, the modified portion of the protocol cannot be approved until the necessary safety office has approved it. This includes Limited Modifications that add a chemical, physical, radiological, or biochemical hazard (e.g. addition of Isoflurane anesthesia).

- The IACUC office is responsible for submitting the pending IACUC protocol to the appropriate safety office.
- The safety office is responsible for ensuring the Principal Investigator completes the required paperwork, if any.
- The safety office will notify Principal Investigators and the IACUC office of safety approval, which does not indicate IACUC approval of the animal protocol.
- If using radiological or biosafety hazards, Principal Investigators are strongly advised to check with the Radiation Safety Office or Institutional Biosafety Committee (respectively) prior to the submission of animal protocols to the IACUC.

Contact information for all University safety offices can be found on the IACUC website at http://www.med.uc.edu/iacuc/content/protocol.cfm.
Modifications to an Animal Protocol

The Institutional Animal Care and Use Committee (IACUC) has established the following procedure for the review of modifications to an IACUC protocol:

**Limited Modifications**

- The PI must complete form P-05 and submit to the LAMS veterinary staff.
- Once signed by a LAMS veterinarian, the IACUC membership is provided a summary of the proposed modification and is afforded three business days to request full IACUC review. The IACUC Chair and a LAMS veterinarian on the IACUC act as designated reviewers.
- If no request is received for full review, the IACUC Chair and a LAMS veterinarian’s approval will be considered final IACUC approval by designated review.

The following will not be considered as limited modifications:

- Changes resulting in an increase in the pain category
- Additions to the numbers of animals used
- Changes in the overall scientific justification or purpose of the protocol

Items that may be considered for modifications under this policy include but are not limited to:

- Administrative changes (changing titles, contact information, etc.)
- Changes in strain, sex, source, or age of animals
- Changes in experimental drug route or dose of an approved drug
- Changes or additions of veterinary therapeutic drugs
- Changes in nutritionally complete diet formulations, diet form (liquid/solid), source, or the addition of nutritional supplements or treats
- Changes or additions to identification methods excluding the addition of toe clipping or freeze branding
- Changes or additions to sterilization/Disinfection methods
- Changes or additions to anesthesia monitoring methods
- Changes in blood draw techniques
- Changes or additions to environmental enrichment methods
- Changes in delegation of the provision of care or husbandry
• Changes or additions to the anesthetics or analgesic regimen
• Changes to wound closure type, technique, or removal date
• Changes or additions to supportive care (i.e. supplemental heat, IV fluids, etc.)
• Changes in surgery length
• Addition of genotyping methods
• Removal of a species, agents, or procedures from a protocol
• Increasing the number of collections for tissue or fluid collections currently listed in the protocol
• Addition of drugs to induce a transgene expression
• Addition of minor procedures similar to ones currently approved in the protocol
• Changes or additions to the euthanasia methods which are AVMA acceptable

**Standard Modifications**

Modifications not covered above will be processed as standard modifications. Standard modifications:
• require the revision and resubmission of the currently approved IACUC protocol form
• May not be submitted on the Limited Modifications form
• May still qualify for urgent review
University of Cincinnati
Institutional Animal Care & Use Committee

Required Transfer of Animals to Outside Institutions

This policy applies to all animals covered by an IACUC protocol at the University of Cincinnati. Compliance with the policy is required if animals under a UC IACUC protocol are to be manipulated at a non-University of Cincinnati institution (e.g. Children’s Hospital Research Foundation, Veteran’s Affairs). Since the UC IACUC also serves Shriner’s Hospital for Children, the following requirements do not apply to animals transferred between UC and Shriner’s.

The following guidance has been provided by the National Institutes of Health:

**NO REQUIREMENT FOR DUPLICATE REVIEW**

There are many circumstances that involve partnerships between collaborating institutions or relationships between institutional animal care programs. OLAW and APHIS agree that review of a research project or evaluation of a program or facility by more than one recognized IACUC is not a federal requirement.

It is imperative that institutions define their respective responsibilities. PHS Policy requires that all awardees and performance sites hold an approved Animal Welfare Assurance. OLAW negotiates Inter-institutional Agreement Assurances of Compliance when an awardee institution without an animal care and use program or IACUC will rely on the program of an Assured institution. Assured institutions also have the option to amend their Assurance to cover non-assured performance sites, which effectively subjugates the performance site to the Assured institution and makes the Assured institution responsible for the performance site.

If both institutions have full PHS Assurances, they may exercise discretion in determining which IACUC reviews research protocols and under which institutional program the research will be performed. **It is recommended that if an IACUC defers protocol review to another IACUC, then documentation of the review should be maintained by both committees.** Similarly, an IACUC would want to know about any significant questions or issues raised during a semiannual program inspection by another IACUC of a facility housing a research activity for which that IACUC bears some responsibility or exposure.

Based on this guidance and in the best interest of the animal care and use program at the University of Cincinnati, UC’s IACUC requires the transfer of animals through LAMS to the outside institution. The outside institution must have full PHS Assurance and an approved animal use protocol that includes the work to be conducted at that institution. In addition, LAMS must approve the transfer of animals back to UC. UC will no longer regulate non-UC areas; therefore, disclosure of specific non-UC areas is not required in the UC protocol and UC IACUC inspection will not be conducted.
University of Cincinnati
Institutional Animal Care and Use Committee

Zebrasfish and Medaka Use

IACUC Regulation of Zebrasfish/Medaka

The UC IACUC has established 7 days post fertilization for Zebrasfish and 21 days post fertilization for Medaka fish as the point at which they transition from the embryonic stage to a free living organism. This is based on the following:

- For Zebrasfish, at 7 days post fertilization, the yolk sac is considered to be completely depleted, and the organism will become free feeding.
- For Medaka, 21 days post fertilization is the point at which the eggs hatch and the animals are immediately free feeding.
- Once free living, additional care such as feeding is necessary to maintain the health and welfare of the fish, and as such should be monitored by the IACUC.

Based on the above definition, Zebrasfish 7 days post fertilization and Medaka 21 days post fertilization will be subject to the following requirements:

- Manipulations must be fully described in an IACUC approved protocol.
- Areas outside the vivaria in which the investigator intends to house or manipulate the fish are subject to IACUC Policies 12, 21, 26, and IACUC approval of the Satellite Housing/Procedure use form as well as IACUC inspection prior to use.

Zebrasfish/Medaka Use Reporting

For purposes of estimating the number of animals used as compared to the number scientifically justified in the protocol, the following method will be used:

- The investigator will maintain a record of the number of clutches of fish that are produced.
- Based on historical data the average clutch size is 80 fish.
- The number of clutches will be multiplied by 80 in order to estimate the total fish usage.
- The total number used will be reported monthly using the Non-traditional Procurement of Animals form.
Requirements for Limited Access to Animal Housing Areas During Studies

The UC IACUC recognizes that there may be valid scientific reasons for restricting the number of personnel entering animal housing rooms during portions of a study. Examples include performing behavioral studies and working with hazards.

LAMS may approve limiting the access by LAMS staff to animal housing rooms. A Service Request must be submitted to and approved by LAMS for limited access privileges. These areas are normally checked daily by LAMS husbandry staff except when access is limited. When access is limited, laboratory personnel are responsible for documenting daily observation and husbandry care.

Limiting LAMS access is a privilege that will be revoked if the lab fails to comply with the requirements outlined above.
Transfer of Animals to LAMS Holding Protocol

Applicability

- **Expiring Protocols**: All animals at the University of Cincinnati used in research or teaching must be held or used under an approved protocol. If animals are in-house under an expiring protocol, and the PI fails to transfer them to the LAMS Holding Protocol, LAMS must transfer the animals to the LAMS Holding Protocol **five business days prior to expiration**. The IACUC has mandated this 5 day period to prevent federally reportable incidents associated with animals on an expired protocol.

- **Late Annual Progress Reports (APR)**: IACUC protocols that involve USDA-regulated species are to undergo annual review through the Annual Progress Report. If the Annual Progress Report review is not conducted within one year of initial protocol approval, the protocol will be considered expired and animals must be transferred to the LAMS Holding Protocol until the Annual Progress Report is approved. (The procedure for transferring animals to/from the LAMS Holding Protocol is noted below.)

- **New Principal Investigators**: If a Principal Investigator is transferring to the University of Cincinnati from another institution, animals may be received at the University of Cincinnati prior to obtaining an approved IACUC protocol. These animals must be placed on the LAMS Holding Protocol until after the University of Cincinnati IACUC protocol is approved. (In this case, a requisition form must be utilized to bring the animals to the University of Cincinnati and a transfer form must be utilized to transfer the animals from LAMS Holding Protocol to the Principal Investigator’s protocol.)

**Expiring protocol/ Late APR Transfer Process**

The following steps must be taken to ensure animals are properly transferred to the LAMS Holding Protocol prior the date of protocol expiration:

- The IACUC office will notify the Principal Investigator of the impending expiration of the protocol.
- The IACUC office will provide LAMS a list of expiring protocols and will notify LAMS promptly when re-approval occurs.
- The Principal Investigator will obtain LAMS Holding Protocol cage cards from LAMS.
- The Principal Investigator will ensure cages that were in use under the protocol are identified with LAMS Holding Protocol cage cards.
- The **PI has until noon five business days prior to the protocol expiration** to transfer the animals to the holding protocol. If the PI fails to transfer the animals in the allotted time, the animal must be transferred by LAMS. LAMS service...
charges may apply. Exceptions may only be granted with approval of the IACUC at a convened meeting.

The following steps must be taken to ensure animals are properly transferred back to the Principal Investigator’s Protocol after release from the LAMS Holding Protocol:
- The IACUC office will notify the Principal Investigator and LAMS that the protocol update is approved.
- The Principal Investigator will ensure LAMS Holding Protocol cage cards are removed within five business days of IACUC office notification.

**New Investigator Transfer Process**
Contact LAMS veterinary staff to arrange the transport and receipt of animals prior to your protocol approval.

**Use limitations for animals held under the LAMS Holding Protocol:**
- **Animals may not be used for experimental procedures.**
- Standard breeding and weaning may occur.
- Special feed and water, genotyping, and identification may be maintained by LAMS.
- Other procedures may only be performed with IACUC approval.
- Animals may be euthanized by LAMS staff if the animals are no longer needed.
- **Animals may not be euthanized for research purposes.**
- No tissues may be utilized from animals euthanized without specific IACUC approval.
<table>
<thead>
<tr>
<th>Animals Transferred To Protocol #</th>
<th>Pain Cat. New Protocol</th>
<th>Species</th>
<th># of Animals Transferred</th>
<th>Date of Transfer</th>
<th>Procedure Performed</th>
<th>Date Returned or Euthanized</th>
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January 2007
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Transfer of Animals between UC Approved IACUC Protocols

The UC IACUC recognizes the need for an efficient mechanism of transferring animals to core research services protocols. This process will facilitate collaborative research between UC investigators and is consistent with the principles of the 3 R’s (Replacement, Reduction & Refinement).

1. Temporary Transfer of Animals (Maximum of 90 Days)

Temporary transfers of animals to another protocol can occur for the purpose of having specialized procedures, not covered on the original protocol, performed as a service for other researchers or as part of a collaboration. The procedure must be approved in the protocol the animals are being transferred to; however, it will not influence the animal numbers on the new protocol.

A. Qualifications for temporary transfers:
   1. Multiple major survival surgeries may not be performed on the animal being transferred unless described in the original protocol.
   2. Procedures performed must be consistent with the Pain Category (C, D, E) of the original protocol.
   3. A temporary transfer may not be used for USDA covered species.
   4. The maximum duration for a transfer is 90 days.
   5. If research is grant supported, the collaborator’s protocol number must be submitted to Sponsored Research Services.

B. Steps of a Temporary Transfer:
   1. The temporary transfer form must be submitted one UC business day (at least 24 hours) prior to the transfer. The original bar coded cage card must be visible on the cage for census purposes.
   2. The cage must be labeled by the PI with a secondary card containing the words TEMPORARY TRANSFER, the new PI Name, and Protocol Number. See the Temporary Transfer Cage Card template.
   3. The originating PI must maintain a copy of the transfer request and details of the procedures performed during the temporary transfer.
   4. Once the temporary cage card is in place, only procedures listed in the new protocol under the new PI can be performed. The new PI will then be responsible for the animals.
   5. If animals are returned to the original protocol, the Temporary Transfer Card must be removed.

2. Permanent Transfer of Animals

For the permanent transfer of animals in which ownership of the animal or funding source used to pay per diems will change, a LAMS Animal Transfer Form must be completed.

For Questions about Temporary Transfers contact the IACUC office @ 558-5187.
For Questions about Permanent Transfers, contact LAMS @ 558-5283.
Environmental Enrichment and Social Housing of Laboratory Animals

Environmental Enrichment
The *Guide for the Care and Use of Laboratory Animals* recommends the use of environmental enrichment to enhance the physical and psychological well-being and to promote species-typical behavior in all laboratory animals. Public Health Service (PHS) Policy (II; IV, A, 1) requires that institutions comply with the *Guide*.

The UC IACUC considers enrichment to be an important part of animal well-being and husbandry.

- Enrichment must be conducted in such a way as to not interfere with the research results.
- Enrichment for all vertebrate animals is required unless scientifically justified.
- IACUC protocol Addendum A: Withholding Enrichment or Single Housing must be approved by the IACUC and LAMS must be notified prior to withholding enrichment:
  - The form must state:
    - the scientific justification for withholding enrichment
    - the period(s) in which enrichment will be withheld

A list of standard enrichment methods and devices will be maintained as a reference document to this policy.

- Physical materials used for enrichment must be easily sanitizable or disposable.
- The LAMS Veterinary staff will maintain the list of approved items.
  - If an enrichment item is not included in the list of approved items the PI must submit a service request for vet approval.
- If you wish to specify what enrichment can be provided based on study restriction, please submit a LAMS service request. As long as some type of enrichment is provided, IACUC approval to withhold enrichment is not needed.

Principle Investigators should consult with LAMS Veterinary Staff to determine the most appropriate form of enrichment. For enrichment devices or methods not provided by LAMS, a LAMS service request must be approved prior to use of the enrichment devices or method.

Social Housing
The *Guide for the Care and Use of Laboratory Animals* states “Single housing of social species should be the exception and justified based on experimental requirements or veterinary-related concerns about animal well-being. In these cases, it should be limited to the minimum period necessary.” “The need for single housing should be reviewed on
a regular basis by the IACUC and veterinarian.” Public Health Service (PHS) Policy (II; IV, A, 1) requires that institutions comply with the Guide.

The UC IACUC in consultation with the veterinary staff has defined social species as all species used at UC excluding reptiles \(^1\) and amphibians \(^2\).

Social animals must be group housed unless one of the following justifications for single housing exists:

- **Experimental Requirements:** An Addendum A: Withholding Enrichment or Single Housing must be approved by the IACUC and LAMS must be notified prior to single housing:
  - The form must state:
    - the scientific justification for single housing animals
    - the period(s) in which single housing is required

- **Veterinary health reasons:** Written veterinary approval is required, and must state:
  - the health reason for single housing the animal
  - the period(s) in which single housing is required
  - the frequency of reevaluating for health reasons

**Standard exceptions to social housing**
The IACUC recognizes that situations exist in which single housing of Non-USDA covered social species (e.g. rats and mice) may be inevitable. These include:

- separation of aggressive cage mates
- death or termination for experimental reasons of a cage mate (resulting in a singly housed animal)
- pregnant females separated to prevent over-crowding
- separation of pups at weaning when the number of pups does not allow for all animals in a litter to be placed with a compatible cage mate (single male pups for example)

The IACUC acknowledges that in these situations attempts to socially house the animals could significantly alter scientific outcomes and/or jeopardize animal welfare. The IACUC grants approval for single housing for the standard exceptions listed above. The time that an animal is kept in single housing should be minimized.

**Social well-being**
In any case, when single housing occurs, methods to ensure social well-being (enrichment) must be implemented under the direction of the veterinary staff.

- Methods for ensuring social well-being include:
  - Additional enrichment items or addition of a companion animal in the room or housing area
  - Visual, auditory, olfactory, and tactile contact with compatible conspecifics
Positive interaction with the animal care staff

- In cases where this would interfere with the research, a request to withhold enrichment must be included on the Addendum A: Withholding Enrichment or Single.


LAMS Veterinary Guideline for Animal Enrichment

Caution: All Food Treats Given in Moderation. Consult a LAMS Veterinarian for potential allergic reactions, dietary upset, product recall and interference with research study.

Caution: All Toys are not Created Equal: Be aware of choking hazards and consumption of inedible toys (i.e. GI foreign bodies).

All food treats that are not specifically labeled/made for animals (i.e. peanut butter, candy) must be marked with the phrase “NOT FOR HUMAN CONSUMPTION”.

All secondary containers housing food treats must be properly labeled (i.e. name, contents, expiration date, etc…)

Laboratory Animal Medical Services reserves the right to discontinue the use of any enrichment device or method if it is determined to be harmful to the animal(s), research study or animal facility.

NOTE: If your animals live in a Barrier environment (i.e. SMI or PIV Housing), toys must be autoclaved prior to placement and when removed for cleaning. Enrichment that already comes certified sterile or autoclaved can be placed into the animals cage without further sterilization.

<table>
<thead>
<tr>
<th>Animal</th>
<th>Sanitizable Toys</th>
<th>Food Treats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cat</td>
<td>Resting Boards, Scratching Posts, Grooming Brushes, Kennel Mats</td>
<td>Pounce, Temptations, Greenies for Cats, Cat Nip</td>
</tr>
<tr>
<td></td>
<td>Sanitizable Toys: Jingle Balls, Kong Toys</td>
<td></td>
</tr>
<tr>
<td>Dog</td>
<td>Sanitizable Toys: Kong Toys, Purple Squirrel Dudes, Jingle Balls, Havaballs</td>
<td>Nylabones, Greenies, Hercules Chews</td>
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<tr>
<td></td>
<td>Dumb Bells Grooming Brushes, Dandy Mats, Kennel Mats, Perla Beds</td>
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<tr>
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<td>Chew Treats:</td>
<td>Peanut Butter</td>
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<tr>
<td>Sheep</td>
<td>Sanitizable Toys: Monkey Shine Mirrors, Stainless Steel Rattles, Jingle Balls</td>
<td>Harlan Enrich Mix, Hay, Beet Pulp, Spice Drops, Gummies, Peeps (Marshmallows)</td>
</tr>
<tr>
<td>Goat</td>
<td>Sanitizable Toys: Monkey Shine Mirrors, Stainless Steel Rattles, Jingle Balls</td>
<td>Harlan Enrich Mix, Hay, Beet Pulp, Spice Drops, Gummies, Peeps (Marshmallows)</td>
</tr>
<tr>
<td>Cow</td>
<td>Sanitizable Toys: Monkey Shine Mirrors, Stainless Steel Rattles, Jingle Balls</td>
<td>Harlan Enrich Mix, Hay, Beet Pulp, Spice Drops, Gummies, Peeps (Marshmallows)</td>
</tr>
</tbody>
</table>

8/2012 REV. (DF)
<table>
<thead>
<tr>
<th>Animal</th>
<th>Sanitizable Toys</th>
<th>Food Treats</th>
<th>Contact Bedding</th>
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</thead>
<tbody>
<tr>
<td>Pig</td>
<td>Monkey Shine Mirrors, Stainless Steel Rattles, Jingle Balls, Best Balls, Havaballs, Dumb Bells, Dandy Mats, Kong Toys, Invincible Rings</td>
<td>Enrich Mix, Hard Candy, Gummy Candy, K-9 Maintenance Dog Food, Peanut Butter, Peeps (Marshmallows), Banana, Banana Chips</td>
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<tr>
<td>Rabbit</td>
<td>Stainless Steel Floor Rattles, Dumb Bells, Nyla-Rings, Havaballs</td>
<td>Fresh Vegetables, Bunny Blocks, Timothy Cubes, Cheerios, Yogurt Bites</td>
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<td>Hamster</td>
<td>Polycarbonate Rabbit Huts</td>
<td>Bacon Softies, Veggie-Bites</td>
<td>Nestlets, Enrich-O’cobs</td>
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<td>Gerbil</td>
<td>Polycarbonate Mouse Huts, Kong Toys, Nylabones</td>
<td>Bacon Softies, Veggie-Bites</td>
<td>Nestlets, Enrich-O’cobs</td>
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<td>Guinea Pig</td>
<td>Kong Toys, Nylabones</td>
<td>Timothy Cubes, Fruity-Gems, Veggie-Bites</td>
<td>Nestlets, Enrich-O’cobs</td>
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<td>Rat</td>
<td>Kong Toys, Nylabones, Polycarbonate Rat Huts, Gumabones</td>
<td>Bacon Softies, Veggie-Bites, Cheerios, Yogurt Bites</td>
<td>Nestlets, Enrich-O’cobs</td>
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<td>Mouse</td>
<td>Nylabones, Gumabones, Polycarbonate Mouse Huts, Rodent Retreats</td>
<td>Bacon Softies, Veggie-Bites</td>
<td>Nestlets, Enrich-O’cobs, Crinkle Paper, Dome Shepherd Shacks</td>
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<td>Amphibian</td>
<td>Polycarbonate Hiding huts, Lily Pads, PVC Tubes</td>
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<td>Birds</td>
<td>Mirror, Parakeet Toys</td>
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<tr>
<td>Reptile</td>
<td>Polycarbonate Hiding huts, PVC tubes, Wooden branches</td>
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University of Cincinnati
Institutional Animal Care and Use Committee

Post-Approval Monitoring

Introduction

A post approval monitoring program (PAM) has been developed to contribute to the importance of securing the foundation of research at UC by collecting evidence of good performance and compliance, in order to prevent costly concerns. The PAM program assures regulatory agencies that animal studies conducted are in accordance with approved IACUC protocols, as directed by the USDA, OLAW, and AAALAC. The purpose of post approval monitoring is to work with, and in support of, research staff members to ensure accurate and consistent protocol performance. The essence of the PAM program is to be collegial and supportive of animal based research. The anticipated goal of this proactive program is to educate researchers on compliance and cultivate a positive culture about compliance throughout our institution. Most importantly, PAM is intended to be a beneficial tool for all groups working with animals and provide an opportunity to communicate, educate, and build relationships with IACUC.

PAM Process

The post approval monitoring program will involve a laboratory site visit to observe animal procedures being performed, evaluate record keeping, and discuss approved activities. It’s important to acknowledge that receiving notification that your animal protocol has been selected for monitoring doesn’t imply that wrong-doing is suspected in the conduct of your study. At the conclusion of the visit, researchers will be offered the opportunity to meet with the compliance liaison to discuss and respond to initial findings. The site visits will be conducted by a compliance liaison and may include a veterinarian or IACUC member. The compliance liaison will note areas of excellence, make suggestions for improvement, and if compliance issues are identified, will assist the researcher in developing appropriate corrective actions for presentation to the committee.

Regulatory Requirements

In response to increasing oversight and consequences imposed by regulators, post-approval monitoring has become the industries standard practice. The IACUC is currently responsible for conducting a continuing review of approved protocols in accordance with Public Health Service Policy (IV.C.5.) and Animal Welfare Regulations (Sec 2.31(d)). Furthermore, the 8th edition of the “Guide” (p 33) describes the elements of continuing review and offers the IACUC guidance on the effective implementation of PAM.
University of Cincinnati
Institutional Animal Care & Use Committee

Storage of Diets Outside LAMS

Reporting Diet Storage Location
The Guide for the Care and Use of Laboratory Animals,” 8th ed., states that “Exposure to temperatures above 21°C (70°F), extremes in relative humidity, unsanitary conditions, light, oxygen, and insects and other vermin hasten the deterioration of food.” “Bedding and food should be stored in a separate area free from vermin and protected from the risk of contamination from toxic or hazardous substances.” The IACUC, must know the location where diets are stored outside of LAMS in order to regularly monitor the storage conditions and food expiration. Please submit IACUC Form #F-03 Storage of Diets Outside LAMS.

Bulk Storage Conditions

Storage Area Requirements
- bulk storage of diet (> 2 wks) refers to diet caches that are not placed on animal cages or temporarily being held in animal rooms to replenish animal cage feeder bins
- the bulk storage space should be clean, and sealed so as to be free of insects, rodents, or other vermin
- all diets should be stored off the floor on pallets, racks, or carts and protected from strong natural or artificial light (e.g. the original shipping box or a storage bin that is capable of blocking out light)
- opened diet should stored in a sealed container and protected from prolonged exposure to light (e.g. twist tied in the original plastic liner bags inside of boxes or in a sealable plastic tote bin container)
- no volatile or extremely toxic chemicals or biological agents should stored in the refrigerator or refrigerated walk-in box or in immediate proximity of rodent diets when being stored at room temperature – contaminants in diets can have dramatic effects on biochemical and physiologic processes, even if contaminants are present in concentrations too low to cause clinical signs of toxicity
- cold storage walk-in boxes, conventional refrigerators, and freezers, should be temperature sensor alarmed to alert mechanical failure, while room temperature storage areas need to be electronically monitored (RENO® sensor) to alert and indicate out of range temperature

- diets that the manufacturer recommends be stored at room temperatures, for example, open formula (e.g. NIH-07) and closed formula (e.g. LabDiet #5002) natural ingredient based diets should be maintained at or below 70°F (21°C) with the relative humidity at approximately 50% or below.
- diets that the manufacturer recommends or requires cold temperature storage, for example, semi-purified and purified open formula (e.g. AIN-76 or AIN-93) diets should be maintained between 39°F to 46°F (4°C to 8°C) or frozen 0°F (-18°C to -20°C) with the relative humidity at approximately 50% or below.

Shelf Life

- diets must be discarded on the posted expiration date or no longer than 6 months past the manufacturers mill date - for most diets the maximum recommended shelf life is 6 months from the date of manufacture (mill date) regardless of storage temperature unless otherwise specified by the manufacturer.
- labs should emphasize the expiration date of a diet by either labeling the expiration date on the diet container or circle the manufacturers posted expiration date to draw attention to this important parameter.
- if diets are removed from the original shipping container (cardboard box) and will be stored in the original plastic liner bags the expiration date or mill date should be labeled on each plastic liner bag.

† UC REMote Notification Option environmet monitoring system
University of Cincinnati
Institutional Animal Care and Use Committee

Food or Fluid Regulation Requirements for Rodents

The Institutional Animal Care and Use Committee (IACUC) has established this policy to implement the food and fluid regulation requirements in the Guide for the Care and Use of Laboratory Animals.

Introduction
Regulation of food or fluid are usually used in scientific studies for the following reasons: 1) homeostatic regulation of energy metabolism or food balance; 2) motivate behaviors and physiologic mediators of hunger and thirst; 3) regulate food consumption to motivate animals to perform learned tasks; 4) regulate food consumption to study the effect of caloric uptake on disease processes. Regulation must be scientifically justified in the approved IACUC protocol including the endpoints. Justification is not required for pre-surgical fasting.

Definition of Regulation
The volume of food or fluid is restricted (e.g. pair or limited feeding) including deprivation or scheduled (e.g. meal-feeding) which offers access to food or fluid at a regular interval of time.

Applicability
- This policy applies when a study involves regulation of food or fluid.
- Animals fed ad libitum including special diets, are excluded from this policy.

Requirements during short periods of regulation
When the period of regulation is less than 24 hours and occurs no more than once a week animals must be clearly identified with the following information:
- The type of regulation being performed
- The period which they will be regulated
- When regulations is complete, identifiers must be removed

The IACUC does not consider a period of regulation less than 24 hours and occurring less than once a week to have an ongoing clinical impact; as such individual records and weekly weights are not required. This deviation from the guide is consistent with longstanding institutional practices and available scientific data.

Requirements during prolonged periods of regulation
When the period of regulation is greater than 24 hours or occurs more than once a week animals undergoing regulation must be clearly identified with the following information:
- The type of regulation being performed
- The period which they will be regulated
- When regulations is complete, identifiers must be removed

In addition, written records must be maintained for each individual animal including:
- Body weights least weekly and more often for animals requiring greater restrictions.
- Document daily food and fluid consumption,
- Hydration status
- Any behavioral and clinical changes used as criteria for temporary or permanent removal of an animal from a protocol

**Record Keeping and Retention**
- Unless other arrangements have been made, the Principal Investigator is responsible for ensuring these items are completed and documented as outlined above.
- Records must be removed when regulation is not occurring.
- Records must be maintained for the life of the animal.
- Records must be available upon request by the IACUC or any regulatory inspector.
Animal Adoption Form

1. I accept the adoption of the animal described below from The University of Cincinnati (UC). I agree with UC’s assessment that the animal is in good health. I understand that there are no expressed or implied guarantees relative to the health or temperament of the animal.

2. I accept responsibility for the care of the animal described below and will make all reasonable attempts to care for this animal in a manner that is generally considered appropriate for a pet of this species.

3. The animal described below is to be a pet for me and my immediate family. I understand that it is not to be sold, given away, or otherwise released from my care unless extreme circumstances require the same. If the animal described below must be released from my care, I will make every attempt to secure a satisfactory home environment for it.

4. I assume responsibility and agree to hold harmless from liability the University of Cincinnati or its agents, for any claim that may arise from the adoption of the animal described below.

5. I have read and understand the foregoing and voluntarily sign this Animal Adoption Form with full knowledge of its significance.

Species_____________________________ Breed or Type ________________
Identifying Marks/ Color ___________________________________________
Sex _________________ Age _____________________ Weight ________________
Vaccination History of Animal:

Medical/Behavioral Information:

___________________________________________________________________
Person Adopting Animal (Print) _________________________________________
Signature ___________________________ Date of Acquisition ___________________
Address __________________________________________________________________
Telephone ____________________________

For dog and cat dispositions only the Animal Welfare Act requires the following additional information:
Method of transportation (circle)  Car    Truck Other (describe) ___________________________
Name of owner of vehicle ___________________ Drivers License (or State ID) Number _______________________
Vehicle License Number/State ____________________________
University of Cincinnati
Institutional Animal Care and Use Committee

Addition of a co-Principal Investigator to an Approved Protocol

This form is to be used to add a co-Principal Investigator to an IACUC-approved protocol. Please reference IACUC Policy #009 for more information (http://www.med.uc.edu/iacuc/content/policies.cfm).

- Handwritten forms will not be accepted.
- If an Addition of Personnel form for the co-PI is not on file with the protocol, a completed form must be submitted with this form.

Protocol Number:

Principal Investigator:

Name of co-PI to be Added:

Co-PI's Department:

Co-PI's Mail Location:

Co-PI's Office Phone:

Co-PI's Lab Phone:

Co-PI's Emergency Phone or Pager:

Co-PI's Fax Number:

Co-PI's Email Address:

Principal Investigator's Endorsement:
I have reviewed this addition of Principal Investigator and endorse its submission.

Signature: __________________________ Date:

Endorsement of co-PI to be added:
I understand that I am responsible to ensure that this project is carried out as described in this protocol. I understand that changes in the experimental design or procedures must be approved by the IACUC before they are implemented and that failure to abide by the protocol may result in suspension of my animal use privileges.

I understand that all personnel must read and understand the procedures described in the protocol and be trained in the specific procedures that they will perform. Additionally, all personnel must have ready access to the protocol.

Signature: __________________________ Date:
Satellite Housing Request

Scientific justification is required to house animals in areas outside of a vivarium. Prior IACUC inspection and approval is required. Please reference IACUC Policy #026 to determine if your area is considered satellite housing. The area must comply with IACUC Policy #012.

- Only one room may be listed on the form.
- Only one protocol may be listed on the form.
- Handwritten forms will not be accepted.

LAMS staff must observe animals in the satellite housing area at least once a week. Charges may be incurred for this service. Prior arrangements must be made with LAMS if LAMS staff is to provide services beyond weekly observation, such as changing cages or sanitizing the area. Both LAMS and IACUC must have independent access to the area referenced prior to approval.

Date:

Principal Investigator: Protocol Number:

Area where animals will be housed: Building- Room-

What species will be housed in this area?

Please provide scientific justification why animals must be housed outside of a vivarium:

The area must maintain temperature and humidity in accordance with the Guide for the Care and Use of Laboratory Animals. The acceptable range of relative humidity is 30 to 70%. Recommended temperature ranges by species are noted on page 32. If the area cannot maintain temperature and humidity within the acceptable ranges on a daily basis, please explain. The University’s Attending Veterinarian must then evaluate this environmental exception to determine if it should have any detrimental affect the health of the animals.

☐ Not applicable, area maintains recommended temperature and humidity

☐ Area does not maintain recommended temperature and humidity on a daily basis (explain):

Attending Veterinarian’s Endorsement (not required if area maintains temperature and humidity):
I have evaluated the environmental conditions of this area and determined it should not have any detrimental affect to the health of the animals. This will be monitored on a continual basis.

Signature: ___________________________ Date:

Principal Investigator’s Endorsement:
I understand that IACUC approval must be gained prior to housing animals overnight in the area referenced above. I have ensured both LAMS and IACUC have independent access to the area referenced above. I understand that LAMS staff will check the animals in this area at least once a week and a charge may be incurred. I will ensure daily observations of animals held in this area are documented in the daily log every day, including the day animals are removed from the area.

Signature: ___________________________ Date:
Satellite Housing Specifications

Principal Investigator: Protocol Number:

Area where animals will be housed: Building- Room-

Name of Emergency Contact: Emergency Phone Number or Pager:

Maximum time period a given animal will be housed in this area:
☐ Colony will be permanently maintained in this area ☐ Overnight one night only ☐ Other:

Maximum number of cages that will be held in this area (cages may not be stacked, shelving must be used):

The following information is required for the University’s AAALAC Program Description. Please contact the IACUC office if you need assistance. Review LAMS standard husbandry SOPs for species-specific recommendations.

Light measurement in foot candles:

Photoperiod:

Description of Primary Enclosure (e.g. shoebox cage):

Dimension of Primary Enclosure in inches:

Frequency of Cleaning Primary Enclosure: ☐ Not applicable, overnight housing only

Description of Food: Type- Source-

Description of Bedding: Type- Source-

Description of Secondary Enclosure (e.g. chemical fume hood):

Description of Sanitization of Secondary Enclosure: Frequency- Method-

Air Source: ☐ 100% Fresh Air ☐ Recirculated- Rate:

Air treatment system: ☐ None ☐ HEPA ☐ Coarse filter or charcoal

Air changes per hour: Air pressure differential to room or hall: ☐ Positive ☐ Negative

Are humidity controls utilized in this area? ☐ No ☐ Yes (describe):
### General Information

<table>
<thead>
<tr>
<th>Date:</th>
<th>Department:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator:</td>
<td>Contact Name:</td>
</tr>
<tr>
<td>Protocol Number:</td>
<td>Contact Phone Number:</td>
</tr>
<tr>
<td>Species:</td>
<td>Mail Location:</td>
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<table>
<thead>
<tr>
<th>Drug/Class</th>
<th>Source or Purity</th>
<th>Sterilization Method (.22F, .45F, A)</th>
<th>Storage Method (F, R)</th>
<th>Shelf Life (weeks/months)</th>
<th>Justification (N,I,O)</th>
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Addendum B: Use of Non-Pharmaceutical Grade Compounds

Form Instructions

❖ General Information
  • List the protocol number, principal investigator, species, etc.

❖ Drug/Class
  • List each individual drug or class of drugs you wish to use in non-pharmaceutical grade formulation

❖ Source or Purity
  • Examples: Reagent grade, experimental compound, etc.

❖ Sterilization Method
  • List the method of sterilization when constituting non-pharmaceutical grade compounds:
    - .22F= .22µm syringe filter
    - .45F= .45µm syringe filter
    - A= Autoclave Sterilization
    - If another sterilization method is used, please list in the table

❖ Storage Method
  • List the method in which non-pharmaceutical grade compounds will be stored:
    - F= Refrigeration Storage
    - R= Room Temperature Storage
    - If another storage method is used, please list it in the table
    - Please note: The storage method will directly affect shelf life

❖ Shelf Life
  • List the expected shelf life of the reconstituted/prepared drug:
    - e.g. 2 weeks, 8 weeks, 6 months, etc.

❖ Justification
  • Provide justification for the use of non-pharmaceutical grade compounds:
    - N= Not Available: The drug you wish to use is an experimental compound and/or is not available in pharmaceutical grade
    - I=Incorrect Formulation: The drug you wish to use is the incorrect concentrate, contains confounding additives, etc.
    - O= Other: If there is another reason you wish to use a non-pharmaceutical grade compound, please list ‘O’ in the box and describe in the Supplementary Justification Page
# Addendum B: Use of Non-Pharmaceutical Grade Compounds

<table>
<thead>
<tr>
<th>Drug/Class</th>
<th>Source or Purity</th>
<th>Sterilization Method $(.22F, .45F, A)^{(1)}$</th>
<th>Storage Method $(F, R)^{(2)}$</th>
<th>Shelf Life $(weeks/months)$</th>
<th>Justification $(N,I,O)^{(3)}$</th>
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</table>

(1) $.22F = 22\mu m$ syringe filter \ $.45F = 45\mu m$ syringe filter \ A = Autoclave Sterilization

(2) F = Refrigeration Storage \ R = Room Temperature Storage

(3) N = Not Available \ I = Incorrect Formulation \ O = Other (Please attach justification)

Principal Investigator or co-Principal Investigator’s Endorsement:
The request is based on scientific justification necessary to conduct the studies in my approved IACUC protocol. I will ensure all approved personnel listed on my protocol are notified of this addendum.

Signature: _______________________________________________ Date: __________________________
## Supplementary Justification Page

<table>
<thead>
<tr>
<th>GENERAL INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator:</td>
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</table>

*Additional justification for use of non-pharmaceutical grade compounds:*
Satellite Procedure Location Request

JUSTIFICATION IS REQUIRED IF A LIVE VERTEBRATE ANIMAL MUST BE MANIPULATED IN AREAS OUTSIDE OF LAMS CORE FACILITIES. PRIOR IACUC INSPECTION AND APPROVAL IS REQUIRED IF SURVIVAL SURGERY WILL BE PERFORMED IN THE ROOM. THIS FORM MAY NOT BE USED TO REQUEST SATELLITE HOUSING (USE FORM #F-02). WHILE MULTIPLE ROOMS MAY BE LISTED, PLEASE SUBMIT ONE FORM PER PROTOCOL. HANDWRITTEN FORMS WILL NOT BE ACCEPTED.

ALL PERSONNEL EXPOSED TO ANIMALS MUST BE ENROLLED IN THE UNIVERSITY’S OCCUPATIONAL HEALTH AND SAFETY PROGRAM. PLEASE ATTACH A LIST OF ALL PERSONNEL THAT MAY BE EXPOSED TO ANIMALS. NOTE IN AREAS THAT ARE NOT CONTAINED (I.E. AREAS THAT DO NOT HAVE DOORS) ALL PERSONNEL IN THE AREA MUST BE LISTED. THIS MAY INCLUDE PERSONNEL THAT ARE NOT WORKING WITH ANIMALS. FOR EXAMPLE, IF LIVE VERTEBRATE ANIMALS WILL BE MANIPULATED IN THE CVC OR THE VONTZ, ALL PERSONNEL THAT ACCESS THAT AREA MUST BE LISTED.

Date:

Principal Investigator:       Protocol Number:

Department:       Mail Location:

Area(s) where live animals will be manipulated (Building and Room Number):

NOTE: IF WORKING IN THE VONTZ OR CVC, PLEASE LIST EACH SPECIFIC BENCH NUMBERS.

Please check all species that may be manipulated in this area:

☐Mice       ☐Rats       ☐Hamsters       ☐Frogs, salamanders, etc.       ☐Other:

Please provide justification why live vertebrates animals must be removed from LAMS core facilities:

Will survival surgery be performed in any of the above-mentioned rooms? ☐No       ☐Yes

If yes, which room(s)?

Principal Investigator or co-Principal Investigator’s Endorsement:
If overnight housing will occur in any of the rooms listed above, I ensure form #F-02 has been submitted. I ensure that all personnel who could be exposed to animals in this area are in the attached list.

Signature: ___________________________ Date:
Request for Limited Modification

- THIS FORM SHALL BE USED TO REQUEST A MODIFICATION TO APPROVED PROTOCOL AS DESCRIBED IN IACUC POLICY #023.
- ALL OTHER MODIFICATIONS REQUIRE REVISION AND RESUBMISSION OF THE CURRENTLY APPROVED IACUC PROTOCOL.
- CONTACT A LAMS VETERINARIAN OR IACUC OFFICE STAFF MEMBER IF YOU ARE UNSURE IF THE REQUEST CAN BE PROCESSED AS A LIMITED MODIFICATION.

Submit one form per protocol. Handwritten forms will not be accepted.

Note: Modifications are not considered approved until official approval notification is received from the IACUC office.

Date:
Principal Investigator:
Department: Mail Location:
Protocol Number: Species: Mouse Rat Other:
Describe the modification:

Principal Investigator or co-Principal Investigator's Endorsement:
The requested modification applies to the approved IACUC protocol noted above. The request does not affect the pain category, the number of animals used, or the overall scientific justification or purpose of the protocol. I will ensure all approved personnel listed under the protocol are notified of this modification.

Signature: __________________________ Date: __________

LAMS Veterinarian's Endorsement:
I approve the modification described above. The above change does not affect the pain category, the number of animals, or overall scientific justification or purpose of the protocol. I have reviewed the approved protocol to ensure no complications arise from the approval of this modification, and that it is consistent with LAMS husbandry practices and policies. I have evaluated any additional training requirements generated by this modification and have discussed them with the PI.

Signature: __________________________ Date: __________

Safety Review Required
- EH&S
- IBC
- RSO
Request for Temporary Transfer of USDA Species between UC Approved IACUC Protocols

- THIS FORM SHALL BE USED TO REQUEST TRANSFER OF USDA COVERED SPECIES BETWEEN UC APPROVED IACUC PROTOCOLS AS DESCRIBED IN IACUC POLICY #029.
- THE FOLLOWING QUALIFICATIONS APPLY
  - Multiple major survival surgeries may not be performed on the animal being transferred unless it has been explicitly described and justified in the original protocol.
  - The original project number will continue to be billed by LAMS for the per diem charges. (i.e. the project number cannot be changed if using this process)
  - Pain category may not be increased from a less painful/distressful to a more painful/distressful category. E.g. from category C to D.
  - If research is grant supported, the collaborator’s protocol number must be submitted to Sponsored Research Services.
  - A copy of this form must be maintained in the animal’s medical record.

SUBMIT ONE FORM PER TRANSFER. HANDWRITTEN FORMS WILL NOT BE ACCEPTED.

NOTE: TRANSFERS ARE NOT APPROVED UNTIL A LAMS VETERINARIAN’S SIGNATURE IS OBTAINED.

Date: ____________________________  PI From: ____________________________  PI To: ____________________________

Protocol # From: ____________________________  To Protocol #: ____________________________  Species: ____________________________

Date and Duration of Transfer: ____________________________

Previous Surgeries Performed on the Animals: ____________________________

Proposed Surgeries or Procedures: ____________________________

ID Numbers of Animals to be transferred: ____________________________

Principal Investigator or Lab Representative Endorsement:

The requested transfer applies to the approved IACUC protocols noted above. The request follows the qualifications listed above and in IACUC policy #029.

Signature: ____________________________ Date: ____________________________

LAMS Veterinarian’s Endorsement:

I approve the temporary transfer as described above. The request follows the qualifications listed above and in IACUC policy #029.

Signature: ____________________________ Date: ____________________________
Addendum A: Withholding Enrichment or Single Housing

Please list the studies involved and the periods in which enrichment will be withheld.

Please list the studies involved and the periods in which single housing is required.

Principal Investigator or co-Principal Investigator’s Endorsement:
The request is based on scientific justification necessary to conduct the studies in my approved IACUC protocol. I will ensure all approved personnel listed on my protocol are notified of this addendum.

Signature: ___________________________ Date: ___________________________
Storage of Diets Outside LAMS

PLEASE USE THIS FORM FOR APPROVAL TO STORE DIETS OUTSIDE LAMS (See IACUC Policy #33 Storage of Diets Outside LAMS).

PLEASE SUBMIT ONE FORM PER PROTOCOL PER LOCATION. HANDWRITTEN FORMS WILL NOT BE ACCEPTED.

Date:

Principal Investigator:        Protocol Number:

Department:       Mail Location:

_________________________________________________________________________________________________

Area where the diet(s) will be stored:   Building:            Room:

Storage Conditions:  Is temperature monitored daily? Yes □ No □

Room Temp (< 21°C)  □  Refrigeration (4°C to 8°C) □  Walk-in Cooler/Freezer □  Conventional Freezer/Refrigerator □

Freezer (-18°C to -22°C)  □

Emergency Contact:            Emergency Contact Telephone:  

_________________________________________________________________________________________________

Storage Conditions:
√ Custom diets expire 6 months after date of manufacture and should be promptly discarded when the expiration date is reached.

√ Diets must be stored off of the floor on pallets, racks, or carts.

√ Area must be cleaned regularly and free from clutter

√ Diets must be tightly sealed in original shipping container or stored in a sealed vermin proof container.

√ Diets must not be stored in refrigerators/freezers or rooms with any type of chemicals or biological agents.

_________________________________________________________________________________________________

Principal Investigator or co-Principal Investigator’s Endorsement:
This disclosure for diet storage location is based on scientific best practices for the preservation of nutritional ingredients or test substance compounds in conjunction with manufacturer’s suggested storage conditions.

Signature: ______________________________________________________ Date: