



Animal Care Matters

An IACUC and ARF Newsletter

From the IACUC Administrator

Elizabeth Thames

The IACUC has issued two new policies and OLAW (Office of Laboratory Animal Welfare) has re-issued an existing policy. The first IACUC issued policy deals with anesthetic systems (see definition below). If you have an anesthetic system in your lab and you have not contacted ARF or myself, please do so. All anesthetic systems must be registered with the IACUC and ARF before they are used for animal work. The second policy (see page 3) deals with the use of expired materials and non-pharmaceutical grade drugs. During the semi-annual inspections, the IACUC will be looking for items listed in these two policies. The OLAW policy explains the use of NIH monies when animals are involved. Please read the policy carefully.

Calibration and Inspection of Anesthetic Systems

An anesthetic system is defined as the whole anesthesia delivery apparatus including but not limited to the vaporizer, gas monitors, tubing and F/AIR charcoal canisters. All anesthetic systems used for animal survival surgical procedures must be registered with the Institutional Animal Care and Use Committee and Animal Resource Facility (ARF). Anesthetic systems must be inspected and calibrated once every three years.

The F/AIR charcoal canister (anesthesia gas filter) is specifically designed to remove waste anesthetic gases such as Isoflurane and Enflurane from the operating environment. These canisters have a finite usable life span and investigators must be aware of the total use of a canister to assure that it is still functional.

The manufacturer states that a single F/AIR canister can remove 50 grams of halogenated anesthetic waste. The canisters should be checked before and after each use to determine if it is still functional. The use should be recorded on the canister in the space provided.

Procedure:

1. Weigh the canister when it is initially put into use and record the weight in the table provided.
2. After each use, reweigh the canister and record the weight (it will be higher than the start weight).
3. The canister should be replaced when the weight has increased by **50 grams**.



Winter/
Spring
2007

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NOTES

1. Please submit all AUPs and amendments (including revisions) electronically to ia-cuc@gwm.sc.edu. Only a hard copy of the signature page needs to be sent to ARF by regular mail.
2. Please use the correct AUP number on the animal order form. Using the wrong number will cause a delay in your order being completed.
3. Facility access cards will only be issued to individual listed on approved AUPs. New personnel must be added to an approved AUP via submission of an amendment.

I would like to begin by welcoming Dr. Shayne Barlow, DVM, Ph.D., DACLAM, and his family to USC. Dr. Barlow received his D.V.M. degree from Louisiana State University (1998) and completed specialized training in Laboratory Animal Medicine at the University of Alabama-Birmingham (1998- 2002). He received a Ph.D. in Molecular and Cellular Pathology from the University of Alabama- Birmingham (2002). He is a Diplomate of the American College of Laboratory Animal Medicine (2004) and has over 9 years of experience in laboratory animal medicine.

The University of South Carolina recently completed an AAALAC International site visit. AAALAC stands for the Association for Assessment and Accreditation of Laboratory Animal Care International. AAALAC is a non-profit private organization that promotes the humane treatment of animals in science through voluntary accreditation and assessment programs. All accredited facilities must have a site visit once

every three years. During the last site, USC was recommended for continued full accreditation. USC has maintained its AAALAC accreditation since 1984. I would like to thank Dr. Robert Beattie, Ms. Peg Rentz, the IACUC and all of the animal care technicians for a job well done.

Some numbers that might be of some use to you are:

- USC's PHS/NIH Assurance No. A3049-01
- USDA Registration No. 56-R-003
- AAALAC—continued accreditation since 1984
last accreditation November 26, 2006



Quick Animal Facts –Mouse

Body temp.: 35.8-37.6°C (96.4-99.7°F)

Heart rate (per minute): 328– 780

Weight, adult male: 25-40 g

Weight, adult female: 25-40 g

Weight, newborn: 1 g

Water consumption: 4-7 ml

Food consumption: 3-6 g

Life span: 1-3 years

Sexual maturity: 40– 60 days

Estrous cycle freq.: 4-5 days

Duration of estrus: 10 hours

Gestation period: 19-21 days

Average litter size: 6-12

Begins eating dry food: 12-14 days

Age at weaning: 21 days

Breeding life: 8 months

Common Bleeding Sites:

- Saphenous vein
- Tail vein
- Retro-orbital sinus (under general anesthesia)
- Heart (terminal procedure under general anesthesia only)

Potential IV Injection Sites:

- Tail vein
- Retro-orbital sinus

Needle sizes and injection volumes:

- IV: Lateral tail vein, 0.2 ml, <25 gauge
- IP: 2-3 ml, < 21 gauge
- IM: Quadriceps/ posterior thigh, 0.05 ml, <23 gauge
- SC: Scruff, 2-3 ml, <23 gauge



...New Policies - Continued

The Use of Expired Material and Non-Pharmaceutical Grade Drugs

The use of expired medical materials such as drugs, fluids, or sutures on vertebrate animals is not considered to be acceptable veterinary practice and does not constitute adequate veterinary care as required by the regulations (Animal Welfare Act). All expired medical materials must either be disposed of or segregated into an appropriately labeled, physically separate location from non-expired medical materials.

For acute terminal procedures, expired medical materials may be used if their use does not adversely affect the animal's well-being or compromise the validity of the scientific study. Proper anesthesia, analgesia, and euthanasia are required for all such procedures. Drugs administered to relieve pain or distress and emergency drugs must not be used beyond their expiration date.

Pharmaceutical-grade medications are to be used whenever they are available, even in acute procedures. Non-pharmaceutical-grade chemical compounds should only be used in vertebrate animals after specific review and approval by the IACUC for reasons such as scientific necessity or non-availability of an acceptable veterinary or human pharmaceutical-grade product. Cost savings alone are not an adequate justification for using non-pharmaceutical-grade compounds in vertebrate animals.

OLAW Policy

The Office of Management and Budget Cost Principles and the NIH Grants Policy Statement (NIHGPS) do not permit charges to grant awards for the conduct of animal activities during periods of time that the terms and conditions of the NIHGPS are not upheld. Specific situations under which charges are not allowable are:

1. The conduct of animal activities in the absence of a valid Assurance on file with OLAW.

USC has a valid Institutional Assurance on File with OLAW

2. The conduct of animal activities in the absence of valid IACUC approval of the activity. Absence of IACUC approval includes failure to obtain IACUC approval, expiration, or suspension of IACUC approval.

In order to charge animal care costs to an NIH grant, USC investigators must have an approved and valid Animal Use Proposal (AUP). In the absence of a valid AUP, these costs must be paid with other institutional funds.

In order to meet the above federal requirements, Animal Resource Facilities (ARF) will contact the Principal Investigator (PI) and the corresponding departmental Business Manager to procure an appropriate non-NIH fund number when:

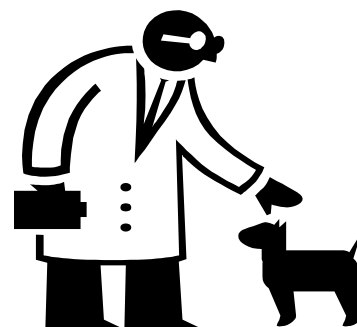
1. A PI does not have IACUC approval to use animals, but animals are being maintained by ARF and charged to an NIH grant account.

2. The PI allows an approved AUP to expire, but intends to maintain the animals until an AUP is approved.

3. The activities on a previously approved AUP have been suspended by the IACUC.

It will be the responsibility of the PI and the department to ensure that per diem charges will be covered by non-NIH funding. If this can not be accomplished, the animals will not be allowed to remain in a University of South Carolina animal facility. The PI and the department will be responsible for notifying Contract and Grant Accounting on all matters related to these requirements.

Questions related to this policy and USC procedures should be directed to Elizabeth Thames, IACUC Administrator, at 7-8564.



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We're on the Web !!
[http://uscm.med.sc.edu/
ARF/index.htm](http://uscm.med.sc.edu/ARF/index.htm)

Animal Care Matters is published four times a year by the Institutional Animal Care and Use Committee (IACUC) and Animal Resource Facilities (ARF) of the University of South Carolina (USC).

The IACUC is an institutional body appointed by the USC President to oversee the program for the humane care and use of all vertebrate animals used for research, teaching, and training. Any investigator who intends to use laboratory animals must submit an Animal Use Proposal (AUP) to the IACUC for its review and approval.

The ARF provides care and maintenance of all animals used by investigators. Preventive care is provided through vendor animal health evaluations, quarantine programs, and sentinel animal diagnostics. Special care and services can be provided upon request.

Comments and submissions for **Animal Care Matters** are welcome and should be directed to Elizabeth Thames, IACUC Administrator, at 777-8106 or elthames@gwm.sc.edu.

**IACUC Meetings
2007**

Meeting	AUP
Date	Deadline
Jan 4	Dec 20
Feb 1	Jan 24
Mar 1	Feb 21
Apr 5	Mar 28
May 3	Apr 25
Jun 7	May 30
Jul 12	Jun 27
Aug 2	Jul 25
Sep 6	Aug 29
Oct 4	Sep 26
Nov 1	Oct 24
Dec 6	Nov 28

IACUC MEMBERSHIP**CHAIRMAN**

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