

Institutional Animal Care and Use Committee
Freimann Life Science Center
Policy on the Reuse of Laboratory Animals

Purpose

The purpose of this policy is to clarify the requirements for reuse of vertebrate animals, including those which have undergone a previous experimental procedure, retired breeding colony animals, and animals used in training and teaching. This policy has been developed to ensure compliance with the Animal Welfare Act and Public Health Service Policy, and to ensure humane care and use of vertebrate animals. The University of Notre Dame IACUC endorses and promotes the ethical use of animals in research and instruction. Fundamental to the ethical use of animals is the application of Refinement, Replacement, and Reduction alternatives as described by Russell and Burch. The Reduction alternative is defined as utilizing means which reduce the number of animals used. This includes, for example, the use of more robust statistical measures, reducing variability, and the appropriate reuse of animals.

Policy

1. Any USDA regulated species reuse must be approved by the IACUC through an amendment with an animal transfer form filled out and signed by an IACUC member with copies placed in the protocol files of all appropriate researchers. Animals may not be used for multiple major survival surgeries across protocols (one surgery in one protocol, and the second in a different protocol) unless:

- a. The Principle Investigator of the second protocol provides scientific justification for the major surgical procedure in their protocol;
- b. The use is approved by the IACUC in an amendment;
- c. An exemption from the USDA is obtained for animals covered by the Animal Welfare Act.

Animals that have been used for a single simple procedure (ex. blood sample or injection of saline or vehicle) may be transferred to another protocol with consultation with the Attending Veterinarian and after amendment approval from the IACUC.

2. USDA regulated animals that have not been used for research or instruction are only required to have the animal transfer form filled out by the Principle Investigator and signed by the Attending Veterinarian with copies placed in the protocol files of all appropriate researchers. The transfer can only be to an approved protocol that is authorized to use the species.

3. USDA non-regulated animals that are experimentally naïve (retired breeders, breeding colony culls, or extra animals from animal shipments) may be transferred to protocols approved for that species.

4. Animals that have been used for a single simple procedure (e.g. a blood sample or injection of saline or vehicle) may be transferred to another protocol with consultation with the Attending Veterinarian and after amendment approval from the IACUC.

5. Animals which have already been used on a study, especially when the well-being of the animal(s) has been compromised, should not be reused. Examples include, but are not limited to, studies that may result in severe or chronic pain or that cause significant alterations in the animals' ability to maintain normal physiology, or adequately respond to stressors.

6. Training protocols will allow a maximum 4 procedures that produce momentary pain or distress per rodent per training session with a maximum of 3 training sessions. These procedures would include:

IP, IM, SC, ID or footpad injections with sterile saline
Retro-orbital, submandibular, saphenous, or femoral bleeds
IV tail vein or retro-orbital injections of sterile saline

The third training session should be scheduled as a terminal session to train on one of the following procedures:

Cardiac exsanguination
Euthanasia
Surgical procedures
Perfusion and/or tissue harvest

Training for manual restraint and using restraint devices may be repeated multiple times without requiring euthanasia.

7. Studies allowing the harvest of tissues post-mortem may use animals from other studies provided those animals do not require any additional manipulations, are not considered biohazardous, and with the consent of the Principal Investigator on whose protocol they reside.

8. The Animal Facility will perform the transfer once a copy of the animal transfer is provided. This will include changes to the computer database of animal records and the barcoded cage cards.

References:

1. Public Health Service. Policy on Humane Care and Use of Laboratory Animals (US Department of Health and Human Services, Washington, DC, 1986; reprinted 2002).
2. ARENA/OLAW. Institutional Animal Care and Use Committee Guidebook 2nd ed. (National Institutes of Health, Bethesda, MD, 2002).
3. Guide for the Care and Use of Laboratory Animals, NRC, 2011
4. USDA APHIS Animal Care Policy #14, "Major Survival Surgery, Single vs. Multiple Procedures"
5. Silverman, Gerald, One animal, two protocols—an appropriate application of the 3Rs? *Lab Animal*. 2007; 36(3).
6. Brown, P., Gipson, C. Collaborative studies and animal reuse: a word from OLAW and USDA, *Lab Animal*. 2008 Feb; 37(2):63.