POLICY

Investigators may need to maintain breeding colonies for a variety of reasons. A breeding colony may be required for (not an all inclusive list of reasons):

- Breeding genetic lines that are not commercially available
- Intercrossing genetically modified animals to produce specific genotypes required for an experimental protocol
- Experiments involving specific age or weight requirements that can not be fulfilled by a commercial source

The IACUC’s role for oversight includes ensuring that the need for a breeding colony has been established based on scientific or animal welfare concerns (cost alone is not a valid justification), that the procedures used in the breeding colony are evaluated and approved by the IACUC on a regular basis, that there is a mechanism for tracking animals, and the standards of care and animal well-being for the animals in the breeding colony are consistent with current policies and regulations.

All activities involving the breeding of rodents must be reviewed and approved by the IACUC via submission of an IACUC Application for Rodent Breeding Colony or an IACUC Application for Animal Research/Testing/Training with Addendum to Experimental Application-Breeding Procedures prior to establishment of a breeding colony.

REQUIREMENTS


PROCEDURE

1.0 The IACUC Application for Rodent Breeding Colony is to be used when animals will be bred TO PRODUCE WEANED PUPS for transfer to an IACUC approved research protocol(s).
   1.1 This application only covers the breeding of animals and does not cover the use of animals for experiments.
   1.2 A separate IACUC Application for Animal Research/Testing/Training must have been previously approved or be submitted to cover the experimental use of bred animals.
   1.3 When completing an IACUC Application for Animal Research/Testing/Training, list the source of animals as being “transferred” from this breeding protocol.
   1.4 A single application can be used to establish and maintain various genetic lines.
   1.5 A single application can supply animals for multiple research protocols.
   1.6 A separate application must be completed for each species to be bred.
   1.7 Animals from a breeding colony protocol that will be utilized in an animal research protocol must be properly transferred to the animal research protocol.
   A. At UNMC, transfers must be completed via the CMMS system at rss.unmc.edu. Contact Comparative Medicine at 9-4034 for assistance.
   B. At UNO, contact the Animal Care Coordinator at 402-554-2943.
2.0 The Addendum to Experimental Application-Breeding Procedures to be used when the experimental design includes the need to breed animals because (not an all-inclusive list):

2.1 You need to generate pregnant females to collect embryonic/fetal tissue.
2.2 Experimental procedures will be performed on the pregnant female.
2.3 You need to generate suckling pups to perform experimental work.
2.4 You need to generate suckling pups for tissue/blood collection.
2.5 Complete an IACUC Application for Animal Research/Testing/Training to address the experimental procedures to be done. Complete and attach the Addendum to the IACUC Application to cover the breeding procedures.

A summary is shown below:

3.0 Weaning-Most strains are to be weaned at 21 days. Exceptions for prolonged weaning may include runt mice or transgenic strains that have small pups that require extended maternal care.
3.1 Exceptions to the 21 days weaning age must be reviewed and approved by the IACUC.

4.0 Animal Identification-The method/s of rodent identification must be reviewed and approved by the IACUC.
4.1 Adherence to the Policy for Rodent Identification is required.
4.2 A Standard Operating Procedure for Rodent Identification Techniques is available.

5.0 Animal Genotyping-Generation of mice may require genetic analysis. The method/s of tissue collection must be reviewed and approved by the IACUC.
5.1 Adherence to the Policy for Rodent Genotyping is required.
5.2 A Standard Operating Procedure for Rodent Genotyping Techniques is available.

6.0 Cage Density Management-Space recommendations as provided in the Guide for Care and Use of Laboratory Animals (2011) are the default standard for appropriate caging densities.
6.1 Breeding Mice-Adherence to the Policy for Cage Population Densities for Breeding Mice is required.

7.0 Animal Usage Records
7.1 Records are to be maintained in such a manner as to track offspring and their ultimate disposition.
7.2 Information would include sire/dam number, date and number born, date and number weaned and ultimate disposition of animals.

A. Disposition of animals may include euthanized (document reason), died, used in experiment, transferred to another protocol, or retained for breeding.
7.3 The records are subject to periodic and unannounced inspections by the IACUC, CM or UNO animal care staff, the Protocol Assessment Liaison (PAL), and other regulatory and accreditation agencies as necessary.
LINKS TO RELATED FORMS, RECORD LOGS, AND SOPS

- IACUC Application for Rodent Breeding Colony
- Addendum to Experimental Application-Breeding Procedures
- SOP on Rodent Genotyping Techniques
- SOP on Rodent Identification Techniques