

TITLE: IACUC POLICY ON RODENT BREEDING

PURPOSE: Standardize protocol requirements and breeding colony management.

REVIEW/REVISIONS: Permanent amendment/revisions to this policy must be presented to the IACUC for review before implementation and should be developed by the IACUC membership and/or University Animal Care management team members (such as the Breeding Supervisor).

EFFECTIVE DATE: December 2, 1999; **Revised/Re-Approved:** 12/7/00, 11/2/05, November 1, 2007

PERSON(S) RESPONSIBLE: University Animal Care and research personnel working with or managing rodent breeding colonies.

POLICY/PROCEDURES:

Records: With regard to records (i.e. protocol files and UAC population accounting):

Issue: Investigators include breeding procedures in experimental protocols not only making it difficult to provide accurate animal numbers, but also making it difficult to distinguish exactly which of the animals approved are being used in an experimental protocol.

Policy:

Protocols for breeding should be submitted separately from the experimental protocols for which the animals are being bred. All breeders and animals that cannot be used for an experimental protocol will be subtracted from the authorized animal numbers on the breeding protocol.

Animals from breeding colonies that are utilized in experimental protocols will be transferred to the experimental protocol and subtracted from the experimental protocol's authorized numbers.

Issue: There has been some question of when pups from the breeding colonies should be accounted for as an individual animal rather than one of a litter. The industry standard is to count pups as individuals upon weaning.

Policy:

Neo-natal and fetal pups which are utilized prior to birth or directly harvested from the dam for tissue collection will be counted with the dam as "litter" (1 dam + litter = 1 animal) under category 'A'. All other pups, pre-weaned and weaned, will count as individual animals and subtracted from the authorized numbers of the appropriate protocol.

General Husbandry:

Issue: If individual litters are not weaned in a timely manner, production of the breeding colony can be drastically affected by overcrowding, cannibalism, and a general deterioration of cleanliness in individual pans housing multiple unweaned litters. University Animal Care has established breeding colony SOPs which assure breeding colony maintenance that is reasonably expected to avoid these problems.

Policy:

Ideally, investigators should utilize the services of University Animal Care to maintain their breeding colony. However, in the event an individual investigator wishes to maintain their own colony, and they have received authorization to do so during IACUC review of their breeding protocol, they must assure that litters are weaned in a timely and age appropriate manner (19-28 days depending on strain). That is, prior to or immediately after the birth of a new litter by the same dam. If UAC personnel find a new litter in a pan, they will separate the older litter and the investigator will be recharged for technician time. (See Enforcement Policy)

Harem breeding- No more than two females shall be housed together AND allowed to litter in a pan (cage). A maximum of three females can be mated with a male in a pan. However, one female must be removed from the pan before the other females begin to litter. No more than one litter will be allowed per pan. (See Enforcement Policy)



Breeding Protocols on “Hold” Status: (section added 12/17/04)

December 17, 2004 the IACUC made a directive to separate split out breeders on protocols that have either expired or been put on hold for other compliance reasons. Protocols may be put on hold for a number of reasons, including not filing Annual Status Reports or AHP checklist as well as going over approved animal numbers. When a protocol has been put on “hold” the following will take place:

1. When the IACUC Office informs the PI that their protocol has been placed on hold, they will also be informed that:
 - * Any and all breeding cages will be separated by UAC at their convenience (next change day).
 - * When feasible, animals will be moved into separate locked rooms that the researchers will not have access to.
 - * The animals will not be rebred until the issue causing the hold state has been rectified with the IACUC.
 - * UAC has the ability to recharge for the labor associated with splitting/recombining the animals, as well as any appropriate charges for moving to/use of a new room.
2. The IACUC will notify UAC via the dedicated Share Point web page and/or email when a protocol has been placed on hold. The notification will contain the PI’s name, protocol number, date that the protocol was placed on hold and the reason for the change in status. A notation to “begin hold” will also be given.
3. The IACUC will notify UAC via the dedicated Share Point web page and/or email when the hold has been lifted. The notification will include the PI’s name, protocol numbers, date that the hold was removed and a notation “end hold”.
4. UAC will use the web page to note when the animals have been split and/or moved and when they have been recombined so that the IACUC can have a record of the activity

Note: *Breeding Protocols that have expired before triennial review and approval has been finalized should be handled in the same manner as “on Hold” protocols.*

ENFORCEMENT:

- 1) UAC personnel will intervene as necessary to enforce the standards of the policy and the investigator will be recharged for services as appropriate.
- 2) The IACUC will be notified of policy violations.
- 3) When Breeding Colony Protocols are reviewed, the IACUC will review the compliance record of the investigator group prior to approval.
- 4) Investigators who repeatedly violate the policy and allow their cages to become overcrowded (more than one litter per pan at a time) will be required to go to single breeding pair housing and will be responsible for the accompanying costs of doing so.

JUSTIFICATION:

With a growing number of investigators utilizing breeding colonies to develop/obtain appropriate animal models, it has become increasingly difficult not only to assure that all animals are being managed appropriately, but also to accurately account for animal numbers both in the protocol files and in the University Animal Care system. In an effort to address these issues the following standards have been established.