MOUSE CAGE DENSITY POLICY

Overcrowded mouse cages represent a significant animal welfare concern. Such cages are noncompliant with Public Health Service (PHS) Policy and our Assurance to PHS. *The Guide for the Care and Use of Laboratory Animals* states the PHS recommendations for housing densities. In order to standardize housing densities and prevent or eliminate the possibility of overcrowding within cages, the University's Animal Resource has adopted the following UCAR-approved policy. **Ventilated cages accommodate up to five adult mice. Static cages accommodate four adult mice in standard isolation (SI) and three adult mice using microIsolator technology (MIT) husbandry.** Cage densities exceeding these numbers represent clear policy violation.

Breeding

- The two breeding schemes permitted are:
    1. Monogamous pairing (1 male: 1 female) - this method is preferred to prevent overcrowding.
    2. Trio grouping (1 male: 2 females) - females must be placed in individual cages prior to parturition.

- Male and female mice should be separated after pregnancy confirmation to avoid post-partum insemination. A post-partum estrus occurs within 14 to 28 hours after parturition in mice.

- No more than two adult females and one litter of pups may be housed in a standard mouse cage without UCAR approval.

- The breeding strategy must be described in the UCAR protocol. This includes the breeding scheme, whether continuous or non-continuous breeding will occur and the weaning age of pups. Justification is required for any scheme other than monogamous and trio, for continuous breeding and/or for cage densities which exceed those described above.

Weaning

Investigators who choose to manage their own breeding colonies are responsible for timely weaning. Conventional mice are typically weaned at 21 days of age. The Animal Resource staff reports the date new pups are found in a log maintained in a binder in each mouse room. There is a separate log sheet for each investigator. The date when pups reach 29 days of age is calculated in the last column of the log. Litters not weaned before their 29th day of age will be reported to the investigator on day 29. DLAM will separate unweaned litters the following morning for a charge of $50.00 per cage. Delayed weaning protocols must be approved by UCAR with specification of actual weaning ages. Additionally, a special request must be submitted to the DLAM/Vivarium office identifying the group of mice approved for delayed weaning.

Where continuous breeding is approved, weaning of older litters between 17 and 20 days may be necessary. Should the presence of an older litter constitute a threat to a newborn litter, DLAM will notify the PI to separate immediately. In the absence of an

immediate response by the investigator, DLAM will wean the older litter for a fee. The investigator will be informed.

The DLAM veterinary staff provides training in the management of rodent colonies for investigators and their staff. DLAM also offers colony management services to those PIs who choose this option.

Overcrowded Cages

Overcrowded cages (> five adult mice in ventilated cages, > four adult mice in static SI cages and > three adult mice in static MIT cages) will be reported to investigator. DLAM will remove mice from overcrowded cages if the investigator has not done so by the day following notification. There is a fee for this service.

Identification

A completed cage card must be present on all mouse cages. Please refer to the Animal Resource website (http://www.urmc.rochester.edu/vivarium/Barcoding.cfm) for information on cage card activation. The information on the card should include: the investigator's name, the approved UCAR protocol number, an animal identification number (if applicable), the mouse strain/stock and the account number. Individual animal identification such as ear punches, ear tags, toe clips, tattoos and implantable transponders is encouraged, especially in cases where animals are group housed and/or appear identical. All methods of identification must be described in the animal protocol and approved by UCAR.

The DLAM and Vivarium staff is available to discuss any questions you may have regarding this policy. Please do not hesitate to contact the Animal Resource Office at X5-2651.