University of Vermont Institutional Animal Care and Use Committee Re-reviewed and Approved 1/23/17 no changes

Breeding and Weaning Policy

Breeding

The three 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.
- 3. "Harem" breeding: (1 male: up to four females) not to exceed maximum number of adults permitted per cage.

In trio or harem breeding situations, male and female mice should be separated after visual confirmation of pregnancy (usually possible around 14 days of gestation) to avoid post-partum insemination. A post-partum estrus occurs within 14 to 28 hours after parturition in mice.

Female rats MUST be examined for pregnancy and separated from other females at 14 to 16 days of gestation.

No more than two adult mice (including the male) and one litter of pups may be housed in a standard mouse cage without IACUC approval for an exception to the recommendations of the Guide.

The breeding strategy must be described in the IACUC 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 or for cage densities which exceed those described above.

Weaning

Investigators who choose to manage their own breeding colonies are responsible for timely weaning. Mice are typically weaned at 21 days of age. At this age, the pups are placed on the animal census by the Animal Care staff. All litters must be weaned by 24 days of age unless doing otherwise is justified in the animal protocol and is approved by IACUC. Delayed weaning protocols must be approved by IACUC with specification of actual weaning ages.

- Investigators will be notified by phone or email if litters have not been weaned at 24 days of age.
- Twenty-four hours after notification, these mice will be weaned by OACM staff.
- There is a fee for this service.

Where continuous breeding is used, weaning of older litters between 19 and 21 days may be necessary if a second litter is born.

- Should the presence of an older litter constitute a threat to a newborn litter, OACM staff will notify the PI to separate within 24 hours.
- In the absence of a timely response by the investigator, OACM will wean the older litter for a fee.
- The investigator will be informed.

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