Mouse Breeding Cage Policy

Overview

The Public Health Service (PHS) and the Association for Assessment and Accreditation of Laboratory Animal Care International (AAALAC) require that institutions base their animal care and use programs on the *Guide for the Care and Use of Laboratory Animals* (*Guide*).

The Hunter College Institutional Animal Care and Use Committee (IACUC) must comply with the national standards and recommendations contained within the *Guide* when establishing mouse cage populations. The IACUC has developed the following policy for mouse housing and breeding.

Definition of an Adult Mouse

An adult mouse is any mouse that is of weaning age or older and able to eat solid food and reach the water source.

Breeding

There are several breeding paradigms that are consistent with guidelines described in the Eighth Edition of the *Guide*. Investigators should choose the best breeding scheme for each particular project.

1. **Monogamous Pairing** of ONE (1) adult male and ONE (1) adult female.
   - Maximizes productivity of females by utilizing post-partum estrus; allows for the identification of the dam of the litter
   - Offers an extended nursing time for inbred strains known to be small and slow growing

2. **Breeding Trio** of ONE (1) adult male and TWO (2) adult females. **Pregnant females must be removed** and placed into another cage before parturition.
   - Provides an option for projects that require an intensive breeding program
   - Maximizes the progeny of an individual male but does not utilize post-partum estrus
   - There may be no litters born into cages with harem breeding
   - No more than one female with a litter can be housed in a single cage

Cage Density

According to current *Guide* recommendations, a female plus a litter, regardless of age, require 51 sq. inches of cage floor space. **Standard mouse ventilated and static cages** used at Hunter College typically have a floor area of 67-78 sq. inches and are designed for:

- a maximum of FOUR (4) adult mice or
- no more than 1 Male + 1 Female + 1 Litter (should be weaned at or before 28 days)

References

Public Health Service Policy on Humane Care and Use of Laboratory Animals (PHS Policy)

Guide for the Care and Use of Laboratory Animals, Eighth Ed. (*Guide*)