

## Office of Animal Care Compliance

Exception - Multiple Species Housing within Room

There is only one animal room each in the (b) (7)(F) and the current biohazard research program requires use of both mice and rat species at each biohazard risk level. For this reason, we need to house mice and rats in the same rooms. However, each species is segregated in separate ventilated cage/racks systems. Also, each room has approximately 15 fresh air changes per hour with no air recirculation. Supply air for each rack is drawn from the room through a High Efficiency Particulate Air (HEPA) filter and distributed to each cage. Subsequently all air from the cages is HEPA filtered and exhausted directly out of the building through the building exhaust ducting. In addition, procedures with mice and rats are not conducted at the same time and generally all procedures are conducted inside a BSC. The aforementioned building mechanical system, ventilated rack design, and methods significantly minimize the stress to animals that can be associated with exposure to interspecies odors or close proximity.

Semi-annual IACUC Review - October 3, 2019



## Office of Animal Care Compliance

The Institutional Animal Care and Use Committee have approved an exception to the standards and regulations of the Animal Welfare Regulations, reference: 3.28 (b) (3) (ii).

## Summary:

A hamster breeding colony with a proven breeding record going back more than 20 years has been approved to continually maintain pair or trio breeders (1 M: 1-2F) from the time of weaning until retired from breeding. The cage floor space provided is 221 square inches, and includes ample nesting material along with standard rodent bedding. The success of the colony has prompted this exception and it affects an average of 4 hamster breeder cages and associated litters.

For USDA FY2019, 45 hamsters were affected by this exception to the breeding standards.

## **Investigator Explanation:**

The method of establishing mating pairs or trios at the time of weaning has been utilized for years and determined by the Attending Veterinarian and Facility Supervisor to result in much less adult and neonatal injury or death than intermittently pairing of adult breeders. Although the USDA Animal Welfare Regulations (ref: 3.28 (b)(3)(ii)) states that a female hamster with litter should be housed with no other hamsters, our current housing method meets the intent of the regulation, which is to optimize enrichment while limiting aggression between breeders and minimizing cannibalism of neonates. Although there are references in the literature that cannibalism may increase when nursing hamsters are housed with other adult hamsters whose dupon the procedures and experience in the retrieved from Animal Research with stable literatory mating groups, "lifemates", we rarely have seen incident of cannibalism under this paradigm and early pairing enhances establishment of breeders that are compatible. If significant fighting between adults or cannibalism of young should occur, then the respective group will be separated and not used as breeders, unless there are other extenuating circumstances that may have contributed to such adverse outcomes.

Semi-annual IACUC Review - September 19, 2019