

## **Animal Care and Use Program**

# Policy: Social Housing of Multiple Species of Rodents in One Room

<b>Objective:</b>	To describe housing of two or more rodent species in one room.
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## **Background**

The Guide for the Care and Use of Laboratory Animals (2011, National Academy Press, Washington, DC) states "Physical separation of animals by species is recommended to prevent disease transmission and to eliminate anxiety and possible physiologic and behavioral changes due to interspecies conflict. Such separation is usually accomplished by housing different species in separate rooms, but in some instances it may be possible with cubicles, laminar-flow units, cages that have filtered air or separate ventilation, and isolators. It may also be acceptable to house different species in the same room-for example, two species that have a similar pathogen status and are behaviorally compatible (Pritchett-Corning et. al. 2009, pg. 111)." Therefore, when small numbers of different species are housed, to optimize space use, species separator differing from rooms may be appropriate. This is especially true if cage change order is prioritized.

#### **Policy**

- 1. Rats and mice can be housed under filter topped or ventilated rack caging in the same Animal Biosafety Level 2 (ABSL-2) or **general use rodent room** only when separate rooms are not available. **Whenever possible, ventilated rack caging is preferred for this purpose.** Gerbils, guinea pigs, chinchillas, rats and mice can be housed together in one or more ventilated racks when other rooms are not available. Hamsters can also be housed in this fashion assuming proper order of cage changes.
- 2. Personnel must strictly adhere to ABSL-2 practices. Regardless, all animal manipulations must be conducted within a certified Class II biological safety cabinet or equivalent change station as warranted by the situation.
- 3. When warranted, rodent cages must contain biohazard markings, and a biohazard sign must be posted at the entrance to the room identifying: the infectious agent(s) in use; protective clothing to be worn; and any special requirements for entry (e.g. immunization or respirators, the principal investigator's name and telephone number, and the name and telephone number of the facility supervisor.
- 4. The research staff must notify the Director, Laboratory Animal Resources that an ABSL-2 experiment or an experiment involving any other hazard is taking place so that the room will be appropriately posted with biohazard information and the Vivarium staff notified of the hazard. Use of all hazardous materials must be approved by the IACUC and IBC prior to study initiation.

## References

1. Calvo-Torrent A, Brain PF, Martinez M. Effect of predatory stress on sucrose intake and behavior on the plus-maze in male mice. Physiol Behav. 1999 Aug;67(2):189-96.

- 2. Belzung C, El Hage W, Moindrot N, Griebel G. Behavioral and neurochemical changes following predatory stress in mice. Neuropharmacology. 2001 Sep;41(3):400-8.
- **3.** Hebb AL, Zacharko RM, Dominguez H, Laforest S, Gauthier M, Levac C, Drolet G. Changes in brain cholecystokinin and anxiety-like behavior following exposure of mice to predator odor. Neuroscience. 2003;116(2):539-51
- 4. Yang M, H Augustsson, CM Markham DT Hubbard, DWebster, PM Wallab, RJ Blanchard and DC Blanchard, The rat exposure test: a model of mouse defensive behaviors. 2004 Physiology & Behavior, 81 (3): 465-473
- **5.** Pritchett-Corning KR, FT Chang, MFW Festing. 2009. Breeding and Housing Laboratory Rats and Mice in the Same Room Does Not Affect the Growth or Reproduction of Either Species.
- **6.** National Research Council. *Guide for the Care and Use of Laboratory Animals: Eighth Edition.* Washington, DC: The National Academies Press, 2011.

# **Revision History**

Approved September 24, 2012 Re-approved May 18, 2015; April 23, 2018; January 25, 2021 Administrative changes September 20, 2022