POLICY

The majority of animals used in biomedical research, testing, and teaching are social species. Because appropriate social interactions are essential to normal development and wellbeing of these species, the Animal Welfare Act and The Guide for the Care and Use of Laboratory Animals (The Guide) detail basic behavioral management expectations in the broad areas of structural environment, social environment, and activity. An appropriate animal housing space or enclosure should account for species-specific social behavior.

Social housing will be considered the default method of housing unless otherwise justified based on social incompatibility resulting from inappropriate behavior, veterinary concerns regarding animal well-being, or scientific necessity approved by the IACUC. A considerable body of evidence indicates that housing naturally sociable animals (e.g., rats, mice, dogs, primates) in solitary conditions can result in stress and harm. Not all members of a social species, however, are necessarily socially compatible. When necessary, single housing of social animals should be limited to the minimum period necessary and, where possible, visual, auditory, olfactory and, depending on the species, protected tactile contact with compatible conspecifics should be provided. In the absence of other animals, additional enrichment should be offered, such as safe and positive interaction with the animal care staff, as appropriate to the species of concern; periodic release into larger enclosures; supplemental enrichment items; and/or the addition of a companion animal in the room or housing area. Exceptions for single housing must be reviewed on a regular basis and approved by the IACUC and/or attending veterinarian.

DEFINITIONS

Commonly used laboratory animals considered by the UNMC/UNO IACUC to be potentially “social” species include the following:

- Nonhuman primates
- Dogs
- Sheep
- Pigs
- Rabbits (excluding adult males)
- Rodents (excluding adult male mice and female hamsters)
- Avian species
- Aquatic species

REQUIREMENTS

Animal Welfare Act and Regulations, in accordance with 9 CFR, Ch.1 Part 3 - Standards- Subpart A, 3.8; Subpart D, 3.81 (a, e).

Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC) International, Position Statements, see Social Housing


PROCEDURE

1.0 IACUC Review and Approval for Exceptions to Social Housing

1.1 Submit written scientific justification to the IACUC clearly explaining why animals cannot be housed in single-sex compatible pairs or groups for all of, or a portion of, the study.
1.2 Describe, in detail, the group/s of animals that will not be socially housed and the frequency and duration of non-social housing.

2.0 General Considerations

2.1 Social animals will be housed in single-sex compatible pairs or groups, rather than individually, unless a single-housing exception has been reviewed and approved by the IACUC. The attending veterinarian, or his/her designee, may exempt an individual animal from participation in social housing because of its health or condition, or in consideration of its well-being.

2.2 If the IACUC approved exception is necessary only for a portion of the study, the animals should remain socially housed before and after that time on study.

2.3 Single housing of social animals post-operatively will be the default method and does not require specific exception review or approval by the IACUC. The post-operative period is typically not more than 3 days.

2.4 When social animals must be housed individually, conspecifics will be housed within visual, olfactory, and/or tactile range whenever possible.

2.5 When social animals must be housed individually, environmental and/or food enrichment, exercise/release into larger enclosures, and/or human interaction shall be provided whenever possible unless contraindicated.

2.6 When social animals are left individually housed due to attrition of cage mates on study, consideration should be given to re-housing with other conspecifics when possible and with consideration given to the expected duration of the study.

3.0 Social Housing Plan by Species

3.1 Nonhuman Primates: Contact CM in reference to SOP #353: Social Housing Implementation for Nonhuman Primates (UNMC). Social housing of Nonhuman primates at UNO is managed under the direction of the UNO attending veterinarian.

3.2 Dogs: Canines should be housed in compatible pairs or small groups. If dogs cannot be compatibly housed continuously, intermittent socialization with other dogs of 20-30 minutes per day, should be provided. Dogs housed individually, without sensory contact with another dog, shall be provided with positive human interaction daily. When housed individually with less than two times the required floor space, dogs will be regularly provided the opportunity for exercise. Contact CM in reference to SOP #201.

3.3 Sheep: Sheep are particularly susceptible to isolation stress and should be housed in compatible pairs or small groups. Where there is likelihood of a single animal remaining after all others have been used on study, experimental plans should include the timely use of the remaining animal.

3.4 Pigs: Contact CM in reference to SOP #400.

3.5 Rabbits: Intact adult male rabbits should be housed individually but allowed visual, auditory and olfactory contact with conspecifics whenever possible. Juvenile rabbits and females of any age should be housed in compatible pairs or groups unless an exception is granted by the IACUC or attending veterinarian. Rabbits housed individually must be provided with a toy or other manipulanda on a regular basis to encourage exploratory behavior.

3.6 Rodents: Behaviorally compatible rodents should be housed socially in single-sex groups. However, unfamiliar males should not be combined. Female hamsters and male mice are not considered social animals and are not required to be group housed. Rodents may be held in a cage as single pregnant females for the last 1/3 of gestation.

3.7 Avian species: Songbirds (passerines) should be housed in socially compatible groups.

3.8 Aquatic species:

a) Schooling fish (ex: zebrafish) should be housed in compatible groups and/or provided with visual obstacles to offer hiding places when space is available.

b) Amphibians (ex: xenopus, salamanders) should be housed in compatible pairs or groups.