

# Environmental Enrichment and Social Housing

Effective Date: October 2018

## I. Purpose

This policy establishes general standards for the humane treatment of animals at UCSF regarding social housing and enrichment. This policy has been developed to ensure that UCSF complies with the Guide for the Care and Use of Animals, 8th Edition.

## II. Regulatory or Accreditation Authority

*The Guide for the Care and Use of Laboratory Animals, Eighth Edition, Environmental Enrichment* - Enrichment programs should be reviewed by the IACUC, researchers, and veterinarian on a regular basis to ensure that they are beneficial to animal well-being and consistent with the goals of animal use. (p. 53)

*Behavioral and Social Management* – Single housing of social species should be the exception and justified based on experimental requirements or veterinary-related concerns about animal well-being. In these cases, it should be limited to the minimum period necessary, and where possible, visual, auditory, olfactory, and tactile contact with compatible conspecifics should be provided. (p. 64)

*Microenvironment* – Social animals should be housed in stable pairs or groups of compatible individuals unless they must be housed alone for experimental reasons or because of social incompatibility. (p. 51)

*9 C.F.R Chapter I, Subchapter A, Part 3, Subpart D* - Specifications for the Humane Handling, Care, Treatment, and Transportation of Nonhuman Primates

(a) *Social grouping*. The environment enhancement plan must include specific provisions to address the social needs of nonhuman primates of species known to exist in social groups in nature.

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(b) *Environmental enrichment*. The physical environment in the primary enclosures must be enriched by providing means of expressing noninjurious species-typical activities. Species differences should be considered when determining the type or methods of enrichment

## III. Scope

This policy applies to all animals cared for at UCSF, both in and outside of centralized LARC care space.

## IV. Definitions

**Environmental Enrichment:** The delivery of husbandry practices and a physical environment that facilitates the expression of species-typical behaviors and promotes well-being through physical exercise, manipulative activities, and/or cognitive challenges according to species-specific characteristics.

**Social Housing:** Group or pair-housing of compatible animals

## V. Policy

### A. Social Housing

For social animals, social housing is the standard husbandry practice. Individuals from these species that are not socially housed should be provided with additional enrichment. If singular housing is necessitated by an exception (see Appendix A), it should be limited to the minimum period necessary.

### B. Environmental Enrichment

All animals should be provided with at least one form of species-appropriate enrichment. This enrichment may take the form of social housing, visual barriers, manipulanda, foraging opportunities, or other biologically appropriate forms. Additional enrichment may be required based on species specific needs. Singly housed rodents, including sentinel animals, must be supplied at least two forms of enrichment.

Enrichment materials or practices must be designed and applied in accordance with The Guide for the Care and Use of Animals, Eighth Edition, in order to enhance the opportunities for the animals to express species specific behavior.

Any exemptions to the provision of enrichment must be part of an approved IACUC protocol or made by a LARC veterinarian if enrichment is determined to adversely affect animal welfare.

## **IACUC Appendices for Enrichment and Social Housing**

Appendices are provided as IACUC suggestions or recommendations. Deviation from the attached appendices may require IACUC approval.

### **Appendix A: Social Housing Exceptions: Rodents IACUC Approved: June 2015**

Single housing of social animals is an exception to standard IACUC housing standards, and may be justified by the following:

1. Experimental requirements included in the approved IACUC protocol;
2. Isolated animal in a cohort group such as the last animal, or an extra animal sent from vendor;
3. Breeding, such as a single pregnant female (until pups are born) or weaning litters;
4. Behavioral incompatibility; or
5. Veterinary approval due to health reasons.
6. Sentinel mice (to reduce overall animal use).

### **Appendix B: LARC Enrichment Program: Rodents IACUC Approved: June 2015**

LARC provides enrichment through the [LARC Environmental Enrichment Program](#). Examples are provided by on the LARC website. PI's, researchers, and lab staff should coordinate with LARC for the implementation of environmental enrichment.