### Title: Standards for Animal Enrichment

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Jamie Peno  
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Date  
Director, Research Integrity and Compliance

### REVISION HISTORY

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**PURPOSE**  
The Guide for the Care and Use of Laboratory Animals indicates that enrichment programs should be in place to ensure that they are beneficial to animal wellbeing and consistent with the goals of animal use.

**SCOPE**  
Principal Investigator and Laboratory Staff should establish a program that ensures the psychological well-being of laboratory animals housed at UNT by providing environmental enrichment with sensory and motor stimulation, through structures and resources that facilitate the expression of species-typical behaviors and promotion of physical exercise, manipulative activities, and cognitive challenges according to species-specific characteristics.

### DEFINITIONS AND ABBREVIATIONS

- **UNT**- University of North Texas, Denton  
- **IACUC**- Institutional Animal Care and Use Committee  
- **SOP/SOP’s**- Standard Operating Procedure(s)  
- **PI**- Principal Investigator  
- **LAF**- Laboratory Animal Facility

### PROCEDURES

1. In all species, enrichment should be provided in accordance with the IACUC approved protocol, with consent from the Principal Investigator, and with approval from the veterinary staff.
A. Protocols may have special considerations regarding environmental enrichment.
B. Social enrichment is based on protocol requirements, species, veterinary concerns and compatibility of individuals.
C. All animals should be housed with olfactory, visual, and auditory contact with conspecifics as well as positive human interaction unless specifically exempted by the IACUC or veterinarian.

II. Social Enrichment:
A. Rabbits: Animals should be socially housed if socially housed at the vendor, of the same sex and size, socially compatible and when performance standards dictate, unless there are IACUC approved scientific exceptions or veterinary-related concerns about animal well-being. Rabbits are housed in cage banks which allow them to hear, see, and smell other rabbits within the room. When more than one bank of cages is in a room, they are placed opposite of each other when possible. Singly housed rabbits should have visual, auditory, olfactory and sometimes tactile contact with conspecifics unless specifically exempted for protocol or veterinary reasons.
B. Rodents: Mice, rats, hamsters, and guinea pigs will be group-housed in compatible groups when possible. All rodents are housed in clear caging so that there is visual contact. Guinea Pigs are housed in groups of up to 4 per cage which allows for social and physical contact. Exceptions made for single-housing animals for scientific purposes, must be scientifically justified and stipulated in the corresponding IACUC approved protocol. Exceptions for singly housing animals due to social incompatibility, breeding purposes, or any other veterinary concerns made by the discretion of the veterinary, husbandry, or investigative staff, must be documented in the animal housing room.
C. Fish and Amphibians: Shoaling and schooling fish and social amphibians should be group-housed according to species. Exceptions to group-housing may be made based on scientific or veterinary needs.

III. Environmental Enrichment:
A. Rabbits: Toys are available for rabbits for expressing normal chewing behaviors. Examples of toys provided are: jingle bell balls, kongs, cat toys, plastic chains, and/or empty boxes for play.
B. Rodents: Mice and Rats are housed on contact bedding. PVC tubes or igloos may be added to caging to provide a mechanism for less dominant animals to find sanctuary. Nestlets©, Shepard Shacks©, and cocoons may be added to breeder cages to provide nest building material and create a productive activity for the animals. Hamsters and guinea pigs may be given PVC tubes for hiding. Other exceptions to the administration of environmental enrichment may be made based on scientific or veterinary needs.

IV. Food Enrichment:
A. Rabbits: Rabbits may receive fruits and vegetables for gnawing as additional enrichment.
B. Rodents: Rodents may receive sunflower seeds for additional enrichment.

V. Other Species not noted in this procedure may require consult with the UNT AV.

REFERENCES
1. The Guide for the Care and Use of Laboratory Animals

APPENDICES
IACUC Standard Operating Procedures