Environmental Enrichment Program for Animals

This policy provides information about the environmental enrichment program for research animals at UNC-Chapel Hill. The policy is applicable to all animals, except those for which an exception has been submitted to and approved by the IACUC.

The Guide for the Care and Use of Laboratory Animals (NRC, 2011) states that, “The primary aim of environmental enrichment is to enhance animal well-being by providing animals with sensory and motor stimulation, through structures and resources that facilitate the expression of species-typical behaviors and promote psychological well-being through physical exercise, manipulative activities, and cognitive challenges according to species-specific characteristics.”

The Guide further states that, “Well-conceived enrichment provides animals with choices and a degree of control over their environment, which allows them to better cope with environmental stressors.”

Mice:
All mouse cages must be provided with some type of environmental enrichment***. This can include PVC tubes (default method) **, nestlets, nyla-rings, seeds, etc.

All mouse breeding cages must be provided with some form of nesting material* (unless the investigator has an IACUC-approved Exception permitting the absence of nesting material).

All nude mice must be provided with nesting material or PVC tube***.

Other Animals
Each animal enclosure must be provided with at least one enrichment item as described below (or a veterinary approved alternative) ***:

- Social grouping for all socially compatible animals is required whenever the scientific design of the study allows.
- Rats will be provided with crinkle paper (default method).
- Non human primates will be group housed and a variety of television, toys, puzzles and food treats provided on a rotational basis.
- Ferrets, guinea pigs, gerbils and hamsters will be provided with at least one of the following: food treats/hay, bells, balls, hide boxes or chew toys.
- Rabbits will be provided with food treats (fresh fruit/vegetables, hay) and other environmental enrichment. If food treats are unacceptable, an Exception is required.
- Cats will be group housed and have perches and/or resting enclosures. Various sanitizable and/or disposable play items will be used on a rotational basis.
- Dogs and pigs will be provided with balls, mirrors, chains, food treats, and/or chew items.
- All aquatic and other species will be provided with enrichment according to their specific needs ***.

Every attempt will be made to choose items that have the desired effect and are durable, cage dedicated, sanitizable and safe. The above items have been used at many other institutions and have been considered beneficial. If necessary, pilot studies will be conducted when introducing new enrichment items.

Instances will arise when social grouping or enrichment items may be inappropriate for the scientific goals of the study or the health of the animals. If investigators believe that providing cage enrichment would have a negative impact on the study or be detrimental to their animals, an exception to the policy may be granted by the IACUC on a case by case basis. Please note that exceptions to the enrichment policy must first be approved by the full Committee (meetings are held monthly) and cages exempt from the policy must be clearly identified with a capital red letter “E” in the upper right corner of the DLAM barcoded cage card. In a reverse light cycle room, this capital “E” should be in black or blue ink. To request an exception, complete addendum 8.0 of the Animal Care Application (ACAP), Exception Request Form, and submit it electronically to the IACUC as part of a full application or as an amendment to an already approved application. Describe the scientific rationale for withholding environmental enrichment so the IACUC can provide full consideration of your request.

*Nesting material may consist of nestlets; crinkle paper, or other suitable substitute readily available to DLAM.

**Should an alternative enrichment item be preferred instead of PVC tubes, please coordinate details with the facility supervisor. No amendment or exception is required for this option.

*** Unless the investigator has an approved Exception

Disclaimer: if your experimental procedure requires a significant deviation to this Standard Operating Procedure (SOP), please amend your application(s) to include Addendum 8.0 Request for Exception to Policy and indicate the following: a description of the exception; the rationale (provide scientific justification and/or justification based on animal welfare); the potential adverse effects/clinical signs resulting from the exception; and specify which (and the total number of) animals in the approved protocol that will be affected. The IACUC will review your request at the next monthly meeting.