

Enrichment and Social Housing for Laboratory Rodents

According to the Guide for the Care and Use of Laboratory Animals (National Academy Press, 8th ed, 2011), “the primary aim of environmental enrichment is to enhance animal well-being. This is accomplished by providing stimuli, structures, and resources that facilitate the expression of species-typical behaviors . . . Well-conceived enrichment provides animals with choices and a degree of control over their environment.” For social animals, the ability to interact with other animals provides a degree of enrichment; according to the Guide, “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.”

At UVM, rodent enrichment may include, but not be restricted to, the following items: nesting material such as nestlets or bedding sheets; nylabones or other gnawing media; opaque plastic or paper huts; and running wheels.

- Rodents routinely will be housed in solid-floor cages with bedding unless specific scientific justification for grid or wire-mesh flooring is provided in the IACUC protocol by the investigator.
- Mice will routinely be given nesting media (e.g. nestlets) unless the investigator has a preference for another form of enrichment.
- Similarly, rats routinely will be given gnawing substrate (e.g. nylabone or wood).
- Any of the above mentioned enrichment items, or other items as suggested by the investigator, may be utilized.
- If NO enrichment item is to be provided, the absence of enrichment must be specifically justified in the IACUC protocol.

Similarly, rats and mice must be housed in stable, compatible social groups whenever possible. If social housing is not possible for experimental reasons, those reasons should be stated in the IACUC protocol. Examples of justification for single housing include post-operative recovery, cannulae and other implants which may be disrupted by cage-mates, the need to monitor individual feed or water intake, or social incompatibility particularly in male mice and rats.