

ACUC Approval Date: 4/8/08

NIMH Guideline # G7

Date Issued:

Date(s) Revised

TITLE: NIMH Guideline for Environmental Enrichment of Non-Human Primates

The Animal Welfare Act requires the provision of environment enhancements to promote the psychological well-being of non-human primates used for research. The program/plan to address psychological well-being must, at a minimum address the following: a) social grouping; b) environmental enrichment; c) special considerations; and e) exemptions from the program. The NIMH Institutional Policy is to enhance the physical and social environment of all animals through the use of paired/social housing and/or other means of environmental enrichment such as the use of special activity/play cages, manipulanda, provision of foraging activities and the use of novel food item as appropriate for the species, unless the animal is exempted from the program by the IC attending veterinarian (see below) or for ACUC approved, scientifically justified, reasons.

It is agreed by most behavioral investigators that a cage-mate can be a dynamic and enriching stimulus to the environment. It is recommended that social housing be used as a primary means of providing enrichment, unless an investigator has provided a scientific justification in their approved Animal Study Protocol. It is the NIMH policy that paired housing is utilized in all cases, unless scientifically or medically justified.

In most cases where conspecific contact is not possible, primate/human interaction also augments the social environment. Positive human interaction via the provision of nutritionally balanced food treats by the animal care staff has been shown to reduce abnormal behavior in singly-housed monkeys. Human interaction benefits animals in other housing settings as well. The act of removing an awake animal from its home cage for chairing, training or behavioral testing has also been demonstrated to provide an animal with a dynamic, complex and challenging environment which promotes their psychological well-being. In addition to the above positive reinforcement training and/or other forms of human interaction, has also been shown to have a beneficial effect on an animal's behavioral. Most behavioral assessments being carried out in approved ASPs rely on positive reinforcement training.

All singly housed animals shall have a plan developed by the attending veterinarian, in consultation with the principle investigator of the ASP under which the animal is being held, to address the animal's psychological well-being. The plan shall list the reason for their exemption and the approved plan to address their psychological well-being. The plan for exempt animals shall, at a minimum, be reviewed by the attending veterinarian once each month.

Veterinary Exemptions

- 1) The attending veterinarian may exempt an animal from paired housing if the nonhuman primate exhibits vicious or overly aggressive behavior, is debilitated as a result of age or other conditions (e.g. arthritis).
- 2) The attending veterinarian may exempt an animal from paired housing if the nonhuman primate is suspected of or diagnosed with a contagious disease. Whenever possible, established pairs or groups which have or are believed to have been exposed or infected with an infectious agent should be maintained as a pair or group during the process of diagnosis, treatment and control of the infection.
- 3) Lack of available/compatible cohorts.

Scientific Exemptions

Scientific exemptions to the NIMH Policy for Environmental Enrichment of Non-human Primates will vary with the nature and goals of the research under consideration. A detailed explanation of the scientific rationale for the exemption, as well as the extent and limitations of the exemption (e.g. social housing, environmental enrichment, etc.) must be included in the ASP under which the research is being conducted. The principle investigator should also include a discussion of the environmental enrichment approaches which are not contrary to the established scientific goals of the study. **Scientific exemptions must be submitted to the NIMH ACUC for review and approval prior to commencing the proposed work.**