Standard Operating Procedure for Non-Human Primate Environmental Enhancement to Promote Psychological Wellbeing

I. PURPOSE

The purpose of this standard operating procedure is to provide proper enrichment and social interaction for non-human primates (NHP) housed at the University of North Carolina-Chapel Hill.

II. RESPONSIBILITY

It is the responsibility of the laboratory animal technician, investigator and veterinary staff to ensure that non-human primates housed in the Division of Laboratory Animal Facilities are given the opportunity to exercise and exhibit normal NHP behavior as outlined in the Animal Welfare Act and The Guide for the Care and Use of Laboratory Animals 8th Edition (NRC, 2011).

III. PROCEDURE

A. Dependent upon the bio-safety level and experimental procedures in the animal protocol, NHP’s will be given enhancement/enrichment in a variety of ways.

1. Social Grouping. When possible, NHP’s will be group housed while in the animal facility. Animals must be housed with animals of the same sex unless breeding is an intended part of the experimental procedures approved in the animal use protocol. Newly arrived monkeys in quarantine will be single housed during quarantine (generally not longer than two months). The veterinary staff may mandate single housing for medical reasons but will notify the IACUC if animals are singly housed for periods exceeding one month. For experimental reasons, animals may be housed singly for a short period of time (less than one month). If animals must be singly housed for longer than one month, the investigator must receive IACUC approval.

Age, sex, and social/housing history at previous institutions (if any) will be taken into consideration before social or pair housing is attempted. When possible, primates will be paired or group housed while in the animal facility. In the event that they are singly housed due to
incompatibility, animals will have auditory, visual, and olfactory contact with their conspecifs. Tactile contact may be allowed but will be considered on a case by case basis. Enrichment and pairing or re-pairing NHPs will be provided by DLAM Vet Services or other qualified DLAM personnel. Social grouping and enrichment will be done in accordance with the IACUC SOP for NHP Environmental Enhancement to Promote Psychological Well-Being.

2. **Environmental Enrichment.** NHP’s will be given cage toys dependent upon the animal use protocol (visual enrichment, tactile enrichment, television or audio enrichment, hanging toys, foraging toys and devices to allow visual barriers and play). Toys will be rotated on a regular basis, which will be recorded on the animal enrichment log. In addition to the enrichment devices NHP’s will receive fresh fruits and vegetables with a variety of textures and shapes on a rotational basis, as well as foraging/occupational enrichment, dependent upon what is available. Specific Environmental Enhancement plans will be referenced.

3. **Special Considerations.** Certain non-human primates must receive special attention regarding enhancement of their environment, based on the needs of the species and/or individual animal. The Attending Veterinarian shall provide instruction for special considerations.

   A) **Infants and Juveniles.** There are no breeding programs for nonhuman primates at UNC-Chapel Hill. If an approved study involved the use of infants or juveniles or if an on-site breeding program was developed, the Attending Veterinarian in consultation with the IACUC and PI will develop guidelines for special considerations for these animals.

   B) **Restricted Activity.** If an approved study involved restricted activity, the Attending Veterinarian in consultation with the IACUC and PI will develop guidelines for these animals.

   C) **Individually housed non-human primates that may be isolated.** This policy currently allows the individual housing (but not in isolation) of a non-human primate for up to one month for research or veterinary medical reasons. If an approved study required individual, housing with or without isolation, or there was a need to individually house a non-human primate longer than one month, the Attending Veterinarian in consultation with the IACUC and PI will develop guidelines for these animals.
D) Great Apes. There will be no approved studies involving great apes.

4. Restraint Devices. If an approved study involved the use of restraint devices, the Attending Veterinarian in consultation with the IACUC, PI and will develop guidelines for these animals in accordance with the Animal Welfare Act.

5. Exemptions. The attending veterinarian may exempt an individual non-human primate for participation in the environmental enhancement program due to health reasons or in consideration of its well-being. Each exemption must be reviewed at least every 30 days, unless the basis for the exemption is permanent. The IACUC may exempt an individual non-human primate from participation in the environmental enhancement program for scientific reason set forth in the approved research proposal. The exemption must be reviewed by the IACUC at appropriate intervals to be determined by the IACUC.

B. Documentation. Enhancement/Enrichment activities will be noted on the primate enrichment documentation form and forwarded to the manager of veterinary services to be maintained as long as required by applicable laws and regulations. Logs are reviewed semi-annually during routine IACUC inspections.

IV. SAFETY CONSIDERATION

A. NHP’s can be aggressive and care should be taken when rotating the enrichment devices within the animal facility.

B. All bites/scratches must be reported to the appropriate health personnel, as well as to a veterinarian for documentation purposes. Refer to the Macaque Bite, Scratch, and Splash Exposure EHS SOP.
   a. Employee Occupational Health contact information:
      i. Phone 919-966-9119
      ii. For an after-hours emergency, employees should go to the Emergency Department on Manning Drive.