
STANDARD OPERATING PROCEDURE

TITLE: Environmental Enrichment / Guinea Pigs / HSACF and WVB
SOP NO.: 442-01
REVISION:
EFF. DATE: February 2010
SUPERSEDES: NA

APPROVALS

Prepared by (print name): _____ Dept.: _____
Signature: _____ Date: _____

Reviewed by (print name): ___Susan Fussell___ Date.: ___ACVS___
Signature: _____ Date: _____

Approved by (print name): _____ Dept.: _____
Signature: _____ Date: _____

- 1.1 To outline the various environmental enrichment strategies used to ensure welfare, encourage normal species-specific behaviour, decrease stress to reduce research variables and benefit research results, and provide consistent environments for all animals groups.

2.0 SCOPE

- 2.1 This SOP applies to all guinea pigs housed in the Health Sciences Animal Care Facility (HSACF) and West Valley Building (WVB) at Western.
- 2.2 It applies to all personnel involved in guinea pig animal studies performed at the above facilities.

3.0 RESPONSIBILITIES

3.1 ANIMAL CARE (AC) STAFF

- 3.1.1 Monitor animal health and welfare daily, ensuring enrichment strategies are being used unless otherwise approved on an Anima Use Protocol (AUP).
- 3.1.2 Inform Veterinary Services (VS) of any observed stereotypic behaviours and implement requested new enrichment strategies to work to alleviate these behaviours. Maintain records in Animal Health Binder.
- 3.1.3 Reference any researcher notes at door, room, or cage level regarding enrichment needs.
- 3.1.4 Provide a stock of clean enrichment devices.
- 3.1.5 Inform manager/lead hand if sufficient supplies are not available.
- 3.1.6 If new enrichment devices are being tested, inform manager/lead hand and Veterinary Services about cage level observations.

3.2 RESEARCH STAFF

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- 3.2.1 All deviations from standard enrichment strategies must be included on an approved AUP.
- 3.2.2 Provide information at room and/or cage level regarding any alterations to the standard enrichment program for your species.
- 3.2.3 Work with ACVS staff to minimize stereotypic behaviours.
- 3.3 LEAD HAND AND/OR FACILITY MANAGER
 - 3.3.1 Pass on any alterations to the standard enrichment programs to full-time and part-time AC staff.
 - 3.3.2 Continue to obtain information on new forms of enrichment.
 - 3.3.3 Work with veterinary staff to periodically evaluate and review the enrichment program.

4.0 PROCEDURE

4.1 GUINEA PIGS

- 4.1.1 Our enrichment strategies for Guinea pigs are designed to promote natural, species-specific behaviours; such as seeking bodily contact, locomotion, retreating to shelter, foraging and gnawing, and social interactions.
- 4.1.2 Standard enrichment items in Guinea pig cages in the facility include all of the following items:
 - One alfalfa cube
 - 1/2 PVC tube, used as shelter
 - solid-bottom cages with contact bedding
 - Cage mates
- 4.1.3 Stereotypic or stress-related behaviours in Guinea pigs may include (but not limited to):
 - Screeching vocalizations
 - Repetitive or obsessive movements, licking themselves or gnawing on caging
 - Increased aggression, such as ear biting of cage mates
- 4.1.4 It is standard at ACVS to group-house Guinea pigs.
 - 4.1.4.1 If animals have undergone a surgical procedure, are incompatible, or are pregnant, it may be necessary to separate them into their own individual cage.

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4.1.4.1.1 If this is required, enrichment should be maximized to compensate for the loss of these cage mate interactions

4.1.4.1.1.1 When separated, olfactory, visual, or audible contact with other animals should be maximized.

4.1.5 An important aspect of Guinea pig cage enrichment is that they do not prefer noisy or novel objects.

5.0 HEALTH & SAFETY

5.1 PERSONAL PROTECTIVE EQUIPMENT (PPE)

5.1.1 ACVS Staff must wear clean scrubs while performing all animal care duties.

5.1.1.1 Discard scrubs to laundry at the end of each work day.

5.1.2 PPE is not required if you are only observing the animals and not handling them.

5.1.3 Wear gloves when filling water bottles.

5.1.4 Wear gloves and a NIOSH approved mask when handling animals and caging.

5.1.5 Wear gloves, a NIOSH mask, bonnet and safety glasses when dumping dirty bedding.

5.1.6 Report all accidents/incidents to your supervisor.

5.1.7 Report all animal bites to your supervisor and UWO Workplace Health.

5.2 All ACVS staff will be enrolled and monitored as per the UWO Preventative Health Program for Animal Handlers Policy by UWO Workplace Health.

6.0 REVISION HISTORY

Revision	Reason(s) for Revision	Initiated by

7.0 REFERENCES / ASSOCIATED MATERIALS

7.1 [CCAC 3 R's Microsite – Environmental Enrichment](#)

7.2 [CCAC Chapter VI - Social and Behavioural Requirements of Experimental Animals](#)

7.3 [CCAC – Module 07 Core A – Environmental Enrichment](#)

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- 7.4 [Comfortable Quarters for Laboratory Animals](#)
- 7.5 [Environmental Enrichment and Refinement for Rodents and Rabbits: An Annotated Bibliography](#)
- 7.6 [CCAC Species Specific Resources on Guinea Pigs](#)
- 7.7 Environmental Enrichment for Laboratory Rodents and Rabbits: Requirements of Rodents, Rabbits, and Research; ILAR Journal, 46, pp. 162-170 (2005).
- 7.8 Modifications to Husbandry and Housing Conditions of Laboratory Rodents for Improved Well-being; ILAR Journal, 46, pp. 140-147 (2005).
- 7.9 The Effects of Test Environment and Rearing Condition on Amphetamine-Induced Stereotypy in the Guinea Pig; Psychopharm., 45, pp. 115-117 (1975).
- 7.10 Making Lives Easier For Animals in Research Labs: Discussions by the Laboratory Animal Refinement & Enrichment Forum; Animal Welfare Institute (2007).

8.0 ATTACHMENTS - none