



<b>ACUP ID number:</b> <i>HM-72</i>		
<b>Approval date:</b>	<i>01/2024</i>	<i>GPS</i>
<b>Written by:</b>	<i>**</i>	<i>C. Moats</i>
<b>Revision by: (numbered accordingly)</b>	<i>Jan 2024</i>	<i>**</i>
<b>Distribution</b>	<i>RAR</i>	

## HM – 72: Rodent Enrichment Program

### **Performance Goals:**

To describe the enrichment program for mice and rats housed in Johns Hopkins University.

### **Definitions:**

JHU-Johns Hopkins University

RAR-Research Animal Resources

BMT-Behavioral Management Team

### **Scope:**

This SOP applies to all employees of the JHU RAR and any other personnel working at JHU who distribute enrichment for mice and rats.

### **Background:**

- All enrichment materials must be initially approved by the Director of Rodent Resources. Once approved, enrichment items are listed in this SOP.
- Only approved enrichment items, listed in this SOP, may be provisioned.
- If researchers request alternative enrichment items, they must be approved in the ACUC protocol.
- All rodent enrichment materials must be autoclavable; however, single use items may be sterilized in another fashion (ex. irradiated).

### **Procedures:**

- A. Standard Enrichment Items
  1. All rat cages receive standard enrichment in the form of crinkled paper (ex. Enviro-Dri).
  2. All mouse cages receive standard enrichment in the form of a cotton nestlet square (ex. Nestlet).
- B. Social Housing
  1. Socialization is the default unless otherwise justified and approved in the ACUC protocol, or described in this policy. Where possible, mice and rats are housed in pairs or groups.
  2. Mice and rat racks are arranged in holding rooms in a manner that permits animals to have auditory, visual or olfactory contact with conspecifics.

3. Singly housed cages of mice and rats are flagged. Conditions for single housing, which are captured by flagging the cage with the appropriate sticker or cage card, are listed below:
    - a. “B” or Breeding (ex. stud males, pregnant females from harem)
    - b. “A” or Attrition (ex. other cage mates have died)
    - c. “E” or Experimental (ex. those approved in the ACUC protocol and captured in the SToP form)
    - d. “V” or Veterinary (ex. cases of fighting)
  4. Singly housed mice and rats are provided additional enrichment, as described in Section C.
- C. Additional Enrichment Items
1. Cages of singly housed mice and rats are flagged, as described in Section B.
  2. Singly housed animals are provided with additional enrichment stocked by RAR, such as additional nesting material and/or an autoclavable plastic hut.
  3. If the typical RAR-stocked enrichment items are not acceptable for the research protocol, other approved devices/materials, provisioned per PI request, may include:
    - a. Autoclavable nyla-bones, or similar commercially available chew toys approved by Director of Rodent Resources
    - b. Autoclavable huts, igloos, tubes, and/or tunnels made of polycarbonate (or similar high grade autoclavable plastic polymer)
    - c. Sterile (ex. irradiated) single use paper huts, igloos, tubes and/or tunnels
  4. Stocking, restocking, provisioning, and sterilizing items not stocked by RAR (ex. items listed in Section C, Subsections a. through c.) is the responsibility of the investigator, not RAR.
- D. Enrichment Item Sanitization Schedule and Cage Change Outs
1. Replace all enrichment devices with new sterilized device at each cage change out.
  2. At cage change out, some nesting material should be transferred from the old cage to the new cage preserve scent marking.
  3. Check all enrichment devices during change outs to ensure that they are free of sharp edges, defects, cracks, or other evidence of diminished integrity. Dispose of and replace with a similar device if such evidence is found.

I acknowledge that I have read and understand the JHU Animal Care and Use Program document “**Rodent Enrichment Program Program**” and I will follow this procedure. I agree to bring any deviations in this procedure to the attention of my supervisor/GPS Working Group.

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Name (Print)

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Date

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Signature