Title: Husbandry Care of Rodents: Mice and Rats, Non-USDA covered

I. Purpose:

The purpose of this policy is to outline the minimum standards of care for non-USDA rodents; mice of the genus Mus and rats of the genus Rattus bred for use in research.

II. Policy:

All units providing animal care for non-USDA rodents must meet or exceed these minimum requirements based on the ILAR Guide for the Care and Use of Laboratory Animals (Guide), and Public Health Service Policy (PHS). Deviations or exceptions must be approved by the Attending Veterinarian and the IACUC.

III. Procedure:

**Daily (365 days a year without exception):**
- Observe each animal and check for health concerns (*Guide* pg. 112).
- Ensure adequate feed and potable water is available (*Guide* pg. 65-68).
- Record sick and dead animals, and report them to Campus Veterinary Services (CVS) or designated clinical veterinarian per standard operating procedure for reporting sick or dead animals.
- Record minimum and maximum temperatures and humidity.
  - Temperature range for rodents is 68°F to 79°F (*Guide* pg. 44).
  - Humidity range for rodents is 30% to 70% (*Guide* pg. 44).
- Change any excessively soiled or flooded cages (*Guide* pg. 70).
- Clean and organize room, anterooms, and surrounding premises (*Guide* pg. 72).
- Record daily completion of tasks, initial, and date log sheet.

**Weekly:**
- Provide clean static microisolater cages (*Guide* pg. 70).
- Provide clean catch pans for wire-floor caging (*Guide* pg. 70).
- Provide clean bottles and sipper tubes (*Guide* pg. 70).
- Clean automatic water delivery valves (i.e. lixits) at cage change (*Guide* pg. 72).

**Biweekly (not to exceed every 14 days):**
- Provide clean individually ventilated cages (*Guide* pg. 70).
- Clean automatic water delivery valves (i.e. lixits) at cage change (*Guide* pg. 72).
As needed:
- Disinfect the animal room including walls, floors, and ceilings (if possible) (*Guide* pg. 72).
- Remove and replace worn or damaged equipment from primary enclosures and surrounding facility (*Guide* pg. 72).
- Chow must be discarded after 6 months of the milling date unless manufacturer guidelines recommend a shorter or longer expiration date (*Guide* pg. 66).
- Clean and sanitize feed storage containers (*Guide* pg. 67).

Environmental Enrichment:
- Refer to the Environmental Enrichment policy.
- Rodents should be provided the opportunity to demonstrate species typical behavior. Examples of enrichment for mice include nesting material or chew sticks (*Guide* pg. 53).
- Devices must be checked regularly for wear and discarded when safety hazards are observed.

Facilities:
- Temperature alarms must be installed in all rooms housing rodents (*Guide* pg. 143).
- Adequate ventilation must be provided for the health and comfort of the animal at all times.
  - A minimum of 10-15 fresh room air exchanges per hour shall be provided in animal housing areas (*Guide* pg. 46).
- Floors shall be moisture-resistant, non-absorbent, impact-resistant, and relatively smooth (*Guide* pg. 137). Refer to Physical Plant and Facilities Maintenance policy.

Housing:
- Whenever possible, rodents should be socially housed in compatible groups (*Guide* pg. 51).
- Floor space taken up by food bowls, water containers, litter boxes, and enrichment devices (e.g., novel objects, toys, foraging devices) should not be considered part of the floor space (*Guide* pg. 56).
- Space requirements for mice of the genus *Mus*:

<table>
<thead>
<tr>
<th>Weight (g)</th>
<th>Floor Area/Animal (in²)</th>
<th>Height (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;10</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Up to 15</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Up to 25</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>&gt;25</td>
<td>≥15</td>
<td>5</td>
</tr>
<tr>
<td>Female with litter</td>
<td>51</td>
<td>5</td>
</tr>
</tbody>
</table>

(*Guide* pg. 57)
Space requirements for rats of the genus *Rattus*:

<table>
<thead>
<tr>
<th>Weight (g)</th>
<th>Floor Area/Animal (in²)</th>
<th>Height (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;100</td>
<td>17</td>
<td>7</td>
</tr>
<tr>
<td>Up to 200</td>
<td>23</td>
<td>7</td>
</tr>
<tr>
<td>Up to 300</td>
<td>29</td>
<td>7</td>
</tr>
<tr>
<td>Up to 400</td>
<td>40</td>
<td>7</td>
</tr>
<tr>
<td>Up to 500</td>
<td>60</td>
<td>7</td>
</tr>
<tr>
<td>&gt;500</td>
<td>≥70</td>
<td>7</td>
</tr>
<tr>
<td>Female with litter</td>
<td>124</td>
<td>7</td>
</tr>
</tbody>
</table>

*(Guide pg. 57)*

When housing this species, please also refer to the Animal Care Program’s Standards of Care Policy on Pest Control, Identification and Labeling of Cages, Environmental Enrichment, Food Storage, House-Keeping in Facilities Housing Biomedical Research Animals, Physical Plant Facilities Maintenance, as well as the IACUC’s Policy on Social Housing of Social Species.