IACUC POLICY  Title: Maintaining Mouse Cage Populations  Version Date: 7/18/2019

Federal regulations stipulate maximum animal populations per cage, based upon the size of the cage and the weight of individual animals. RARC utilizes “shoe-box” cages for housing mice ranging from 63.0 in \( \times \) to 75 in \( \times \) of floor space. In order to comply with federal regulations, the IACUC has established the standards below for housing mice.

Compliant cages:
Mouse cages housing no more than:
1. Five adult animals; or
2. Two adults and one litter of pups up to 21 days of age; or
3. Two adult females with 2 litters (of any size) up to 7 days of age; or
4. Two adult females with 2 litters (maximum 15 pups total) up to 21 days of age*.

<table>
<thead>
<tr>
<th>Adults</th>
<th>Pups 1-7 days</th>
<th>Pups 8-21 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>1 litter</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>2 litters</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>2 litters (maximum 15 pups total)</td>
<td></td>
</tr>
</tbody>
</table>

With IACUC approval, the following is also permissible:
1. **Delayed Weaning:** One adult non-pregnant female and one litter of pups up to 28 days of age.
2. **Harem breeding:** (a harem consists of 1 male and 2 females, permanently mated)
   a. A harem with 1-2 litters (maximum 30 pups total) up to 7 days of age*; or
   b. A harem with 1-2 litters (maximum 10 pups total) up to 17 days of age*; or
   c. A harem with 1-2 litters (maximum 6 pups total) up to 21 days of age*.

Overcrowded Cages:
Cages with animal numbers exceeding the above limits will be considered overcrowded. Once identified, the investigator has 7 days to separate the animals with the day of identification being the 1st day.

Grossly Overcrowded Cages (GOC):
Overcrowded cages in which the animals’ health is acutely at risk are considered grossly overcrowded. These include cages with ANY of the following conditions:
1. More than 10 adult animals; or
2. More than 20 adults and weanlings (21-28 days); or
3. More than 33 animals of any age; or
4. More than 3 adults and weanlings (21-28 days) plus any pups; or
5. Two litters born more than 14 days apart.

<table>
<thead>
<tr>
<th>Adults</th>
<th>Weanlings 21-28 days</th>
<th>Pups 1-21 days old</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>&gt; 20</td>
<td>0</td>
<td>&gt; 0</td>
</tr>
<tr>
<td>&gt; 33</td>
<td>0</td>
<td>&gt; 0</td>
</tr>
</tbody>
</table>

The time allocated to separate GOCs is determined on a case by case basis, dependent on the number of animals present, their age and condition. Default deadlines for separating animals are indicated below. Cages may need to be addressed sooner depending on animal welfare.
- Sunday through Thursday: GOCs must be addressed by 12pm the next day
- Friday, Saturday, or the day prior to an institutional holiday: GOCs must be addressed by 6am the next day

It is strongly recommended that investigators provide birth dates on cage cards. This will help correctly assessing the age of the pups.

Please contact a member of RARC’s Education and Quality Assurance Staff if you have questions regarding this policy.

* Age is determined by the oldest pup in the cage.