PURPOSE:
To ensure proper rodent husbandry and to prevent the spread of disease between rodents housed in ventilated cages.

HOUSING AND CARE:
A. Mice/rats are generally socially housed in ventilated cages.
   1. For any animal that is individually housed, justification must be given in the animal use protocol and approved by the IACUC.
B. All forms located in the room’s notebook must be adequately filled out.
   1. Daily observation sheet
   2. Task sheets
   3. Temperature/humidity logs
      a. Temperature range: 68-79 degrees F
      b. Humidity range: 30-70%
C. Rooms should be checked daily for any operational deficiencies. Any deficiencies must be reported immediately to the facility manager.
D. Water bottles are filled as needed and changed out weekly.
E. Fresh food is added to the cages as needed.
F. Cage lids, wire bars, and enrichment devices are changed out every other week.
G. Cages with 2 or fewer mice - cage bottoms are changed out every other week.
H. Cages with 3 or more mice and all rats- cage bottoms are changed out once a week.

ENRICHMENT:
A. Rodents are housed in groups to provide social interaction, unless justification for single housing provided.
   a. Strain Specific Mouse Housing:
      i. CD-1: up to 3 mice per cage
      ii. Swiss Webster: up to 3 mice per cage
      iii. Balb/c: up to 5 mice per cage
      iv. C57: up to 5 mice per cage
   b. Rat Housing:
      i. Up to three small juvenile rats per cage
      ii. Up to 2 adult rats per cage

B. **additional strains not mentioned above will be housed based on weight (Guide p.57)Nesting material is added to the cages to facilitate thermoregulation and provide opportunities for species-typical behavior (i.e. foraging, burrowing, nest building, etc.).
C. Enrichment tubes or huts are added to the cages to provide the rodents with shelter and also aid in thermoregulation.

ENRICHMENT IMPLEMENTATION:
A. Enrichment is provided on a rotational schedule by the technicians at change-outs. The rodents receive a different type of enrichment every two weeks (i.e. wheels, trapeze, alternative nesting material, etc.)
B. Exceptions to enrichment require adequate justification as to why environmental enrichment would interfere with the study. These exceptions must be stated in the approved institutional animal care and use protocol

CAGE SANITATION:
A. Bedding from the cages is dumped in the trash, and a scraper is used to remove bedding stuck to the bottom or corners of the cage. The bedding is then removed from the facility and disposed in a designated dumpster outside the building.
B. Water bottles, cage lids, wire bar lids, enrichment devices, and cages free of bedding, are cleaned in the facilities’ cagewasher.
C. Cage racks should be cleaned with Pharmacal Research Laboratories (PRL) grease-free and sanitized with 7-10% bleach every 6 months.

ANIMAL ROOM SANITATION:
A. Floors are swept daily and mopped with disinfectant mixed according to manufacturer’s recommendations at least twice a week. Designated brooms and mops are to be used in each room.
B. All surfaces (including door frames, lights, and vents) are wiped down with disinfectant mixed according to manufacturer’s recommendations, weekly.
C. Floors, walls, and ceiling should be disinfected according to manufacturer’s recommendations, monthly.

VENTILATED RACK MAINTENANCE:
A. Check Daily:
   1. Power supply to rack
   2. Ensure all of the appropriate openings are capped
   3. Condensation in the cages- if present, report it to the facilities manager
   4. Cage clips are properly fastened
B. Check Every Two Weeks:
   1. Inspect pre-filter- clean if necessary
   2. Wipe down the unit
C. Every 6 months:
   1. Change out the rack and hoses
D. Yearly:
   1. Replace the EXHAUST HEPA filter
   2. Replace the pre-filters
E. Every two years:
   1. Replace the SUPPLY HEPA filter

ANIMAL HEALTH MONITORING:
A. Animals are observed daily by animal care staff for evidence of illness or change in behavior.
   1. Everyone with access to the animal facility is responsible for immediately informing the facility manager or a university veterinarian when an animal becomes ill or a change in behavior is observed.
   2. Possible signs of illness are as follows:

<table>
<thead>
<tr>
<th>Species</th>
<th>Behavior</th>
<th>Appearance</th>
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</thead>
<tbody>
<tr>
<td>Rodents</td>
<td>Decreased activity; excessive licking/scratching; self-mutilation; avoidance or aggression; abnormal locomotion (stumbling); writhing; no nest building</td>
<td>Piloerection; rough or stained haircoat; abnormal stance or hunched back; porphyrin staining (rats); rapid, shallow respirations</td>
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B. In the event of suspected illness:
   1. Record your observation on the treatment/observation sheet located in the protocol binder- include the date, animal #/cage ID, the problem observed, and initials
   2. Contact the ACS facility manager or a university veterinarian:

   ACS Attending Veterinarian
   806-834-8588 Office
   806-239-2120 Cell Phone

   ACS Clinical Veterinarian
   806-834-7373 Office
   660-562-4425 Cell Phone

   ACS Facilities Manager
   806-834-2872 Office
   602-758-0670 Cell Phone