Objective: To describe aspects of the program of behavioral management for rodents

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Purpose
UNC Charlotte recognizes the need for laboratory animals to be able to demonstrate species-typical behaviors in a benign and enriched environment. By allowing natural behaviors to be exhibited and providing environmental enrichment, laboratory animals may show reduced stress and anxiety, enhanced well-being, and are given a choice in coping mechanisms to avoid environmental stressors (i.e. temperature changes, social conflict, environmental disturbances, etc.) (Guide for the Care and Use of Laboratory Animals, 8th edition: 2011). For rodents, these behaviors include grooming, exploring, gnawing, reproduction, and resting.

However, it is also understood that some animals may react adversely to the introduction of novel items to their immediate environment, therefore no animals will be subjected to the presence of items they find distressing (OLAW Position Statement #2b: Environmental Enrichment: http://grants.nih.gov/grants/olaw/2011positionstatement.htm)

Procedures

Structural Environment
To create opportunities for species-typical postures and activities, rodents will be maintained:

1) In transparent caging, to allow visualizing of the macroenvironment, and other groups of animals;
2) On contact bedding, to allow digging/burrowing/foraging;
3) In caging sized to allow postural adjustments characteristic of rats and mice; and
4) By using feed that requires gnawing, and can be carried off in small pieces

Social Environment
To provide a social environment that promotes physical contact and communication:

1) Rodents will be group-housed whenever possible given the limitations of available caging and compliance with “the Guide”;
2) Daily technician observation for signs of negative social interaction;
3) Staff will recognize that they form part of the animals’ social environment; and
4) Staff will be trained in suitable handling and restraint.

Activity
To encourage activity:

1) Wire bar lids will be used to allow climbing and hanging;
2) Cotton “nestlets” will be provided during nesting and lactation;
3) Animals will typically be caged below the densities allowed by the *Guide*, to balance both social interaction and space for activity and postural adjustment; and
4) Appropriate supplemental devices (paper toweling, cardboard tubes or sheets, PVC tubes, or enrichment devices) will be provided.

Questions regarding behavioral management should be addressed to the Director, Laboratory Animal Resources/Attending Veterinarian.

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**Health and Safety** -- None

**Personnel/Training/Responsibilities** -- Assuring knowledge of the pertinent aspects of rodent behavioral management is the responsibility of the Director, Laboratory Animal Resources/Attending Veterinarian

**Required Materials** -- Enrichment items

**Guidelines** --

- “Comfortable Quarters for Laboratory Animals” (1997)
- “Evaluation of Environmental Enrichment for Laboratory Mice” (1999)

**Quality Control Checks and Acceptance Criteria** -- Direct observation by the population of animal users at UNC Charlotte.