

## Rat – Basic Care

- The rat is second only to the mouse in its use in biomedical research. Characteristics such as short generation time, easily bred, short life span and docile behavior make the rat an ideal research subject.
- Rats are social animals and should be housed together when young.
- Curious, usually non-aggressive creatures. Respond well to gentle handling, males are less prone to fighting than females.
- Minimum cage sizes are specified in the Animal Welfare Regulation and The Guide for the Care and Use of Laboratory Animals exception must be approved by the IACUC.
- Rats prefer objects to manipulate within their cage, objects that generate their natural behavior such as gnawing and burrowing.
- Examples of enrichment:
  - Wood blocks
  - Group housing
  - Nylabones
  - Shredded corn husks
  - Food treats
  - Nesting Material
  - Shredded paper
  - Human touch
  - Plastic piping
- Should be fed high quality commercially prepared diets that are balanced for proper nutrition.
- Food and water should be fed ad libitum.
- Like all rodents, the incisors grow continuously throughout life. Feed should be hard pelleted for the rats to wear down the teeth by constant gnawing.
- To handle and restrain a rat, grasp the base of tail with one hand, then place the other hand over the back with the thumb and forefinger gently but firmly pressing the forelegs toward the head.
- Should be housed on contact bedding in solid bottom caging. May be housed in suspended wire-bottom cages.
- The tears and saliva of rats contain porphyrin which is red or reddish-brown in color. It can sometimes be seen around the eyes and on the end of the nose. Excessive accumulation around the eyes, nose or on the front legs can be a sign of illness or stress.
- For more specific species information including physiologic data, husbandry and breeding requirements, or procedural information, please contact the Office of Laboratory Animal Care (865-974-5634).