



## Rodent Colony Management IACUC Policy

### 312.1 Mouse Colony Management

#### 312.1.1 Definitions

- i. Adult Mouse: Any mouse that is of weaning age or older and able to eat solid food and reach the water source.
- ii. Mouse Pup: Any neonatal or young mouse up to 24 days of age, i.e. standard weaning cage.
- iii. Breeder Cage: Any cage that contains a male with one or more females, a female with litter, or any cage where pups may reasonably be expected to be born.
- iv. Mouse Litter: A grouping of pups from the same mother.
- v. Post-Partum Estrus: The fertile estrus period in female mice is 14-24 hours following delivery of a litter of pups.
- vi. Delayed Weaning Extension: Instances where a litter has passed its weaning date, but is unable to be weaned due to small size or inability to access food or water. All extensions must be administered by vet staff, or described and justified in an approved IACUC protocol.

#### 312.1.2 Breeding Schemes

- i. Any breeding schemes used must be described under the Breeding Section in an approved IACUC protocol.
  1. Monogamous or Pair Breeding: One (1) adult male and one (1) adult female
  2. Trio Breeding: One (1) adult male and two (2) adult females
  3. Harem Breeding: One (1) adult male and up to four (4) adult females in a standard cage

#### 312.1.3 Overcrowded Cages

- i. Maximum densities for mice housed in microisolators are as follows:
  1. FIVE (5) adult mice per cage of the same sex
  2. Breeding Pairs: Pup density is unrestricted provided that all pups are under 24 days old.
  3. Breeding Trios: Pup density is unrestricted when pups are less than 14 days of age. Pup numbers must be reduced to a maximum of 12 pups per cage when one or more pups are at least 14 days of age.
  4. Harem Breeding: Gravid females in excess of two must be removed and placed in another cage at the time noted to be visibly pregnant and before giving birth. No litters may be born into harem breeding cages containing more than 2 females and 1 male.
- ii. Breeding cages containing pups 24 days of age or older without IACUC approval for extended weaning or exemption due to a failure to thrive will be considered overcrowded.

- iii. It is the responsibility of the investigator to adhere to maximum cage density policies. If an animal care technician observes overcrowded cages, he/she will notify the investigator or his designated contact person of the situation. The cage will be flagged as overcrowded and the investigator and/or lab contact person will be notified. Once notified, the investigator will be given 48 hours to correct the overcrowded cage. A fee for this notification service can be applicable (See SOM and Yerkes DAR websites).
- iv. If the overcrowded cage is not corrected within 48 hours, the animal care technician will be responsible for correcting the cage. The technician will place mice in separate cages to comply with density policies and will assign new cards to the cages with the following information: Investigator, protocol number, sex, number of mice, parent cage identification. The investigator is responsible for obtaining proper barcode per diem labels for those cages in a timely manner. A “per hour” charge for this service will be assessed. (See SOM and Yerkes DAR websites).
- v. When the welfare of the animals is at immediate risk, staff may require that cages be separated prior to 48 hours.
- vi. Exemptions to this policy will be considered by the IACUC on a case-by-case basis and as identified and addressed in the applicable protocol as an original or as amended.
- vii. When the IACUC has granted approval for an exemption to this policy it is the responsibility of the protocol-associated personnel to identify the exemption where it applies when ordering animals and when creating new cages.

## **312.2 Rat Colony Management**

### **312.2.1 Definitions**

- i. Adult Rat: Any rat that is of weaning age or older and able to eat solid food and drink from the water source.
- ii. Rat Pup: Any neonatal or young rat up to 24 days of age.
- iii. Breeder Cage: Any cage that contains one male with one female, a female with a litter, or any cage where pups may reasonably expected to be born.
- iv. Rat Litter: A grouping of pups from the same mother.
- v. Post-Partum Estrus: The fertile estrus period in female rat is 14-24 hours following delivery of a litter of pups.
- vi. Delayed Weaning Extension: Instances where a litter has passed its weaning date, but is unable to be weaned due to small size or inability to access food or water. All extensions must be administered by vet staff, or described and justified in an approved IACUC protocol.

### **312.2.2 Breeding Schemes**

- i. Any breeding schemes used must be described under the Breeding Section in an approved IACUC protocol.
  1. Monogamous or Pair Breeding: One (1) adult male and one (1) adult female

### **312.2.3 Overcrowded Cages**

- i. The housing density should comply with the “Guide” according to the following specifications:
  1. rats up to 300 gm. - 29 square inches each
  2. rats 300-400 gm. - 40 square inches each
  3. rats 400-500 gm. - 60 square inches each
  4. rats greater than 500 gm. each –  $\geq 70$  square inches each

5. female rat with litter – 124 square inches each
- ii. The number of rats per cage will vary depending on the type of cages used. Consult with each facility to determine the housing density.
- iii. Breeding cages containing pups 24 days of age or older without IACUC approval for extended weaning or exemption due to a failure to thrive will be considered overcrowded.
- iv. It is the responsibility of the investigator to adhere to maximum cage density policies. If an animal care technician observes overcrowded cages, he/she will notify the investigator or his designated contact person of the situation. The cage will be flagged as overcrowded, and the investigator and/or lab contact person will be notified. Once notified, the investigator will be given 48 hours to correct the overcrowded cage. A fee for this notification service can be applicable. (See SOM and Yerkes DAR websites).
- v. If the overcrowded cage is not corrected within 48 hours, the animal care technician will be responsible for correcting the cage. The technician will place rats in separate cages to comply with density policies and will assign new cards to the cages with the following information: Investigator, protocol number, sex, number of rats, parent cage identification. The investigator is responsible to obtain proper bar-code per diem labels for those cages in a timely manner. A “per hour” charge for this service will be assessed. (See SOM and Yerkes DAR websites).
- vi. When the welfare of the animals is at immediate risk, staff may require that cages be separated prior to 48 hours.
- vii. Exemptions to this policy will be considered by the IACUC on a case-by-case basis and as identified and addressed in the applicable protocol as an original or as amended.
- viii. When the IACUC has granted approval for an exemption to this policy it is the responsibility of the protocol-associated personnel to identify the exemption where it applies when ordering animals and when creating new cages.

### **312.3 Vole Colony Management**

#### **312.3.1 Definitions**

- i. Adult Vole: Any vole that is of weaning age or older and able to eat solid food and drink from the water source.
- ii. Vole Pup: Any neonatal or young vole up to 24 days of age.
- iii. Breeder Cage: Any cage that contains one male with one female, a female with a litter, or any cage where pups may reasonably be expected to be born.
- iv. Vole Litter: A grouping of pups from the same mother.
- v. Post-Partum Estrus: The fertile estrus period in female vole is 14-24 hours following delivery of a litter of pups.
- vi. Delayed Weaning Extension: Instances where a litter has passed its weaning date, but is unable to be weaned due to small size or inability to access food or water. All extensions must be administered by vet staff, or described and justified in an approved IACUC protocol.

#### **312.3.2 Breeding Schemes**

- i. Any breeding schemes used must be described under the Breeding Section in an approved IACUC protocol.
  1. Monogamous or Pair Breeding: One (1) adult male and one (1) adult female

### **312.3.3 Overcrowded Cages**

- i. The housing density should comply with the “Guide” according to the hamster housing density specifications. Specific vole density is not included in the “Guide”.
- ii. The number of voles per cage will vary depending on the type of cages used.
- iv. Breeding cages containing pups 24 days of age or older without IACUC approval for extended weaning or exemption due to a failure to thrive will be considered overcrowded.
- v. It is the responsibility of the investigator to adhere to maximum cage density policies. If an animal care technician observes overcrowded cages, he/she will notify the investigator or his designated contact person of the situation. The cage will be flagged as overcrowded the investigator and/or lab contact person will be notified. Once notified, the investigator will be given 48 hours to correct the overcrowded cage. A fee for this notification service can be applicable. (See SOM and Yerkes DAR websites).
- vi. If the overcrowded cage is not corrected within 48 hours, the animal care technician will be responsible for correcting the cage. The technician will place voles in separate cages to comply with density policies and will assign new cards to the cages with the following information: Investigator, protocol number, sex, number of voles, parent cage identification. The investigator is responsible to obtain proper bar-code per diem labels for those cages in a timely manner. A “per hour” charge for this service will be assessed. (See SOM and Yerkes DAR websites).
- vii. When the welfare of the animals is at immediate risk, staff may require that cages be separated prior to 48 hours.
- viii. Exemptions to this policy will be considered by the IACUC on a case-by-case basis and as identified and addressed in the applicable protocol as an original or as amended.
- ix. When the IACUC has granted approval for an exemption to this policy it is the responsibility of the protocol-associated personnel to identify the exemption where it applies when ordering animals and when creating new cages.

### **312.4 Document Properties**

Author: IACUC

Administering Division/Department: IACUC

Office Effective Date: 5/18/16

Last Revision: 5/18/16

Version: v. 20160518