

## **Regis University Animal Facility Animal Use Policies**

### **GENERAL**

#### *Quarantine*

All animals arrive from outside the facility shall be initially quarantined in a separate cubicle in order to minimize the chance of introduction of pathogens into the rest of the facility. This quarantine also give animals the opportunity for physiological and nutritional stabilization prior to use.

#### *Surgeries*

All surgeries are performed using aseptic or sterile techniques. Major procedures require the approval of the Regis IACUC.

#### *Euthanasia*

All animals will be euthanized at the end of their use or when medical conditions necessitate. Overdoses of inhaled anesthesia or barbiturates are the preferred method of euthanasia.

#### *Food and fluid restriction*

Food or fluid restriction can only be performed following approval by the Regis IACUC. Animals with food or fluid restrictions must be checked and weighed daily and must maintain at least 80% of their free feeding and drinking body weight.

### **RATS**

#### *Cage organization*

- The rats are all housed in plastic tub cages in separate cubicles from other rodents
- In general, all our rats are female. Male and female rats should be housed in separate cubicles.
- Rats can be housed up to two (2) per cage

#### *General husbandry*

- Feed and water supplies, bedding condition, and general health of the rats should be checked daily during the week. Special care should be given on Fridays to ensure that all the rats have adequate food and water to last the weekend.
- Any overcrowding, injuries, or death should be reported to Dr. Basham immediately.
- Cages are changed twice a week, water bottles are changed once per week.
- All rats are recorded in the rat log book when they arrive.
- When an animal dies or is to be euthanized, it is crossed off the master list in the animal log and also noted on that animal's page
- Every two months a complete inventory is done of the colony. Reconcile cage card data against the rat log book data and visually inspect each cage to make sure the number of rats is accurately reported on the cage card.

*Environmental conditions:*

- Light cycle - 12 hours light/12 hours dark (dark cycle starts @ 6pm)
- Humidity - 40-60%
- Temperature - 70-74°F
- Aspen or pine wood chips are used in all rodent cages. Cedar chips are not used for rodent bedding.

*Breeding*

We do not breed rats in this facility

**MICE**

*Cage organization*

- The mice are all housed in plastic tub cages in separate cubicles from other rodents
- In general, the male mice are housed on a separate shelf from the female mice.
- Female mice can be housed up to six (6) per cage
  - Pregnant female mice are housed individually
- Male mice are housed up to four (4) per cage
  - male mice from the same litter can be housed together until they are used in an experiment or until they have mated
  - After mating males must always be housed individually

*General husbandry*

- Feed and water supplies, bedding condition, and general health of the mice should be checked daily during the week. Special care should be given on Fridays to ensure that all the mice have adequate food and water to last the weekend.
- Any overcrowding, injuries, or death should be reported to Dr. Basham immediately.
- Cages are changed twice a week, water bottles are changed once per week.
- All mice are recorded in the mouse log book. New litters are recorded when they are ~3 days old and the sex of all mice is recorded once the litter has been weaned.
- When an animal dies or is to be euthanized, it is crossed off the master list in the animal log and also noted on that animal's page
- Every two months a complete inventory is done of the colony. Reconcile cage card data against the mouse log book data and visually inspect each cage to make sure the number of mice is accurately reported on the cage card.

*Environmental conditions:*

- Light cycle - 12 hours light/12 hours dark (dark cycle starts @ 6pm)
- Humidity - 40-60%
- Temperature - 70-74°F
- Aspen or pine wood chips are used in all wild-type mouse cages, knockouts are housed with paper bedding. Cedar chips are not used for rodent bedding.
- Over-grooming often occurs in mice housed together - as long as the skin is not broken there is usually no problem. Toilet paper rolls or PVC pipes can be placed in the cages to give the mice something else to do and can relieve the problem.

### *Breeding*

Breeding pairs should be placed in individual cages. In some cases, one male and two females may be housed together for breeding purposes. The date of pairing is recorded in the animal log. Breeding cages should be checked daily for pregnancies and pregnant females are moved to an individual cage. **Be sure to note the female's ID number on the cage.** A golf ball sized piece of cotton is placed in the pregnant female's cage for her to build a nest.

DO NOT change the cage or bedding of a cage with recently born pups, try to disturb them as little as possible until the pups are 3-4 days old.

### *Weaning*

Litters are weaned when pups are ~21 days old. Once the litters are weaned from their mothers, the adult females are returned to their appropriate breeder cage. Male and female weanlings are placed in separate cages, up to six mice per cage. At the time of weaning, all mice should be assigned an ID number, their data entered in the mouse log book, and the appropriate ear punch made. Mice are numbered consecutively starting with the last number assigned. Ear punches match the assigned number. In general, it is best to first number (and punch) the females in the litter, then number (and punch) the males. Male and female weanlings are placed in separate cages, up to six (6) mice per cage - only litter mates may be housed together.