These guidelines ensure compliance with animal use regulations and AAALAC standards. Cage space requirements are from the 8th edition of the NIH Guide for the Care and Use of Laboratory Animals. Exemptions to these standards require scientific justification, must be stated in an approved IACUC protocol, and must be directly conveyed to the UAC Animal Care Manager for the facility where the breeding colony is maintained before changes are implemented.

**Basic breeding support services provided by UAC (included in per diem)**
- Check breeding cages with a “Check for Litters” card for new litters daily
- Record litter DOB on “Breeding Card” and initial if found by UAC technician
- Flag cages containing newborn litters with “Litter <4 Days Old” card
- Change cages with litters **only** when litters are more than 4 days old or the cage is excessively soiled and/or wet
- Record number pups in litter on “Breeding Card” at first cage change after birth
- Flag cages containing pregnant animals with “Check for Litter” card at each cage change
- Flag cages due to be weaned during the following week with “Wean ___ day” cards each Friday (may differ on holiday weeks)
- Place “UAC Weaned” cards on newly weaned cages. “UAC Weaned” card is removed at the next cage change.
- Email investigators with self-managed colonies providing the number of litters weaned per strain and the reason weaned (when rodents must be weaned by UAC to meet regulatory standards)
  - Example email: UAC weaned X litter(s) of mice in room Y due to (state reason) and these cages have been flagged with “UAC weaned” cards.

**Investigator responsibilities for self-managed colonies**
- Submit cage card request forms for breeding/weanling packets for each strain at least one week before needed, either via email or by placing in one of the black cage card collection boxes. Verify all information (esp. lab contact and phone number) is current.
- Manage colony size and production to meet experimental needs
  - Minimize surplus animals
  - Consider cryopreservation as an alternative to live colony maintenance
- Separate pregnant females prior to parturition if:
  - Trio breeding mice (to ensure a maximum 2 adult mice and 1 litter per cage)
  - Trio breeding rats (< 400g BW) in sterile/standard cage
  - Pair breeding rats (< 750g BW) in sterile/standard cage
  - Female rats must be separated from male prior to parturition.
- IACUC approval is required for continuous trio breeding of specific mouse strains that do not reproduce well (maximum of 3 adult mice and 2 litters per cage)
- Record breeder information on breeding cards:
  - Dates bred
  - Dates litter born
  - Weaning dates with number and gender of pups weaned
University Animal Care Rodent Breeding Guidelines

- Wean rodents according to the standards specified below
- Remove weaning card from breeder cage when the litter is weaned
- Record information on new cage cards for weanlings
  - parental cage card number and any additional breeder ID *i.e. ear tag numbers.*
  - date received (= date weaned)
  - number of pups
  - gender
  - DOB
- Record the number of rodents culled at or before weaning on the “Pre-weanling/Culled Animal Usage” form located in each breeding room
  - This is a regulatory requirement to track animal usage for the IACUC
  - This does *not* apply to rodents weaned into a new cage with a newly activated cage card
  - A *maximum* of 10 weanling mice can be placed in a cage marked for euthanasia (with a “clean/dirty PTS” card)

**Breeding support services provided by UAC on a fee for service basis**
- Weaning
- Separating pregnant females
- Setting up breeder pairs/trios
- Setting up timed matings, checking for plugs, and separating breeders
- Collecting blood or tissue for genotyping
- Animal identification (ear tagging, ear notching, ear punching)
- Enhanced notifications
  - Colony inventories
  - Detailed information on animals weaned
- Culling pups

**Mouse and Rat Weaning Standards (per NIH Guide)**
- Mice and rats are generally weaned at 21 days of age
  - If 21 day old rodents are deemed too small to wean by the investigator or UAC, weaning can be delayed up to 28 days of age by displaying the “Litter too small” label adhered to the weaning card
- A maximum of 1 litter is allowed in a single breeding cage; if 2 litters are present the oldest must be weaned (UAC will separate if observed)
- The maximum number of rodents weaned into a single cage is:
  - 5 mice per IVC cage
  - 4 mice per static microisolator cage
  - 4 Rats < 300g BW per sterile/standard cage
- UAC will wean the litter if 2 days past the weaning day indicated by the wean card.
- Litters marked with the “litter to small” label or those that are IACUC approved to be left with female for 28 days, must be weaned on that day or UAC will wean litters on day 29.

Revised 9/2017