

## **BIOLOGICAL RESOURCES: Breeding Colonies**

Before maintaining a breeding colony, you must have an **IACUC-approved breeding protocol**. For assistance with writing an IACUC protocol, contact **Danielle Miller**, IACUC/IBC Administrator, or the **Attending Veterinarian**.

### **Planning:**

When planning a breeding colony, contact **Biological Resources** for guidance. We can assist with: breeding strategies, weaning litters, animal identification, tail-tipping, mouse log setup, expected phenotype(s), and projected colony size once established.

### **Requirements:**

- Weaning must occur between **19–21 days of age**, unless otherwise specified in the protocol.
- Tail-tipping must occur **before 21 days of age**.
- **Cage Identification:**
  - All breeding cages must be clearly marked **“BREEDING”** on the cage card.
  - A separate litter log card must be placed behind the cage card.
  - **Trio or harem breeding** is permitted in large cages if specified in the IACUC-approved protocol.
  - **Small cages** are only allowed for a single female with a single litter ( $\pm$  the male).
  - If there is potential for two litters at once (e.g., trio/harem breeding or IACUC-approved delayed weaning), **large cages are required**.

### **Breeding Colony Management Options**

#### *Option 1: Investigator-Managed*

The research staff listed in the IACUC-approved protocol are responsible for:

- Setting up breeding cages
- Tail-tipping
- Identifying pups
- Weaning pups
  - If animal care staff observe an **overcrowded cage** during AM or PM checks, a **blue OVERCROWD acetate** will be placed over the cage card. Research staff have **24 hours** to correct the issue. After 24 hours, animal care staff will separate animals, and charges will be applied to the PI.
- Managing colony size

#### *Option 2: Managed by Biological Resources*

A supervisor or Licensed Veterinary Technician (LVT) will be assigned to your colony and will provide the following services as part of the **breeding-colony per diem rate** (150% of the standard per diem rate for cages containing breeding pairs or trios):

- Breeding cage setup
- Daily litter monitoring
- Weaning, tail-tipping, and ear punch/tag identification
- Managing colony size
- Maintenance of a shared mouse log (accessible to the PI and research staff via Google Drive)