**Subject:** Neonatal Rodent Euthanasia

**Source:** Institutional Animal Care and Use Committee (IACUC)

**Effective Date:** 06/08/20

**Replaces:** 11/13/17

**Applies to:** Personnel involved in research or teaching studies involving animals

**Reference:** Animal Welfare Act; PHS Policy on Humane Care & Use of Laboratory Animals; Guide for the Care & Use of Laboratory Animals; AVMA Guidelines of Euthanasia (2020).

**Introduction**

The Institutional Animal Care and Use Committee (IACUC) maintains oversight review for federally mandated rules and regulations with regard to animal research, ethics, misconduct and biomedical research for the University of Colorado Denver | Anschutz Medical Campus (CU Denver | Anschutz).

**Policy Statement**

This policy is intended to provide information on the requirements of euthanasia of neonatal rodent not older than 10 days of age and to establish procedures to be followed.

- Neonatal rodents are unusually resistant to hypoxia and the inhalant anesthetics often used as euthanizing agents in adult rodents.
- Inhalant agents alone should not be used in neonatal rodents as a form of euthanasia. Inhalants may be used to induce unconsciousness, followed by some other method of euthanasia.
- The IACUC recommends the following euthanasia methods for neonatal rodents (not older than 10 days of age):
  - The neonate is euthanized by an overdose of injectable anesthetic, given IP.
  - The neonate is anesthetized by exposure to hypothermia (not direct exposure to ice) for approximately 5 minutes until there is no response to noxious stimuli (i.e. foot pinch). Once there is no response to noxious stimuli, the neonate is rapidly and humanely euthanized by decapitation.
  - Neonatal mice and rats (not older than 10 days of age) are resistant to hypoxia. Carbon dioxide is suitable for induction of narcosis but should be followed by another recognized method for euthanasia. A commonly employed technique is decapitation.
- It is imperative that all individuals responsible for administering CO₂ for euthanasia be qualified and trained appropriately on the technique and equipment. Documentation of such training/experience must be provided at the time of protocol submission.
- Any deviation from the policy concerning euthanasia of neonatal rodents will be considered and reviewed by the IACUC on a case by case basis and only with adequate scientific justification.

Per regulatory requirements, failure to comply with this policy may result in notification of your funding agency (e.g. NIH) and regulatory agencies (e.g. USDA) that your research has violated federal and/or local policies regarding the humane use of animals. This notification may affect continuous funding of your animal-related research. Further, depending on the violation, you may be required to take additional training and/or your privilege to conduct animal research at CU Denver | Anschutz might be temporarily suspended or even completely revoked.