

**University of Connecticut
Institutional Animal Care and Use Committee**

Guideline on Rodent Toe Clipping

The Guide for the Care and Use of Laboratory Animals (*Guide*) in the section on Identification and Records states the following on the topic of means of animal identification: "... room, rack, pen, stall, and cage cards with written or bar code information; collars, bands, plates, and tabs; colored stains; ear notches or ear tags; tattoos; subcutaneous transponders; and freeze brands. Toe clipping (removal of the first bone of certain toes corresponding to a predetermined numbering code), as a method of identification of small mammals, should be used only when no other individual identification method is feasible and should be performed only on altricial neonates."

The IACUC position on toe clipping is that under certain circumstances the technique of toe clipping for the purpose of animal identification or tissue collection may be necessary. However, toe clipping is considered as a potentially painful procedure that should be discouraged and may only be done with the approval of the Institutional Animal Care and Use Committee (IACUC). The principal investigator must justify to the IACUC that no other methods of marking the animal or collecting tissue is feasible. The IACUC must also be satisfied that the procedure will be performed in the most painless and humane way. In addition, the IACUC will evaluate the use of accepted veterinary procedures, including anesthesia and antisepsis. The IACUC has adopted the following guidelines based upon a review of the literature:

1. Since altricial rodents are prone to hypothermia and maternal rejection, toe-clipping without anesthesia can be done in rodents under the following conditions:
 - Mice, voles and hamsters before 13 days of age. Note: This procedure is most easily done in these animals at 8-12 days of age.
 - Rats before 7 days of age
 - Older rodents must be anesthetized.
2. Toe clipping of animals in field studies requires scientific justification. The IACUC will consider the age of the animal and the use of possible alternative methods of identification.

References:

1. U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research and Training and the Guide.
2. Emory University Guidelines for Biopsy Procedures to Facilitate Identification and DNA-Based Molecular Genotyping of Rodents.
3. National Institutes of Health, ARAC, Guidelines for Toe Clipping of Rodents, Revised 5/12/04, (<http://oacu.od.nih.gov/ARAC/>)

The UConn IACUC voted to formally accept this document on April 12, 2005.