

## INDIANA UNIVERSITY

# Office of Research Compliance (ORC) Institutional Animal Care and Use Committee (IACUC)

## **Toe Clipping**

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**Policy Statement** 

**Policy** 

**Regulatory Authority** 

Effective: 11.2013 Last Updated: 11.2013

Responsible University Office:

Office of Research Compliance IACUC Office(s)

**Responsible University Administrator:** 

Vice President for Research

**Policy Contacts:** 

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#### **Policy Statement**

The IUSM IACUC is obligated to provide policies that notify and train personnel concerning the appropriate techniques, equipment, and agents for performing appropriate procedures to ensure humane care and use of laboratory animals.

### **Policy**

Other methods of identification that do not result in permanent loss of function for the animal are preferred over toe clipping. These methods include: toe tattoo, tail tattoo, microchipping, ear notching, and ear tagging.

Toe clipping is a method for identification that involves a numerical scheme in which a toe or toes is/are amputated. The Guide says (Page 75) "... toe-clipping should be used only when no other individual identification method is feasible. It may be the preferred method for neonatal mice up to 7 days of age as it appears to have few adverse effects on behavior and well-being at this age (Castelhano-Carlos et al. 2010; Schaefer et al. 2010), especially if toe clipping and genotyping can be combined. Under all circumstances aseptic practices should be followed. Use of anesthesia or analgesia should be commensurate with the age of the animals...."

#### **General Guidelines**

- There is a maximum of two toes per foot, and two feet per animal that may be clipped, thus only four toes may be clipped per animal.
- Only the first bone should be removed, rather than the whole digit.
- Personnel must be appropriately trained on this technique.
- Aseptic technique must be followed.
- The foot must be aseptically prepared before the digit is removed.
- A sterile scalpel blade or sharp surgical scissors must be used.
- Instruments must be disinfected between animals.
- Bleeding after toe clipping should be treated by compression of the sample site by direct pressure.
- Instruments should be sharpened regularly to ensure minimization of tissue injury.

NOTE: Toe Clipping should not be considered a suitable identifying technique for animals used in some behavioral studies as it may reduce grip strength.

#### **Altricial Neonates**

Anesthesia is not required when toe clipping altricial neonates (<10 days old), although topical analgesia such as lidocaine gel is encouraged. Neonatal rodents must be observed daily to ensure that toe clipping has not impeded their ability to nurse.

# **Regulatory Authority**

Guide for the Care and Use of Laboratory Animals, 8<sup>th</sup> edition