Policy on Mouse Toe Clipping

Date approved: April 7, 2017

Purpose
The intent of this UC Santa Cruz Institutional Animal Care and Use Committee (UCSC IACUC) policy is to describe when mouse toe clipping may be performed and the standard procedures for performing this technique. This policy is intended for use by mouse users when individual mouse pup identification is required prior to prior to an age when other methods (e.g. ear punch, tag, microchip) are appropriate.

Policy
Toe clipping for the purposes of identification and/or genotyping may be approved in the animal protocol under the following circumstances:

- Mice up to 7 days of age may be toe clipped for identification purposes
- Mice 8-14 day of age may be toe clipped only if the toe tissue is also used for genetic analysis
- This is considered a refinement by making it unnecessary to perform tail biopsies for tissue sampling

The following procedures must be followed:

- No more than 1 toe per paw may be clipped
- Avoid clipping digits/toes on fore paws if possible
- Do not clip the 1st digit/toe (i.e. thumb) on either fore paw
- Only remove the 3rd phalanx (i.e. last bone of a digit); in other words, amputate at the joint between the 2nd and 3rd bones/phalanges
- Aseptically prepare the digit before clipping (i.e. wipe with betadine or alcohol)
- Use very sharp scissors (fine pointed tips work best)
- Scissors must be cleaned, preferably sterilized (i.e. hot bead sterilizer), between animals
- Alternately, scissors may be sanitized with 70% ethanol or antiseptic solution (e.g. povidone iodine, chlorhexidine)
- Monitor animals continuously until bleeding has stopped
- Bleeding may be stopped using a piece of gauze with gentle pressure between finger tips
- OAR veterinary staff must be contacted promptly if toe does not heal properly or if the animal cannot ambulate normally following the procedure

Any procedure involving toe sampling that does not meet the above criteria must be described and appropriately justified in an UCSC IACUC-approved animal protocol.

References