PURPOSE:
To ensure proper technique for tail snipping or clipping (biopsy) so that an adequate sample is obtained with minimal pain and distress to the animal.

TAIL SNIPS:
A. Tail Snip is to obtain a small amount of tissue and/or blood from a rodent for genotyping or other analysis and involves the removal of the fleshy tail tip thus avoiding the bony vertebral segments.
B. This procedure will result in only a small amount of blood (25-50 µl) suitable for serial sampling (i.e. Blood glucose testing).
C. These procedures usually lead to bleeding at the site.
D. Tail snips are easy to perform and cause minimal pain or distress.
   1. Anesthetics and/or analgesics are not required for a one-time removal of the fleshy tail tip (1-2mm).
   2. Tail snipping should be performed using sharp scalpel, scissors or razor blade. It is recommended that no more than two tail snips are performed on a single animal. Anesthesia (local or general) is required for more than one snip or clip within the animal’s lifetime. If the tail is snipped for serial blood collection, no more than 1 mm of tail in mice should be snipped.
   3. It is recommended that there is a minimum of two weeks in between tail snips to allow the animal to recover.
   4. Bleeding from the sample site may stop spontaneously; however, to achieve adequate hemostasis, a cotton ball or piece of gauze may be applied using a small amount of pressure.
   5. Animals shall be monitored for self-traumatization and or mutilation.

TAIL CLIP (BIOPSY):
A. Tail clip (biopsy) is a more invasive procedure and involves amputation of the tail between bony vertebral segments.
B. If procedure is done between 5-10 days of age, no anesthesia is required.
C. If procedure is done between 10-21 days of age, local/topical anesthesia is recommended.
D. Anesthetics ARE required unless the investigator provides adequate scientific justification and obtains IACUC approval if the animal is over 22 days of age or at weaning (28 days in transgenic mice).
   1. Isoflurane is a common anesthetic used for tail clips, which allows for quick induction and quick recovery.
2. Tail clipping should be performed using sharp scalpel, scissors or razor blade to remove 1-3mm from the tip of the tail.

3. If tail clips are performed on multiple animals using the same scalpel blade, the blade must be cleaned with alcohol between each use. (Be aware that cross-contamination of DNA material may occur using the same blade on multiple animals.)
   a. Bleeding from the sample site may stop spontaneously; however, to achieve adequate hemostasis, a cotton ball or piece of gauze may be applied using a small amount of pressure.