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| Institutional Animal Care and Use Committee | | UNTHSC |
| Title: Guillotine Maintenance | | |
| Document #: 007 | Version #: 04 | |
| Approved by IACUC Date: November 17, 2020 | | |

A. BACKGROUND INFORMATION

Euthanasia techniques should result in a rapid loss of consciousness followed by cardiac or respiratory arrest and the ultimate loss of brain function. The technique should minimize distress and anxiety prior to loss of consciousness. Animals must be euthanized only by trained personnel using appropriate technique, equipment and agents. This is necessary to ensure a painless death that satisfies research requirements. Death should be induced as painlessly and quickly as possible. The euthanasia method must be appropriate to the species, approved in the animal study proposal and conform to the most recent AVMA Guidelines on Euthanasia. Equipment used for decapitation, such as guillotines (a machine with a heavy blade sliding vertically in grooves, used to decapitate small rodents), must be kept clean and sharp.

B. RESPONSIBILITIES

- a. It is the responsibility of investigators and/or lab staff to maintain guillotines that are used for decapitation.
- b. It is the responsibility of the investigator to maintain a log book for each guillotine.

C. PROCEDURES

- a. Cleaning the guillotine:
 - i. After each decapitation, personnel shall rinse and/or wipe down the guillotine and surrounding area to remove all blood and tissue.
 - ii. At the end of each day of use, personnel shall wash the guillotine with soap or detergent and dry it.
- b. Records/Log of cleaning
 - i. The cleaning of the guillotine shall be marked in a log book kept in the lab where the guillotine is kept.
 - ii. The number of rodents decapitated each day shall be noted in the log book.
- c. Testing and sharpening
 - i. Before each day's use, the guillotine blade should be checked for sharpness using a carrot or rubber tubing.
 - ii. The carrot or tubing should be cut by the blade with minimal force. If resistance is felt cutting the carrot or tubing, or if the blade does not cut the carrot or tubing smoothly, the blades will need to be sharpened before use.
 - iii. Document the test in the log book and whether or not the guillotine "passed" this test.

- iv. If the guillotine does not pass the test, the blades should be sharpened by the Equipment Support Specialist (x2614), or the unit should be sent to acquire replacement blades from the vendor. Any of these procedures should be noted in the log book.

D. References:

- a. 2020 AMVA Guidelines for Euthanasia of Animals: 2020 Edition
- b. Guide for the Care and Use of Laboratory Animals, Eighth Edition