THE UNIVERSITY OF QUEENSLAND AUSTRALIA — CREATE CHANGE	UQ Animal Ethics Committee - Standard Operating Procedure **LAB_009 Euthanasia - Decapitation in Mice and Rats (Expires November 2027)** Institutional author: **UQ Biological Resources** AEC Reviewed & Approved: November 2024	Version #4 Page 1 of 2

LAB_009 Euthanasia - Decapitation in Mice and Rats (Expires November 2027)

I. OBJECTIVE

To describe the standard, safe and humane use of decapitation for euthanasia of mice and small rats used across UQ research projects, also reflecting the procedure used to train workers across UQ within UQBR.

NOTE
- **When citing this SOP the document *LAB_100 Euthanasia Methods in Rats and Mice* also forms part of this SOP.**
- **You must also describe your chosen anaesthetic technique (or quote the relevant SOP you will be following).**
- **The use of (*) indicates this statement is dependent on the facility procedures.**
- **The use of (**) indicates this statement is dependent on AEC Approvals.**

II. DEFINITIONS – Refer to LAB_100 Euthanasia Methods in Mice and Rats

III. COMMENTS / RECOMMENDATIONS – Refer to LAB_100 Euthanasia Methods in Mice and Rats

IV. SAFETY AND COMPLIANCE – Refer to LAB_100 Euthanasia Methods in Mice and Rats

V. TRAINING CONSIDERATIONS – Refer to LAB_100 Euthanasia Methods in Mice and Rats

VI. EQUIPMENT
- PPE*
- Cadaver bag*
- Scissors**
- Guillotine restraint device Guillotine restrain device (e.g. Decapicone©) – appropriately sized for the animal
- Guillotine
- Bench protector material
- CO_2 or Anaesthesia Equipment**
- Cleaning materials: paper towels, 70% ethanol spray

VII. PREPARATION – Refer to LAB_100 Euthanasia Methods in Mice and Rats

VIII. PROCEDURE

Part A: Neonatal Mice and Rats (P0 – P10)

1. Place neonate on the prepared surface.
2. Immobilise the neonate using the least dominant hand.
3. Gently position the opened scissors around the neck, behind the head.
4. In one swift and controlled action cut through the neck, separating the body from the head.
5. Place the remains into the cadaver bag and dispose of the bag*.
6. Clean the surface and scissors.

Part B: Mice and Rats (>P10)

1. Gently but securely restrain the rodent within Decapicone® or another similar device. The use of restraining device is optional but is likely to reduce stress from handling, minimize the chance of injury to personnel, and improve the positioning of the animal in the guillotine.

2. Place the rodent on the stage at the entrance to the guillotine; the rodent's head should be placed through the guillotine's diamond shaped blade opening, with the path of the blade directed at the animal's neck. *Ensure you maintain a secure grip of the animal (by the base of the tail) and ensure that your fingers are not within the path of the blade.*

3. Once the head is in the correct position, firmly and swiftly depress the guillotine lever, ensuring the complete decapitation occurs in a quick single cut.

4. Place the remains into the cadaver bag, and dispose of the bag*

5. Clean the surfaces and guillotine after use on an individual animal. The guillotine must be rinsed and cleaned to remove blood, tissue, and gross contamination. This is a critical step to prevent contamination and stress due to the smell of blood on the guillotine.

IX. BIBLIOGRAPHY Refer to LAB_100 Euthanasia Methods in Mice and Rats

Version #	Reviewing AEC (note: all other relevant AECs ratify the approval)	AEC Review Date	Approval To Date
[#]		[DD/MM/YYYY]	