

	Flinders University Safe Work Method Statement Mouse – Sexing, Handling, Restraint, and Ear Notching 18/06/19		
			College of Medicine and Public Health Animal Facility
SWMS Number	RA Number		RA Score
SWMS- 1.0	RA1.0		Medium
Contact Person	SWMS prepared by	AWC Approval Date	Review Date
Roxanne Collingwood	Roxanne Collingwood	18/06/2019	June 2021

Contents

The SWMS **Mouse – Sexing, Handling, Restraint, and Ear Notching** contains the following sections:

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Legislation

- *Australian Code for the Care and Use of Animals for Scientific Purposes 8th Ed.*
- *Animal Welfare Act 1985*
- *Animal Welfare Regulations 2012*

- [Gene Technology Act 2000](#) (the Act)
- [Gene Technology Regulations 2001](#)
- [Work Health and Safety Regulations 2012](#)

University Policy

- Work Health and Safety Policy 2013
- Responsible Conduct of Research Policy 2016
- NHMRC Guidelines

Local Policy

Use of the College of Medicine and Public Health Animal Facilities by all staff and researchers of the College of Medicine and Public Health, Flinders University, is subject to awareness of, and adherence to the following:

Research Involving Animals:

- The University holds a licence for the use of animals for teaching and research purposes. To satisfy the requirements of the licence, anyone wishing to undertake teaching and research using animals must submit a proposal to the Animal Welfare Committee (via the Animal Ethics Review Sub-Committee. No work with animals may commence until written approval has been received from the Animal Welfare Committee. Standardised application forms for Research and Teaching can be found on the Flinders University website listed below. It is your responsibility to regularly check this site for updates to guidelines, forms etc
http://www.flinders.edu.au/research/researcher-support/ebi/animal-ethics/animal-ethics_home.cfm

- **All staff and students involved in animal research must complete Animal Ethics Online Training (AEOT) and must also regularly attend Animal Researcher Information Sessions (ARIS).**
- **All personnel working with Genetically Modified Animals (GMO) or working with in a PC1 or PC2 facility must attended a Biosafety Training Day every 3 years**

Safe Work Method Statement

Refer to Risk assessments, Safe Work method Statements for chemicals, processes and plant equipment where appropriate. All projects must have an accompanying Risk Assessment signed by the Animal Facility Manager

- SWMS 1.7 Mouse -Transportation
- RA 1.7 Mouse -Transportation
- SWMS 1.9 Mouse – PC1, PC2 and Infectious Containment Husbandry
- RA1.9 Mouse – PC1, PC2 and Infectious Containment Husbandry
- SWMS 10.2 - Emergency Contingency
- RA 10.2 - Emergency Contingency

Personal Protective Equipment Required

- **Gloves – to be worn throughout entire procedure**
- **Gown**
- **Mask**
- **Hair Net**
- **Shoe Covers**

Hazards and Controls

- **Animal bites- training, demonstrate competency, adhere to SWMS.**
- **Animal Scratches- training, demonstrate competency, adhere to SWMS.**
- **Needle Stick- DO NOT recap needles, dispose immediately into sharps containers, adhere to SWMS.**
- **Chemical exposure- wear PPE and goggles.**
- **Unintentional release of GMO- number of animals checked and recorded on “Researcher Movement Sheet”. Cage/ shipper secured with in the Animal room or PC facility to prevent accidental release. Attend Biosafety training every 3 years.**

Before Work Commences

Ensure that you are aware of the locations of the following:

- **Spill Kit**
- **Fire Extinguisher**
- **Eye Wash**
- **Exits**

Risk Assessment and SDS (Safety Data Sheet) - Ensure that you have read and understood for all the substances being used.

Equipment

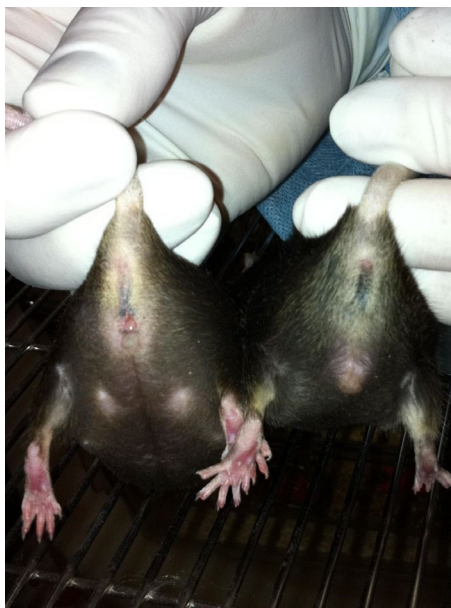
- **Check for safety and electrical compliance**
- **Ensure that you have read and understood the Risk Assessment and Safe Work Method Statement**
- **Obtain training before using any equipment**

General Information

- **All procedures are to be performed by trained competent staff.**
- **Training is available from senior animal house staff or Animal Welfare Officer.**
- **Evidence of training is available in the “Staff Training Needs Analysis”**

Sexing Mice

- **To sex mice, lift up the tail and hindquarters, and examine.**
- **The sex is determined by comparing the anogenital distance:**
 - **In adult **males**, the distance is 10-15mm. The testes may also be visible in the scrotum, but can often be retracted.**
 - **In adult **females**, the distance is 5-6mm. Females also have a hairless strip, which is visible between the anus and genital papilla.**



FEMALE

MALE

Catching and Restraint

1. Catch and hold mouse by the base of the tail (if the mouse is held by the tip of the tail, it may cause it to strip the skin from the tail).
2. Place the animal on of the cage lid, and gently pull the mouse backwards by the tail. This will cause the animal to grip the bars on the cage lid, allowing you to restrain it.
3. Use thumb and forefinger to grasp the mouse by the scruff (this will prevent the mouse from turning around to bite).
4. Lift the mouse, turning it over to rest in the palm of your hand, tucking the tail under your little finger.



Step 1



Step 2



Step 4

Ear Notching

1. Restrain the mouse in one hand using the above procedure.
2. Immerse the ear punch in alcohol to disinfect it before use, and between animals.
3. Place the punch on the outer edge of the ear in a location where you want to mark the animal for identification.
4. Press firmly to punch a circular hole through the ear.
5. Care must be taken as you remove the punch, not to rip the delicate membrane of the ear. Gently separate the ear from the device.
6. The punched tissue may be put into a sterile Eppendorf tube for PCR testing if genotyping is required.
 - NOTE: The holes or notches may grow closed over a period of time. It is important, to check the markings regularly and re-notch the animal so that it can still be identified accurately.



Ear Notch Codes

- When notching, the right and left ears are the “**Mouses**” right and left ears.

No Notches

R	1 notch on the Right ear
L	1 notch on the Left ear
RL	1 notch on the Right ear + 1 notch on the Left ear
2R	2 notches on the Right ear
2L	2 notches on the Left ear
2R1L	2 notches on the Right ear + 1 notch on the Left ear
1R2L	1 notch on the Right ear + 2 notches on the Left ear
2R2L	2 notches on the Right ear + 2 notches on the Left ear
3R	3 notches on the Right ear
3L	3 notches on the Left ear
3R1L	3 notches on the Right ear + 1 notch on the Left ear
3R2L	3 notch on the Right ear + 2 notches on the Left ear
1R3L	1 notch on the Right ear + 3 notches on the Left ear
2R3L	2 notch on the Right ear + 3 notches on the Left ear
3R3L	3 notch on the Right ear + 3 notches on the Left ear

SWMS Review

This SWMS currently applies to the animals housed in the College of Medicine and Public Health Animal Facility. This SWMS will be reviewed 3 yearly, but also updated more frequently as policies, techniques and animal care requirements change.

Position	Name	Contact Details
Manager Animal Facility	Roxanne Collingwood	8204 4380 roxanne.collingwood@flinders.edu.au
Animal Welfare Officer	Dr Lewis Vaughan	0450 424 143 awo@flinders.edu.au

Useful References

- <http://www.nhmrc.gov.au>

- <http://www.ogtr.gov.au/internet/ogtr/publishing.nsf/Content/home-1>
- <http://www.adelaide.edu.au/ANZCCART/>
- http://www.flinders.edu.au/research/researcher-support/ebi/animal-ethics/animal-ethics_home.cfm

Any questions regarding the above guidelines and any technical advice/ assistance required can be directed to Animal Facility Manager.