ResearchMaster

Animal Ethics Application

Application ID :	0000025516
Application Title :	Rat breeding colony for Victoria University of Wellington
Date of Submission :	24/11/2017
Primary Investigator :	[redacted]
Other Personnel :	

Intro

Details of application

Ethics category code*

Animal

1. Current Committee

Animal Ethics Committee

2. Clearance Purpose code*

Both Research and Teaching

3. Application ID

0000025516

4. School*

[redacted]

5. Application Title*

Rat breeding colony for Victoria University of Wellington

6. Estimated duration of project. (If ongoing, the maximum approval period is 3 years.)*

3 years

7. Does this application require formal approval?*

- (●) Yes
- ( ) No

Project Details

8. Please list the Principal Investigator (the PI), Co-investigators and Student/Technical Assistants. The Principal Investigator must be academic staff of grade lecturer or above.

If you are not the principal investigator, please delete your personnel entry below and add your name again, with the correct position title..

Please list all personnel involved in this project. Ensure that all are listed with the correct role.

Please ensure that only one person is listed as Principal Investigator and ticked as Primary

To add a person, search for their Victoria ID if known, otherwise *either* their first *or* last name (whichever is the most unusual). Click on the magnifying glass to search for results.

Press the **green tick** at the bottom right corner to save the person record.

Add anybody who is involved in this project as:

- Associate Investigator
- Other Researcher
- PhD Student
- Masters Student
- Research Assistant

Click on the help button if you are having difficulty adding people to the list.*

1	Title	[redacted]
	Given Name	[redacted]
	Surname	[redacted]
	Full Name	[redacted]
	Position	[redacted]
	Email Address	[redacted]
	Primary?	No
2	Title	
	Given Name	[redacted]
	Surname	[redacted]
	Full Name	[redacted]
	Position	[redacted]

	Email Address	[redacted]
	Primary?	Yes
3	Title	[redacted]
	Given Name	[redacted]
	Surname	[redacted]
	Full Name	[redacted]
	Position	[redacted]
	Email Address	[redacted]
	Primary?	No
4	Title	[redacted]
	Given Name	[redacted]
	Surname	[redacted]
	Full Name	[redacted]
	Position	[redacted]
	Email Address	[redacted]
	Primary?	No
5	Title	[redacted]
	Given Name	[redacted]
	Surname	[redacted]
	Full Name	[redacted]
	Position	[redacted]
	Email Address	[redacted]
	Primary?	No
6	Title	[redacted]
	Given Name	[redacted]
	Surname	[redacted]
	Full Name	[redacted]
	Position	[redacted]
	Email Address	[redacted]
	Primary?	No
7	Title	[redacted]
	Given Name	[redacted]
	Surname	[redacted]
	Full Name	[redacted]
	Position	[redacted]
	Email Address	[redacted]
	Primary?	No
8	Title	[redacted]
	Given Name	[redacted]
	Surname	[redacted]
	Full Name	[redacted]
	Position	[redacted]
	Email Address	[redacted]
	Primary?	No
9	Title	[redacted]
	Given Name	[redacted]
	Surname	[redacted]
	Full Name	[redacted]
	Position	[redacted]
	Email Address	[redacted]

	Primary?	No
10	Title	[redacted]
	Given Name	[redacted]
	Surname	[redacted]
	Full Name	[redacted]
	Position	[redacted]
	Email Address	
	Primary?	No

8a. Please describe the qualifications and experience of each researcher listed above and list any training plans.

[redacted]

Animal technician assistants/students will be appropriately trained by [redacted] to care for the rat colony when she is away (please see attached document - List of additional Research Assistants and Students involved in animal husbandry; the list will be modified if new students get involved).

[redacted]

9. Please list the project funding. *

Internal

10. Lay summary: (Short paragraph for non-scientists; will be made available to the general public.)*

We would like to maintain our rodent breeding colony to produce the rats needed for the research experiments approved by the Animal Ethics Committee of VUW.

11. Background, aim and significance of project: *

Several approved research experiments involving rats are conducted in our facility each year. In order to have enough animals for these experiments, or to have animals showing particular characteristics, we would like to maintain our rat breeding colony.

12. State where the animals will be housed, who will care for them, how they will be maintained, and who will carry out anaesthesia, surgery and euthanasia: (refer Code, Section 5)*

Animals will be housed in individually ventilated cages in the animal facility of Te Toki A Rata, Kelburn Parade, VUW. The rooms where the animals will be housed will be temperature-controlled and kept at 21 degrees Celsius and 55% humidity. Food and water will be freely available. Breeding activities (selection, pairing, weaning and culling) and care for the rats will be performed by [redacted] primarily, or by appropriately trained students.
The cages have a floor area of 870.9 cm2 allowing for 2 rats of 500 g to be housed together (or more animals depending on their weight). An exhaust system allows each cage to be ventilated in order to keep low levels of ammonia and CO2 in the cages, and to reduce the spread of infections and contaminants.
By default, all animals will receive enrichment material (chew blocks, cardboard rolls, nesting material; food treats such as dry fruits are also considered) and will be kept in pairs.

13. Proposed avenue of publication of research results: (Results from research projects are expected to be published. For on-going projects, evidence of publication is required before approval can be given to renew the application for a further 3 years.)*

No research result will be obtained from the breeding per se, but experiments for which the breeding colony is necessary will yield results that will be published in international journals.

14. Is this a continuation of an ongoing project?*

- ○ Yes
- ◉ No

15. Do you require an IDAO form? *

- ○ Yes
- ◉ No

16. Do you intend to use any of the Standard Operating Procedures for the following? A new page will appear when each option is chosen and the page is saved.

- ☐ Biological Sciences
- ☐ Malaghan
- ☐ Psychology

This question is not answered.

Species justification, DOC and Justification of Use

18. Give the species, strain, sex, age, and source of animals, and state the total number of each species needed for the project. (refer (refer Code vii)*

Species: Rats
Strains: Sprague-Dawley, Long Evans, Wistar SERT mutants (mutation of the serotonin transporter), Wistar D1 mutants (mutation of the dopamine D1 receptor), APO-SUS and APO-UNSUS
Sex: males and females
Number: up to 1176 breeders (588 females and 588 males)

19. Does your project require DOC approval?*

- ○ Yes
- ◉ No

20. Justification of animal use. Explain why the proposed use of animals is unavoidable, what alternative approaches are available, and how the number of animals used will be minimised. (State prior history of animals, and provide statistical or biological justification of numbers.) (refer (refer Animal Welfare Act 1999 s 100)*

The only purpose of our breeding colony is to produce the rats needed for the experiments conducted in our facility and approved by the Animal Ethics Committee.
Because we need animals showing standard responses to experimental manipulations and treatments, we need them to be bred in standard conditions in a colony. The breeding colony needs to be on site in order to have enough animals for experiments, and to have animals showing particular characteristics, such as the SERT and D1 mutant rats (not otherwise available in New Zealand). In addition, because many of our experiments involve an environmental component, they can require particular breeding conditions which can only be suitably controlled in our own breeding site. Breeding rats in situ also means they don't need to go through long hours of transport.

Animal Manipulation

21. Pain classification of project: (Please indicate the grade(s) of your manipulation(s):*

- ☐ Grade A - no impact
- ☑ Grade B - little impact
- ☐ Grade C - moderate impact
- ☐ Grade D - high impact
- ☐ Grade E - very high impact

22. Experimental design of project: (give overall design, including details of protocols involving animals, including details of experimental and control groups of animals, and state if the method to be used is standard practice of a new approach. If applicable, give details of risk management and containment procedures.) If the details exceed a character limit of 4000, please upload details as a document to the Documents page. *

Animals of the mutant strains (SERT and D1) will be identified by a microchip implanted subcutaneously at 21 days of age, and on the same day, these animals will also be ear-notched for genotyping. Ear-notches may be used in rats of other strains for identification if a harem system is used for breeding (this is likely to happen for the first two generations only, after which monogamous pairs will be established).

22a. What, if any, statistical advice have you sought for this application?*

NA

23. Surgical procedures: (give details for each type of operation) (Refer Code, Section 5)*

NA

24. Provisions for post-manipulation recovery and care - definitions of endpoints - whether based on the aims of the study, humane considerations, or death of animal : (refer Code, Section 5)*

Microchipping and ear-notching have a low pain impact. Microchips are small (about a rice grain size) and their implantation is similar to an injection with a large needle; it is done at weaning age when there is no discomfort any more. Ear-notching is done in young animals, at an age when no anaesthesia is needed, and performed by trained personnel. After the manipulations, the animals will be monitored for any behavioural or physical change.
Animals losing 15% of their weight overnight for no explainable reason (for ex. empty water bottle) or showing signs of illness will be euthanised.

25. What is the fate of animals at conclusion of study: (refer Code, Section 5)*

Breeders will be culled when 6-9 months of age, if they consistently have small litters (less than 5-6 pups) or if they repeatedly fail to breed (no pregnancy after paired for 6 weeks).

26. Does your research involve anaesthesia or euthanasia?*

- ◉ Yes
- ○ No

26a. Anaesthesia or euthanasia procedures: (give specific drugs, doses, and routes of administration) (refer Code 5 xi, xii)

Animals will be sedated CO2/O2 mix, then euthanised with CO2.

Documents

27. Upload documents to this page.

Description	Reference	Soft copy	Hard copy
Research Design	List of additional Research Assistants and Students involved in animal husbandry - Rats.docx	✓	

Declaration

28. I am aware that this project is undertaken within the provisions of the Animal Welfare Act 1999, I have read the Victoria University of Wellington Code of Ethical Conduct for the Use of Live Animals for Teaching and Research, and I agree to abide by all the conditions contained in these two documents. In the event of this application being approved, I will promptly inform the Animal Ethics Committee of any subsequent unforeseen change or planned modifications to the project, giving explanations for all such changes.

I agree to maintain accurate records of all animals used (refer Code, Section 4 (c)) and to make these records available promptly to the Executive Officer of the Animal Ethics Committee. If this is a modification, I agree that the proposed changes will be carried out in conformance with the details approved.*

- (•) Yes
- ( ) No

29. Please add the Head of School (or delegate) who should be notified about this application. This will be your own Head of School, or the person in your School responsible for Ethics applications. **Please check with your School administration team if you are unclear who should be assigned this role.**

Once you've searched for your Head of School/delegate, click on the green tick to add them, and then also save the application before submitting.

*

1	Given Name	[redacted]
	Surname	[redacted]
	Full Name	[redacted]
	Position	[redacted]

AEC Administration (committee use only)

AEC Internal File Reference

This question is not answered.

Date Approved

14/12/2017

Date IDAO Approved

This question is not answered.

AEC notes on application

To start on 1/1/2018

This project is approved until this date of expiry

01/01/2021

Date Reapproved

This question is not answered.

Rat breeding colony for Victoria University of Wellington – List of additional Research Assistants and Students involved in animal husbandry

Name	Position	Email address
[redacted]	[redacted]	[redacted]

[redacted]