THE UNIVERSITY OF QUEENSLAND
AUSTRALIA
CREATE CHANGE

TOP TIPS FOR MANAGING

MOUSE BREEDING COLONIES

UQ RESEARCH ETHICS AND INTEGRITY





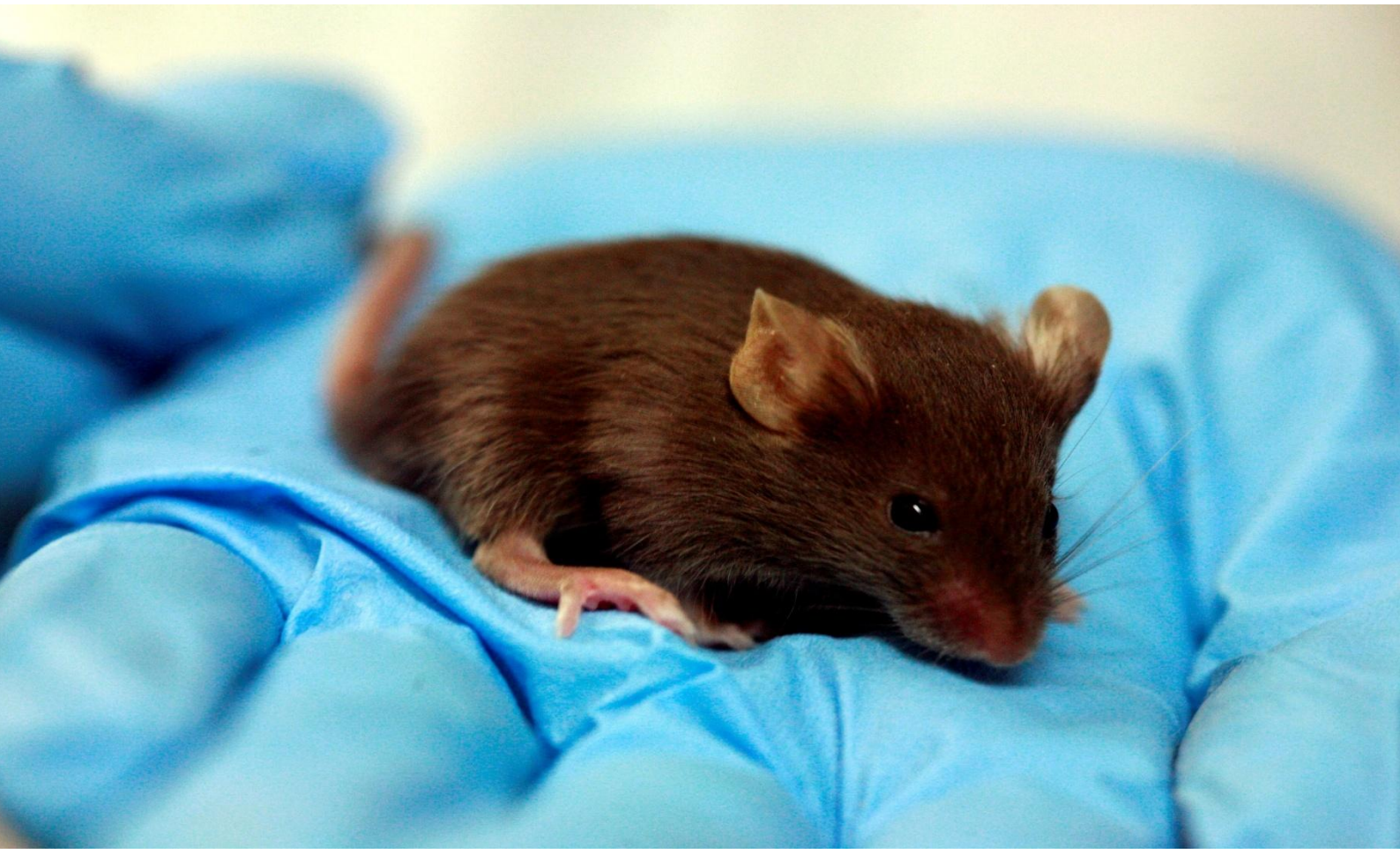
UQ's innovations have made, and continue to make, life-changing advances. The University is committed to maintaining the highest standards of ethical decision-making, animal husbandry and care as a contribution to achieving quality research and teaching outcomes.

For research that involves the study of animals in the wild or in agriculture, or the use of animal models of human disease, the University's Animal Ethics Committees (AECs) review proposals to ensure that animal welfare is fully considered before the commencement of any activities. Similarly, the Committees must consider teaching activities that directly involve animals, such as veterinary science or marine biology.

As part of the Top Tips Series produced by UQ Research Ethics and Integrity (UQREI), this brochure provides advice to researchers to assist with management of laboratory animal breeding colonies and should be read in conjunction with the Top Tips for Success in Animal Ethics Applications.

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INTRODUCTION

Breeding colonies of laboratory animals must be professionally managed to avoid or minimise the production of excess animals. The University of Queensland (UQ) requires that animal ethics approval is obtained prior to establishing a breeding colony. Both breeding and research colonies are managed with the help of UQ Biological Resources (UQBR) and using Mosaic.

Mosaic software has been implemented to meet the record keeping requirements for breeding and research colonies at UQ, and to assist staff in providing a high standard of breeding colony management.

This Top Tips document provides advice to researchers preparing ethics applications for mouse breeding colonies and is based on common application errors and/or omissions UQ AECs have encountered.

THE BREEDING APPLICATION

The breeding application helps the AEC consider:

- Why animals are being bred.
- Whether the breeding strategy will produce the required animals without unnecessary surplus.
- Any welfare risks associated with the strain.
- Measures to minimise welfare impacts.
- Who is responsible for managing the breeding animals.

KNOW YOUR RESPONSIBILITIES

The CI remains ultimately responsible for the breeding project and for ensuring that all activities are conducted in accordance with AEC approval conditions and the requirements of the Code. While animal management is a shared responsibility involving facility staff and research personnel, the CI retains oversight of the project and is accountable for:

- Compliance with approval conditions
- Animal welfare monitoring
- Accurate record keeping
- Management of breeding outputs
- Reporting required information to the AEC

Top Tip: Good animal management is a shared responsibility, with all participants contributing to animal welfare, compliance and effective oversight.

BEFORE YOU BEGIN

Ensure you know the following:

- Strain names
- Number of progeny required
- Breeding strategy
- Estimated breeding performance
- Expected culls
- Expected mortality/morbidity
- Responsible personnel
- Transfer arrangements to research/teaching projects



Use the same strain name across all breeding, research and teaching approvals. This ensures animals can be tracked correctly and simplifies reporting.

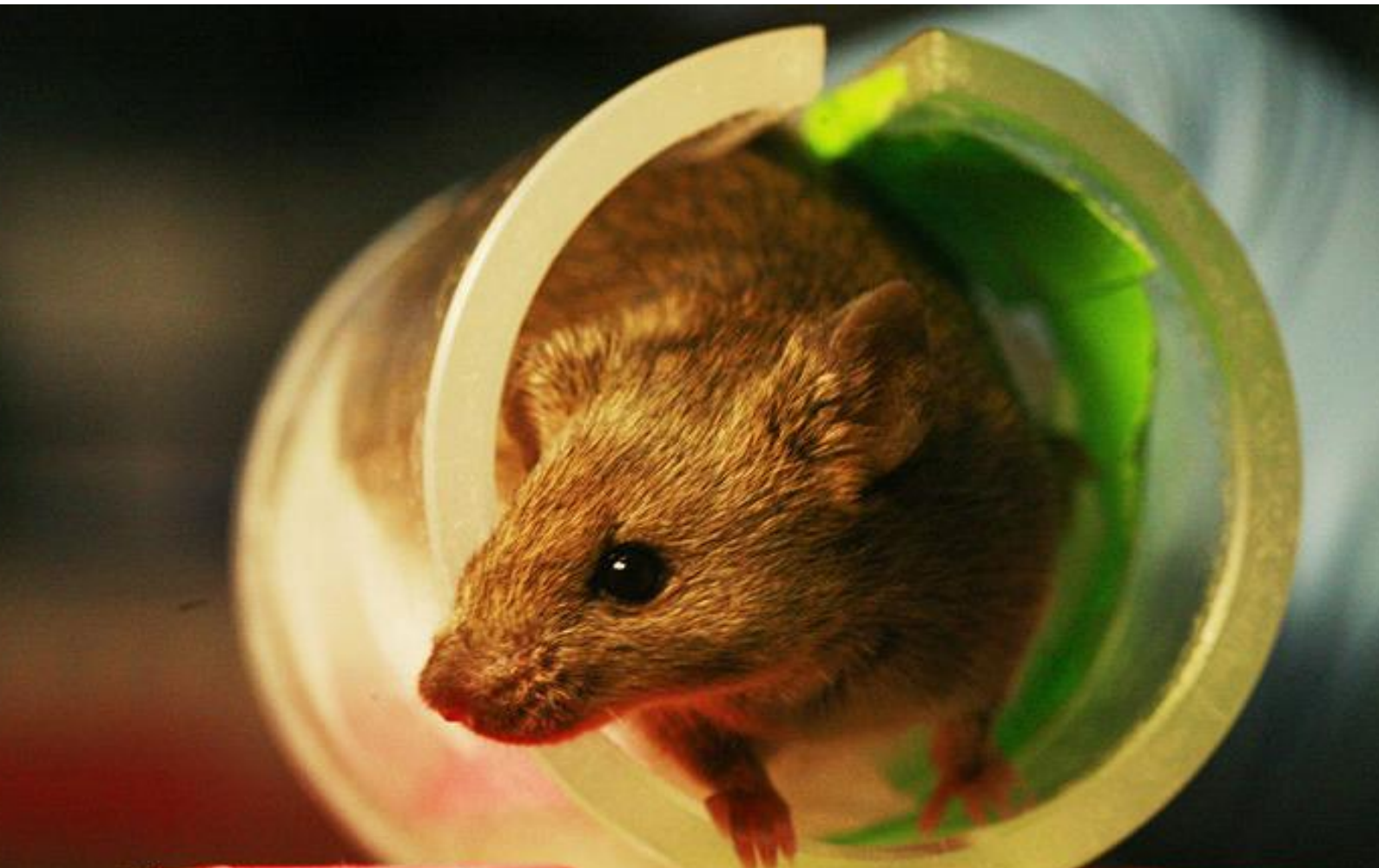
Before applying to an AEC, you must discuss your breeding requirements with the UQBR Facility Manager or breeding teams. They are best placed to provide guidance on your intended breeding strategies and expectations.

In your application, you will identify your breeding activities via a breeding line. Each breeding line is to produce the final strain of animal that is required for research/teaching. If your research/teaching will require multiple strains, these must be added as separate breeding lines.

Top Tip: Plan your breeding lines carefully and discuss them with UQBR before applying, to ensure your strain names, breeding strategy and animal numbers are accurate from the outset.

DEFINITIONS IN A BREEDING APPROVAL

Term	Simple definition
Breeder	An animal, male or female, whose purpose is to produce offspring, regardless of their effectiveness.
Cull	A healthy animal not suitable to be used for experiments or as replacement breeder.
Progeny	Pre weaned animals born, suitable to be used in the associated research or teaching approval. Note: Post weaning, all progeny should be allocated/transferred to the ethics approval they will be used on.
Retained breeder	Animals born in a line, that are selected and retained for generational breeding, rather than being culled.
Mortality	An animal found deceased, whether the cause of death is known or unknown
Morbidity	Animals which are adversely impacted due to occurrence of illness, disease, injury, or abnormal health condition and either recover or require euthanasia.
Strain	A genetically defined group of animals that share common ancestry and stable genetic characteristics



ANIMALS IN A BREEDING APPROVAL

In your application, breeding activities are identified through breeding lines, with each breeding line established to produce a specific strain of animal for research or teaching purposes. Where multiple strains are required, each strain must be included as a separate breeding line.

The number of animals requested for each breeding line should be justified by the number of progeny of that strain required for transfer at weaning to the research or teaching project in which they will be used.

The total number of animals needed to produce the required number of progeny can then be back calculated to determine the number of breeder animals of each sex required and the number of animals that may be produced but are unsuitable for use in the research project (culls) or as additional breeders.

In your application, you will also be asked to identify the predicted incidence of expected adverse events which may impact animal welfare (for example in rodents: cannibalism, dystocia, malocclusion). This information will allow you to identify estimated mortality and morbidity rates for your breeding line.

All animals within the breeding line must be accounted for. This includes:

- Animals bred
- Animals retained for breeding
- Animals culled
- Unexpected mortalities
- Animals euthanised because of illness, injury or welfare concerns

Top Tip: Every animal should have a documented outcome.

JUSTIFICATION FOR BREEDING

A justification for a breeding line should include:

- The reason for maintaining a breeding line of the strains in the application form.

  If a strain is already part of an existing breeding approval at UQ, the justification as to why it is necessary to establish another breeding approval.

- The number of animals (progeny) needed for the research or teaching experiment. This is the reason for establishing the breeding line and the breeding strategy should be based upon this number.

- The proportion of animals produced that will be used for experiments.

- Information regarding the reproductive performance of the mouse strain (i.e. number of pups per litter, number of litters per female). Information related to mouse reproductive performance can be obtained from online mouse resources, or you may use statistics from your own breeding lines.

If you are unsure, the Facility Manager of the UQBR animal facility in which your animals will be housed, will be able to help you. In addition, there are resources available on the UQ Biological Resources web page to assist.

The Jackson Laboratory website is a valuable source of mouse strain information. You may download the free Handbook of Genetically Standardized Mice that contains tables describing the reproductive performance of several mouse strains.

Top Tip: The AEC needs to understand not only how many animals you plan to breed, but why those numbers are necessary and how they were calculated.

EXAMPLE: JUSTIFYING ANIMAL NUMBERS

You must justify the number of breeding animals maintained or to be maintained to generate your required progeny. The following example is provided to guide how to enter all required information into the application form.

Animals required for experiments (progeny): Work being conducted under approval 2027-AE0123 requires 100 homozygous animals.

Breeding strategy on your breeding application form: Heterozygous x heterozygous mating pairs

Expected genotypes: It is expected that one quarter of the offspring will be homozygous

Number of breeding animals: We will require seven breeding pairs and breeders will be replaced after six months of breeding.

The expected offspring produced for the life of the project: In this example 1 year: 14 females x 5 litters per female* x 5 pups per litter* = 350 animals produced.

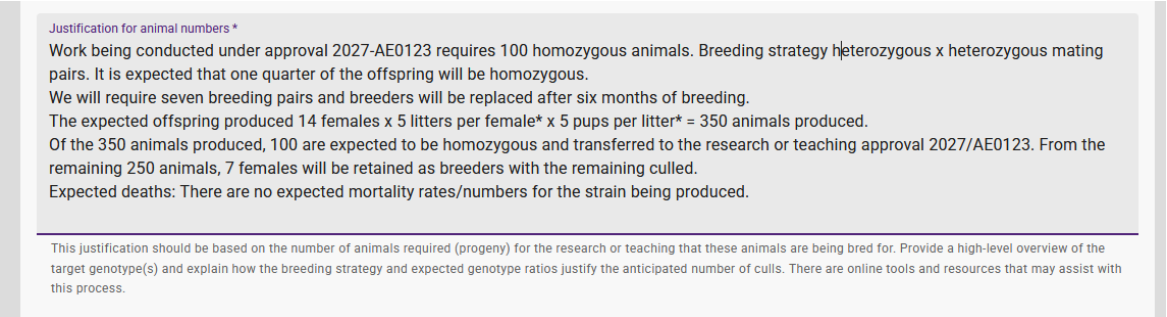
Of the 350 animals produced, 100 are expected to be homozygous and transferred to the research or teaching approval 2027/AE0123. From the remaining 250 animals, 7 females will be retained as breeders with the remaining culled.

Expected deaths: There are no expected mortality rates/numbers for the strain being produced.

Your justification should be based on the number of animals required (progeny) for the research that these animals are being bred for and include a high-level overview of the target genotype(s). It should also explain how the breeding strategy and expected genotype ratios justify the anticipated number of culls.

There are online tools and resources that may assist with this process; however, your UQBR Facility Manager or breeding teams are best placed to provide guidance on your intended breeding strategies.

* Expected numbers for C57BL/6J mice are from the Handbook of Genetically Standardize Mice (Jackson Laboratories



NUMBER OF ANIMALS REQUIRED FOR BREEDING

Number of breeders required (please include replacement breeders in this number) over the life of the project.

The example justified the number of breeding animals required. The breeding application form asks for the number of breeding animals broken down by males and females.

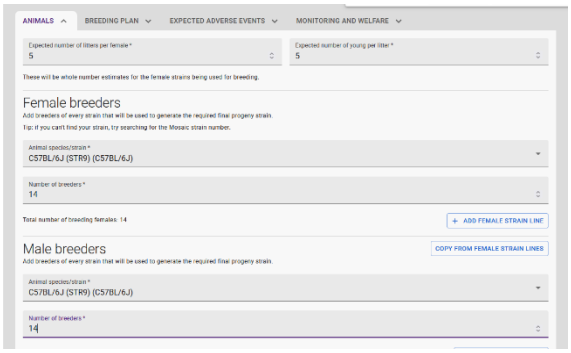


Figure 1

Figure 1 provides an example of how information from the justification should be entered into the Breeding Plan, of your application. Data entered in this section will be used to populate the 'Breeder' animal numbers on the Animal Ethics Approval Certificate for the breeding line.

If the breeding strategy requires that transgenic mice be mated with wildtype mice, then two rows will need to be completed to request 7 transgenic mice, and 7 wildtype inbred mice.

This distinction will become important when you order animals for your breeding line.

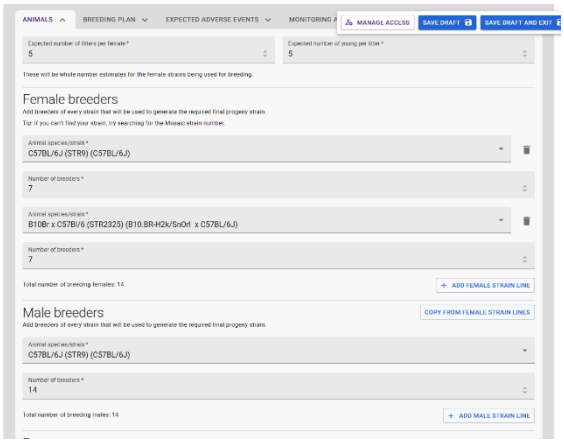


Figure 2

Figure 2 provides an example of how to enter information for multiple strains into the Breeding Plan of the breeding application form.

NOTE: There is no need to include the ages of animals being requested on a breeding application form. It is assumed that breeding animals are adults and progeny that are not needed will be culled prior to or at weaning, as necessary.



ESTIMATED OFFSPRING

You will be asked to identify the strain that is ultimately to be produced and transferred for use in research. This is the progeny strain.

The total number of offspring (animals produced) will be calculated based upon the variables you enter into your application. This calculation is: Female breeders × expected litters per female × expected young per litter.

These are based on the anticipated breeding performance of the strain under normal breeding conditions and should reflect the numbers required to support the breeding activity.

The total offspring value is then used to qualify other data entered: required progeny, estimated deaths, estimated culls and the number of animals retained as breeders.

The example provided included a calculation for the expected number of animals that will be produced. The numbers from the example have been entered into Figure 3.



Figure 3



ESTIMATED CULLS

On the Breeding Plan of the application form you are asked to identify an estimated number of animals for each strain, that may be culled during this breeding activity.

NOTE: For complex crossbreeding or back-crossing programs, cull numbers may need to be included for intermediate breeding generations. You do not need to list every possible genotype. Any progeny not required for future breeding can be counted as culls under the relevant parent breeding strain.

You can only select strains which have been included in the breeding strains or the progeny strain, within this breeding line.

From the example, the cull animals are calculated as follows:

Total animals produced - 350

Minus animals transferred to research or teaching project (progeny) - 100

Minus animals retained as breeders - 7

Minus expected mortality/morbidity - 0

Total culls = 243.

This information should be entered in the Breeding Plan tab of the breeding application form under the strain to which the animals will be assigned when they are culled.

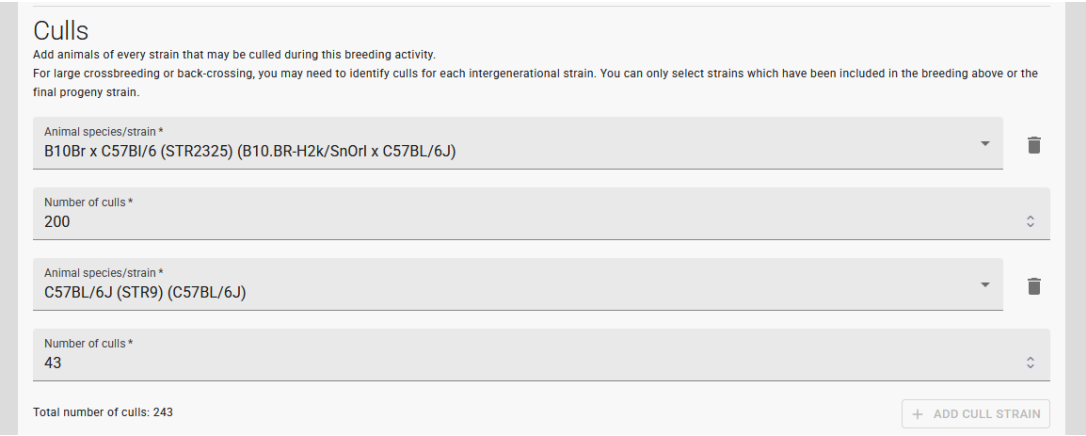


Figure 4

The numbers from the example have been entered into Figure 4 above.

Data entered in this section will be used to populate the 'Cull' animal numbers on the Animal Ethics Approval Certificate for the breeding line.

ESTIMATED DEATHS

For each breeding line, you must estimate the expected mortality and morbidity rates and identify any expected adverse events associated with breeding or the general health of the strain. Information provided in the Expected Adverse Events section, together with guidance from your UQBR Facility Manager should be used to support these estimates.

Expected adverse events included in your application and approved by the AEC do not need to be reported individually. However, records must be maintained and event rates monitored. If adverse events occur more frequently, or are more severe, than approved, an Unexpected Adverse Event Report must be submitted.

NOTE: Include only adverse events affecting breeders and pre-weaning progeny in the breeding application. Post-weaning adverse events should be addressed in the relevant experimental application.

PROGENY PRODUCED

Progeny suitable for use in an approved research or teaching project should be transferred at weaning. All transfers between breeding and receiving projects must be traceable and final.

Responsibility for animal care and monitoring may change when animals are transferred and can vary depending on the strain and housing arrangements.

The breeding application must clearly identify who is responsible for animal care and monitoring at each stage of the project and when responsibility transfers.

You must maintain records of:

- Animal numbers
- Strain and genotype
- Date of transfer
- Receiving project ID

IMPORTANT: Progeny must not be retained under a breeding approval beyond weaning, solely to allow transfer to a research or teaching project at a specific age.

At weaning, responsibility for progeny transfers from the breeding project to the receiving research or teaching project. If animals are required to age beyond weaning before participating in approved activities, the receiving application must include provisions for their care, husbandry and welfare monitoring until they enter the research or teaching activity.

Top Tip: Accurate transfer records provide the link between breeding activities and research use.



BREEDING APPROVAL CERTIFICATE

Information entered in the Breeding Plan is used to generate the animal ethics approval certificate.

Figure 5, below, shows how approved animal numbers are displayed on the certificate, including separate breeder, cull and mortality numbers for each approved breeding line.

Summary

Species	Strain	Class	Gender	Approved	Remaining
Mice	Acsl4 Flox/Gpx4 flox/CD4-Cre (Acsl4em1Gpt x Gpx4tm1.1Qra x Tg(Cd4-cre)1Cwi)	Breeder	Female	2	2
Mice	CD169 Cre (STR2745) (C57BL/6-Siglec1<tm1(cre)Mtaka>)	Breeder	Female	6	6
Mice	CD169 Cre (STR2745) (C57BL/6-Siglec1<tm1(cre)Mtaka>)	Breeder	Male	2	2
Mice	Cd19.Cre (STR17) (B6.129P2(C)-Cd19tm1(cre)Cgn/J)	Breeder	Male	4	4
Mice	CD169 Cre (STR2745) (C57BL/6-Siglec1<tm1(cre)Mtaka>)	Cull	Mix	20	20
Mice	CD169 Cre (STR2745) (C57BL/6-Siglec1<tm1(cre)Mtaka>)	Mortality	Mix	5	5
Mice	CD169 Cre/Tlr4 Flox (C57BL/6-Siglec1<tm1(cre)Mtaka> x Tlr4tm1.1Karp/J)	Mortality	Mix	15	15

Figure 5

The approval certificate specifies the conditions and maximum animal numbers approved by the AEC for operation for each breeding line.

Remember:

- Approved animal numbers are maximum limits, not targets or estimates.
- Monitor breeding outcomes regularly against approved numbers.
- Submit an amendment before exceeding any approved limit.
- Ensure animal production remains aligned with scientific need.

When submitting research or teaching applications that will receive animals from the breeding approval, use the same strain name as listed on the breeding approval certificate. Consistent strain names support animal traceability and simplify Mosaic reporting and annual reporting requirements.

Top Tip: Review your breeding numbers throughout the year, not just at annual reporting time.

REUSE OF ANIMALS BETWEEN APPROVALS

Animal reuse may be possible in some circumstances but must comply with AEC approvals and institutional policies.

Opportunities for animal reuse should be considered where appropriate. Examples include the use of retired breeders for training or competency assessment instead of euthanasia, and the transfer of healthy offspring that are unsuitable for the original research or teaching project to another approved project rather than culling them.

Before reusing animals:

- Consider the cumulative impacts of multiple 'uses' on animal wellbeing.
- Confirm the AEC breeding approval covers the proposed reuse.
- Ensure records clearly track animal movement and use.

Top Tip: Always document the destination of animals and how they were used.

TISSUE SHARING

Tissue sharing in laboratory animal research is the practice of distributing post-mortem biological samples (such as organs, tissues or body fluids) among different research teams rather than discarding them.

Tissue sharing supports the principle of Reduction by maximising the value gained from animals already used.

Consider:

- Whether tissues can be shared across projects.
- Recording tissue collections and recipients.
- Ensuring the proposed use aligns with approvals.

Tissue sharing DOES NOT include:

- The collection of samples from any live animals
- Euthanising an animal solely to collect tissue, this requires its own full ethics approval.
- Modifying the euthanasia method or experimental end point for the donor animal in any manner

Tissue sharing as an approved activity is automatically applied to all laboratory animal breeding approvals. If there is a reason tissue cannot be shared from animals in your approval, this must be identified in your application.

Top Tip: Ask whether tissue already available within your institution/facility could meet project needs before breeding new animals.

ESTABLISHED STRAIN BREEDING OR NEW GENOTYPE?

Be clear about the purpose of your breeding activity. Breeding of an established strain involves maintaining a strain for which the genotype, phenotype and associated welfare impacts are already known and documented. Applications for these breeding activities are expected to include detailed estimates of known adverse event rates, including mortality and morbidity.

When developing a new strain of mouse, the Code requires the AEC to assess the need for the new genetically modified animal strain and to consider the impact of the genetic modification on the wellbeing and genetic stability of the animals in new breeding lines. The AEC will need to understand the scientific justification for the activity and will require additional monitoring, oversight and reporting, until such times as the phenotype, welfare and genetic stability of the strain is established.

Top Tip: If breeding objectives change, review whether an amendment or new approval is required.

MOSAIC

Mosaic is the animal management software system used at UQ to maintain records of laboratory animals housed in UQBR animal facilities. Every animal housed within a UQBR facility is recorded in Mosaic. UQ Biological Resources (UQBR) staff are the recognised experts in mouse strain nomenclature and are responsible for maintaining approved strain names within the Mosaic database. Any new mouse strain must be reviewed and approved by UQBR and added to Mosaic before it can be selected and included in an animal ethics application.

Once laboratory animals have been approved for use by the AEC through a breeding, research or teaching application, the information from the animal ethics approval certificate is entered into Mosaic by UQBR staff. Mosaic records include:

- the ethics approval ID
- the number of animals approved for use

Managing your breeding lines

Mosaic is a valuable resource for UQ's research and teaching staff who manage laboratory animal breeding colonies. The following are some useful functions of Mosaic:

- Review the live animals in your approval without the need to visit an animal facility
- Identify animals you wish to reserve for experimental use.
- Request that UQBR staff cull unrequired animals
- Determine whether the female animals are producing the expected number of pups per litter
- Determine whether female mice are having the expected number of litters.
- Tracking mortality and morbidity rates in your approval

Mosaic can also be used to assist you in managing your animal numbers. For example, when ordering animals, Mosaic will track the remaining number of animals that can be used under a specific project allocation.

Speak to your Facility Manager to understand how Mosaic can support your compliance requirements.

Creating reports

You can generate reports of animal use recorded in Mosaic. Mosaic can help you:

- Determine how many animals are remaining for use under an animal ethics approval
- Determine how many animals were used during a defined period. This feature will be of use when completing the Mandatory Annual Report of animal use.

It is recommended that participants who manage breeding colonies obtain training in the use of Mosaic. It is also recommended that they meet regularly with the UQBR staff that work in the rooms in which their animals are housed.

Contact UQ Biological Resources to arrange a personal or group training session.

Top Tip: Use Mosaic as a colony management tool, not just a reporting tool, to help monitor breeding performance, animal welfare outcomes and project allocations.



MANDATORY ANNUAL REPORTS

A Mandatory Annual Report of animal use is required to meet two regulatory requirements:

- to meet the reporting requirements under the relevant Acts in each State/Territory of Australia to report the number of animals used, and
- to meet the AEC obligations outlined in the Code which require that an annual report for each approved project is submitted to the AEC regardless of the duration of approval for the project.

These reports are required to include the number of animals used for scientific purposes during each reporting period (January 1 - December 31) of every year. Project Chief Investigators will be required to report:

- animals bred
- animals retained as breeders
- animals culled
- mortality and morbidity events
- breeding outcomes and performance

Top Tip: Accurate records collected throughout the year make annual reporting straightforward.

Animal Use Reporting

You must report annually the number of animals that were used in your animal ethics approval under the two categories:

Breeder

- The number of female and male animals that were placed in the same cage with the aim of producing offspring.
- Any males and females that were placed in a cage to mate but did not produce any litters.
- Animals born in this line and retained for generational breeding, rather than being culled.

NOTE: Breeders must be reported in each calendar year that they are active in a breeding approval.

Example: A male and female breeder introduced on 1 December 2025 and removed on 1 February 2026 must be reported in both the 2025 and 2026 Mandatory Annual Reports, even if no progeny is produced.

Cull

- Animals produced in the breeding lines that were healthy but not suitable to be used for experiments or as replacement breeders.
- Animals that were technically suitable for experiments but couldn't be used for another reason, not already defined.
- Animals that died or were euthanased during the reporting period, either from unknown causes or euthanased because of illness, disease, injury, or abnormal health condition.

DO NOT include animals that experienced an adverse health condition but were treated and recovered. These animals will be reported within the animal welfare section of the Mandatory Annual Report.

- Animals that were born out of this breeding which, rather than being euthanased, were transferred to another ethics approval for use (e.g.: training). Under the Animal Care and Protection Act (Qld), we are required to report all animal use, for every reporting year, for all categories of use.

DO NOT include retired breeders euthanased during the reporting period. Animals used as breeders should be reported only as breeders.

DO NOT report progeny transferred for use under a research or teaching approval in the breeding approval. These animals must only be reported under the approval on which they were used.

NOTE: Where possible surplus animals should be transferred to training projects, or other research projects, rather than being unnecessarily wasted. When this occurs, their use must be identified in annual reporting as being 'used' in both projects (eg: breeding and training) in a reporting period. Speak to your UQBR Facility Manager or REI if you have any questions about how to undertake this process.

Other information to include in your Mandatory Annual Report.

It is important that when reporting in your Mandatory Annual Report that you include information relevant to:

- the success of each breeding line and any issues or problems that may have impeded breeding.
- a summary of animal deaths, including animals that died or were humanely euthanased on welfare grounds during the reporting period, and an explanation of whether these numbers differed from those anticipated in the approved breeding application.
- where animal death or morbidity rates are higher than expected, you will be required to provide details of the underlying causes and the measures implemented to manage and minimise their impact on animal welfare.
- a summary of animals that experienced an adverse welfare impact due to illness, disease, injury, or abnormal health condition and were treated and recovered.
- describe how these outcomes align with the expected adverse events identified in your application, and for any welfare issues that arose during the reporting period, their impact on the breeding program, and the measures implemented to manage and minimise their occurrence.



ADVERSE EVENTS IN BREEDING COLONIES

The Australian code for the care and use of animals for scientific purposes defines an Unexpected Adverse Event (UAE) as:

*"An event that **may** have a negative impact on the wellbeing of animals and was not foreshadowed in the approved project or activity."*

All actual and potential adverse events associated with breeding projects must be considered by the Animal Ethics Committee (AEC) during the application review process and monitored throughout the life of the project.

To comply with the Code and UQ policy, all Unexpected Adverse Events (UAEs) must be reported to the AEC promptly. Refer to the Research Ethics and Integrity website for further guidance.

Any expected or known adverse events identified in the application must be recorded, monitored and reported to the AEC through annual progress reports and/or the final project report.

However, if an expected or known adverse event occurs more frequently than estimated in the application, or if the impact on animal welfare is more severe than described in the approved application, the event must be reported to the AEC immediately.

Top Tip: Early reporting allows timely support, review and implementation of corrective actions.

What are Expected Adverse Welfare Impacts in Breeding?

Expected adverse events for laboratory animals when breeding, will depend upon the strain being used. Even in the best managed breeding activities, adverse animal welfare events can occur at predictable rates.

Examples include:

- pup cannibalisation,
- dystocia,
- vaginal septum, and
- hydrocephalus in offspring.

There is a wealth of knowledge of the characteristics and reproductive performance of the commonly used strains of mice for scientific research are readily available.

It is recommended that researchers consider this information when selecting which strain to use for their research, and in devising appropriate breeding strategies. For example, UQ has many breeding colonies of genetically modified mice which are, for the most part, bred on a C57BL/6 background.

A great resource for information for this mouse strain can be found on The Jackson Laboratory website and in their Handbook of Genetically Standardized Mice. Chapter 4: Characteristics of Popular Strains of JAX® Mice, Including Reproductive Performance will inform the researcher of which characteristics and welfare risks to expect in their mice.

What Events Must Be Reported to the AEC

Whilst the AEC members are aware of the expected events that occur in breeding colonies of laboratory animals (such as cannibalisation of pups, occurrence of a vaginal septum or a prolapsed penis, and the occurrence of hydrocephalus in offspring), if these are not identified in your application to the Committee, then they cannot be identified as expected and for every occurrence, an unexpected adverse event form must be submitted for review by the AEC.

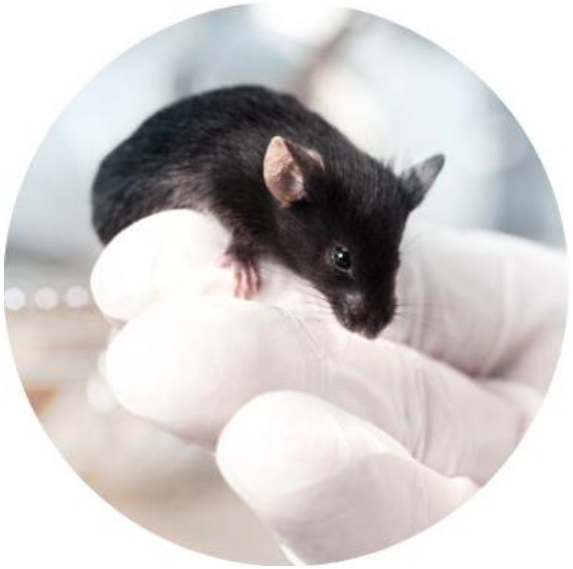
Other events may occur unexpectedly due to accidents, illness, previously unobserved strain-specific conditions, or unusually high rates of common conditions.

In addition to unidentified expected adverse events in a breeding line, an unexpected adverse event report could be required for:

- Unexpected phenotypes associated with a genotype
- An increase in the number of 'natural' deaths that occur in the breeding line
- An accident or accident within an animal facility, such as a leaking automatic water sipper, that may have impacted animals in the breeding line.

In such instances, consult with the Facility Manager of the animal facility where your animals are housed. Events impacting the whole facility, or a large component would likely affect the breeding lines of many researchers with animals housed in the same location, and therefore the Facility Manager would also be required to submit a facility adverse event report which will be used by the Animal Ethics Committee to understand impact and management.

If you are unsure if you need to submit an unexpected adverse event report, contact the REI Welfare team, as soon as possible. They will help you provide the information that the AEC will need to consider the matter, which might include recommending that a necropsy be performed







AMENDMENTS

There are instances where you may need to submit an amendment to the current approval for your breeding.

- Adding additional animals of an approved strain

When applying for animal numbers on a breeding application form, animal numbers are justified based on the number of animals required (progeny) to be transferred to the research or teaching approval on which they will be used.

Researchers should monitor and review their breeding activities regularly to ensure that it is producing as expected.

If there is a need to increase the number of animals being used, this must be well justified and submitted to the AEC as an amendment.

Once approved by the AEC, the additional number of breeder and/or cull animals for the identified strain will be added to the animal ethics approval certificate.

- Add an additional strain to an existing breeding approval

To add an additional strain to an existing breeding line within animal ethics approval or to add a completely new breeding line, the AEC must be provided with the same information for each strain that was requested in the Breeding Plan of the application form. This includes:

- The reason for establishing this breeding line
- The breeding strategy to produce the animals needed for research or teaching use, while not overproducing animals that will not be used.

Include:

- the number of breeding animals required per year
- the expected number of animals that will be produced each year
- the expected number of animals that will be culled per year
- Phenotypes associated with genotypes that may introduce a welfare risk to the animals.

Provide a clear summary of the additional animals required which, once approved by the AEC, will be included on the amended animal ethics approval certificate.

Top Tip: Changes to animal numbers or strains require AEC approval, so monitor your colony closely and plan amendments early.





REFERENCES

The Research Ethics and Integrity website includes many resources to support and guide you in writing your application: https://www.uq.edu.au/research/research-support/ethics-integrity-and-compliance/animal-ethics

Animal Ethics Procedure: Animal Ethics in Teaching and Research Procedure

UQBR website: https://biological-resources.uq.edu.au/

UQ RDM: https://rdm.uq.edu.au/

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