|  |
| --- |
| al Research Ethics Committee (AEC) **APPLICATION FORM FOR ETHICS APPROVAL FOR RESEARCH INVOLVING ANIMALS** |

**The following must be read before you proceed with the preparation of an application.**

GENERAL INFORMATION

It is the responsibility of the researchers to ensure that all facets of animal care and use meet the requirements of the FNU Code of Care and use of animals for scientific purposes. This includes a responsibility to protect the welfare of animals used.

The Code embodies the principles of:

* Reduction of animal use
* Replacement of animal use
* Refinement of animal use.

And, Investigators should be familiar with:

* *Animals (Control of Experiments) Act 1957*
* *Animal Research Regulation (2010)*
* *FNU Code of Care for Research*
* *FNU Constitution of the AREC*
* *The International Council for Laboratory Animal Science (ICLAS)* [*Guiding Principles for Biomedical Research Involving Animals*](https://olaw.nih.gov/sites/default/files/Guiding_Principles_2012.pdf)
* *World Organization for Animal Health’s Terrestrial Animal Health Code (*[*Chap. 7.8*](https://www.oie.int/index.php?id=169&L=0&htmfile=chapitre_aw_research_education.htm)*)*
* *The Australian and New Zealand Council for the Care of Animals in Research and Teaching (ANZCCART) guidelines for the Use of Animals in Experiments and Research.*
* [*Environmental Management Act (2005)*](https://www.ffa.int/system/files/Environment_Management_Act_2005.pdf)
* [*Occupational Safety and Health Legislation*](https://fhta.com.fj/wp-content/uploads/2017/07/Occupational-Health-and-Safety-and-Occupational-Health-Services-Profile-in-Fiji.pdf)
* [*Radiation Health Act (2009)*](https://www.laws.gov.fj/Acts/DisplayAct/544)

It is essential to consider these principles when designing and carrying out projects.

The World Organization for Animal Health’s Terrestrial Animal Health Code ([Chap. 7.8](https://www.oie.int/index.php?id=169&L=0&htmfile=chapitre_aw_research_education.htm)) specifies that academic and research institutions involved in the use of animals for research and teaching have an ethical responsibility for the animals’ welfare and they may utilize a local committee as a system of authorization and enforcing compliance with international animal welfare standards.

The FNU Animal Research Ethics Committee (AREC), therefore, requires approval to be sought from the AREC before any vertebrate animals are used for research and teaching. The AREC must assess the impact on animals of all procedures, and the project as a whole.

The application should focus on what is happening to animals and what is being done to ensure their well-being. It is vital that this information is presented in a way that clearly shows what is happening to individual animals from the beginning to the completion of a project, and that the impact of procedures is detailed. The researchers should provide a step by step examination of all treatments (substances, dose rates, routes, volumes, anaesthetics, surgical procedures, etc.) and the expected effects. In addition, factors that will impact on animals such as housing (type, duration, the opportunity for social interaction) must be considered.

The application should also clearly explain the reasons for the use of animals with justification, why certain species and the number of animals have been chosen. A clear explanation should also be provided on the qualifications of personnel that are suitable for the procedures to be performed.

It is important for applicants to remember the composition of the AREC. Applications must be made primarily for an interested, intelligent person without a scientific background, and not for a specialist. The use of specialist language may not be helpful to the Committee and may delay the processing of an application while explanations are sought.

**SECTIONS OF THE APPLICATION**

Section A: Project Summary and Personnel

Section B: Project Details

Section C: Project Details

#### Section D: Justification for the Use of Animals for Scientific & Teaching Purposes

Section E: Procedures and Data Storage

Section F: Declaration

HOW TO USE HIDDEN TEXT IN THE APPLICATION

Guidelines to help you respond to the questions in this form are included as **hidden blue text**.

To view the hidden text on a **PC**, select from your toolbar, or go to your toolbar and select the paragraph option and then select ‘show/hide’. If this is not visible, please contact IT Service Desk on 1207 for assistance to locate this functionality.

The hidden text will not be seen in the printed version.

To print hidden text select: File⏐Options⏐Display⏐Print hidden text.

***DO NOT submit these pages with your application***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *Office use:* | **Reference Number** | Click here to enter text. | **Date Received** | Click here to enter a date. |  |

|  |
| --- |
| Animal Research Ethics Committee (AREC)**Ethics Approval for Research Involving Animals** |

#### SECTION A – PROJECT SUMMARY AND PERSONNEL

#### A1 – PROJECT TITLE and SUMMARY

|  |  |
| --- | --- |
|  |  |
| **Project Title** This title will be used in all correspondence relating to this project | Click here to enter text. |  |
|   |  |

|  |  |
| --- | --- |
|  |  |
| **Project Summary** Provide a brief (in simple English) snapshot of the project (max. 100 words). Give a brief description of the aims and significance of the project There needs to be a balance between brevity and completeness but remember the summary should be designed for a lay audience. | Click here to enter text. |  |
|  |  |

#### A2 – PRINCIPAL RESEARCHER or PROJECT SUPERVISOR (*this is not the research student)*

This is the person whom the AEC will correspond with in relation to this project. If the Principal Researcher/Supervisor **is not** a FNU researcher then the researchers will be charged the current assessing fee, for an outside organisation. In the case of student research, a member of the student’s supervisory team must be listed.

|  |  |
| --- | --- |
|  |  |
| **Name** *(e.g. Dr. John Smith)* | Click here to enter text. |  |
|  |  |
| **FNU Staff Number** | Click here to enter text. |  |
|  |  |  |
| **Qualifications Relevant to this Project** | Click here to enter text. |  |
|  |  |  |
| **Mailing Address** | Click here to enter text. |  |
|  |  |
| **Work Phone No.** | Click here to enter text. |  |
|  |  |
| **After Hours Phone No.** | Click here to enter text. |  |
|   |  |
| **Email Address** | Click here to enter text. |  |
|  |  |
| **Specify the level of experience with the procedures and animals being used in this protocol. If no experience, describe how the relevant experience will be obtained.** | Click here to enter text. |  |
|  | *(insert X in the box)* |
| **Has this researcher ever had a research authority cancelled?** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | [ ]   |  | No | [ ]   |

 |
|  |

|  |  |
| --- | --- |
| If **Yes**, please include the relevant details, i.e. authority No., reason, etc. | Click here to enter text. |

 |
|  |  |
| **Has the researcher completed an Animal Ethics Course elsewhere?** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | [ ]   |  | No | [ ]   |
| If **Yes**, include Animal Ethics Course Number.**Reminder:** This course/unit or similar must be completed before the research can be approved. Proof of unit completion or a similar course should be attached. | **Course Name:**Click here to enter text. |

 |
|  |

|  |  |
| --- | --- |
|  |  |

 |

**A3 – CO-RESEARCHER/CO-SUPERVISOR/RESEARCH ASSISTANTS/TECHNICIANS ETC**

List all personnel who will be handling live animals on this project who are **not** students conducting the research as a component of their studies (this includes Co-Supervisors). **However**, if students of the University are working on the project, e.g., as research assistants, but are not using the research for their studies, they should be listed here. Livestock Farm staff do not need to be included unless conducting tasks specific to this project.

|  |  |
| --- | --- |
|  |  |
| **Name** *(e.g., Mr. Bill Dawson)* | Click here to enter text. |  |
|  |  |
| **FNU Staff/Student Number** | Click here to enter text. |  |
|  |  |  |
| **Qualifications relevant to this project** | Click here to enter text. |  |
|  |  |
| **School/Employer** | Click here to enter text. |  |
|  |  |  |
| **Role** | Choose a role |  |
|  |  |  |
| **Mailing address** | Click here to enter text. |  |
|  |  |
| **Phone No.** | Click here to enter text. |  |
|   |  |
| **Email** | Click here to enter text. |  |
|  |  |
| **Specify the level of experience with the procedures & animals being used in this protocol. If no experience, describe how the relevant experience will be obtained.** | Click here to enter text. |  |
|  | *(insert X in the box)* |
| **Has this researcher ever had a research authority cancelled?** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | [ ]  |  | No | [ ]  |

 |
|  |

|  |  |
| --- | --- |
| If **Yes**, please include the relevant details i.e., authority No., reason, etc. | Click here to enter text. |

 |
|  |  |
| **Has the researcher completed an Animal Ethics course elsewhere?** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | [ ]  | Click here to enter text. | No | [ ]  |
| If **Yes**, include Animal Ethics Course Number.**Reminder:** This course/unit or similar must be completed before the research can be approved. Proof of unit completion or a similar course should be attached. | **Course Name:**Click here to enter text. |

 |
|  |  |

|  |  |
| --- | --- |
|  |  |
| **Name** *(e.g. Mr Bill Dawson)* | Click here to enter text. |  |
|  |  |
| **FNU Staff/Student Number** | Click here to enter text. |  |
|  |  |  |
| **Qualifications relevant to this project** | Click here to enter text. |  |
|  |  |
| **School/Employer** | Click here to enter text. |  |
|  |  |  |
| **Role** | Choose a role |  |
|  |  |  |
| **Mailing address** | Click here to enter text. |  |
|  |  |
| **Phone No.** | Click here to enter text. |  |
|   |  |
| **Email** | Click here to enter text. |  |
|  |  |
| **Specify the level of experience with the procedures & animals being used in this protocol. If no experience, describe how the relevant experience will be obtained.** | Click here to enter text. |  |
|  | *(insert X in the box)* |
| **Has this researcher ever had a research authority cancelled?** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | [ ]  |  | No | [ ]  |

 |
|  |

|  |  |
| --- | --- |
| If **Yes**, please include the relevant details i.e., authority No., reason, etc. | Click here to enter text. |

 |
|  |  |
| **Has the researcher completed an Animal Ethics course elsewhere?** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | [ ]  |  | No | [ ]  |
| If **Yes**, include Animal Ethics Course Number.**Reminder:** This course/unit or similar must be completed before the research can be approved. Proof of unit completion or a similar course should be attached. | **Course Name:**Click here to enter text. |

 |
|  |  |

*Copy these table/questions and repeat for any additional personnel.*

#### A4 – STUDENT RESEARCHERS

List only students working on the project who **are** conducting the research as a component of their studies.

List all students working on the project who **are** conducting this research as a component of their studies.

|  |  |
| --- | --- |
|  |  |
| **Name** *(e.g., Mr Mohamed Ali)* | Click here to enter text. |  |
|  |  |
| **FNU Student Number** | Click here to enter text. |  |
|  |  |  |
| **Qualifications relevant to this project** | Click here to enter text. |  |
|  |  |
| **School**  | Click here to enter text. |  |
|  |  |
| **Mailing address** | Click here to enter text. |  |
|  |  |
| **Phone No.** | Click here to enter text. |  |
|  |  |
| **Email (**use FNU email Only**)** | Click here to enter text. |  |
|  |  |
| **Degree type (Tick):** | Undergraduate[ ]  |  | Honours[ ]  |  |  Postgraduate Coursework[ ]  |  | Postgraduate Research[ ]  |  |  |
|  |  |
| **Fiji National University?** |  Yes |  |  | Other *(please specify)*:Click here to enter text. |  |
|  |  |
| **Specify the level of experience with the procedures and animals being used in this protocol. If no experience, describe how the relevant experience will be obtained.** | Click here to enter text. |  |
|  | *(insert X in the box)* |
| **Has the student researcher ever had a research authority cancelled?** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | [ ]  |  | No | [ ]  |

 |
|  |

|  |  |
| --- | --- |
| If **Yes**, please include the relevant details i.e., authority No., reason, etc. | Click here to enter text. |

 |
|  |  |
| **Has the researcher completed an Animal Ethics Course elsewhere?** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | [ ]  |  | No | [ ]  |
| If **Yes**, include Animal Ethics Course Number.**Reminder:** This course/unit or similar must be completed before the research can be approved. Proof of unit completion or a similar course should be attached. | **Course Name:**Click here to enter text. |

 |
|  |  |

*Copy this table and repeat for each additional student.*

#### SECTION B – PROJECT DETAILS – Answer all questions

|  |  |
| --- | --- |
| **B1** | Duration of data collection for research. (‘Start date’ must be after the next AREC meeting date) What is the anticipated duration of the data collection/animal research phase of the project? Approval is granted for a 12-month period for a research project. Applications for teaching or maintenance protocols may be granted for a 3 year period. Please indicate below the expected commencement and completion dates. Commencement *cannot* be before the meeting date that this application will be tabled at. |
| **Start:** | Click here to enter a date. | **End:** | Click here to enter a date. |

*(insert X in the box)*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **B2** | Is this a new or an ongoing protocol? | New | [ ]  | Ongoing | [ ]  |
| If ongoing, please indicate the prior AREC number (s) | Click here to enter text. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **B3** | Has the research been approved, or is it under consideration by another Animal Research Ethics Committee (AREC)? *If Yes, and approved, attach a copy of the approval(s).*If a FNU student is listed on this application, as part of their study requirements, but is conducting the research at CSIRO, then this application must be completed and submitted to the FNU’s AEC. CSIRO approval will not be accepted. | YesGive details |  | NoGo to **B4** |  |
| Reason for simultaneous submission:Click here to enter text. |
| *Name of other AREC:*Click here to enter text. | *Reference No.:*Click here to enter text. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **B4** | Are you using the FNU facilities for holding the animals? This must be completed before animals can be held in the Centre for Animal Research & Teaching Complex. | YesGo to **B5** |  | NoGo to **B7** |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **B5** | Have you completed the FNU Animal Entry form? This must be completed before animals can be held in the Centre for Animal Research & Teaching Complex. | YesGo to **B6** |  | NoGive details |  |
| **Please explain why the form has not yet been completed:** Click here to enter text.**Please indicate when the form will be completed:** Click here to enter text. |

|  |  |  |
| --- | --- | --- |
| **B6** | If you are holding the animals at the FNU farm, please clarify where they will be held. This must be completed before animals can be held in the Centre for Animal Research & Teaching Complex. | **Location:** Click here to enter text.**Building Name/No.:** Click here to enter text.**Room No.:** Click here to enter text. |

|  |  |
| --- | --- |
| **B7** | If animals are not being held at any FNU site, please provide the **exact location**(s) where the animals will be captured or housed from the time of entry into the experiment until the time of its completion. If animals are not being housed or captured for this project, please include the location where they will be observed in their natural habitat. |
| ***Site(s):*If more than 10, give number and type, eg “12 NSW government primary schools”** |
| **Site/Property Name:** Click here to enter text.**Address:** Click here to enter text.**City/Town:** Click here to enter text. **Postcode:** Click here to enter text.**Contact person name and contact details:** Click here to enter text. |
|  |

*Copy this table for each location that will be used in this project.*

|  |  |
| --- | --- |
| **B8** | List all the different types of animals to be used in this project. |
| **Number of animals required:** | Click here to enter text. |
| **Species Category No. & Name:***(Copy and paste this section again if more than one species is used)* | Choose a species. |
| **Common name of Species**  | Click here to enter text. |
| Breed/Strain: | Click here to enter text. |
| Age: | Click here to enter text. |
| Sex: | Click here to enter text. |
| Source: Under the legislation, non-exempt animals must be obtained from a licenced animal supplier. Issue such as capture of wild animals or obtaining animals from remote sources that will necessitate prolonged transport will also need to be considered by the Committee and the answer should be as complete as possible. | Click here to enter text. |
| **Conservation status (if applicable):** | Click here to enter text. |

|  |  |
| --- | --- |
| **B9** | *Copy and paste this section again if more than one species is used**If the animal you intend to conduct research on is not listed in the dropdown box, contact the Animal Ethics Secretary before proceeding further.* |
| Indicate from the list of procedures provided those that apply to this protocol (more than one may apply). Please **bold** the appropriate **number**(s) & **description**(s) in the list below. If you select **P4** or **P5,** you must complete both the Intensive Observation & Anaesthetic/Surgical Monitoring Sheets. If you select **P7** you must complete the Intensive Observation Monitoring Sheet. Please refer to Appendix A and B for both sheets.Procedures must be appropriate for the species and the circumstances, consistent with the current best practice, be compatible with the purpose and aims of the project or activity, cause the least harm, including pain and distress, to the animals and be performed competently, and by a person who is competent for the procedures, or under the direct supervision of a person who is competent to perform the procedures. |

|  |  |  |  |
| --- | --- | --- | --- |
| P1 | Observation involving minor interference Animals are not interacted with or, where there is interaction, it would not be expected to compromise the animal’s welfare any more than normal handling, feeding, etc. There is no pain or suffering involved. | P6 | Minor physiological challenge Animal remains conscious for some or all of the procedure. There is interference with the animal’s physiological or psychological processes. The challenge may cause only a small degree or pain/distress or any pain/distress is quickly and effectively alleviated. |
| P2 | Animal unconscious without recovery Animal is rendered unconscious under controlled circumstances with little or no pain or distress. Capture methods are not required. Any pain is minor or brief and does not require analgesia. Procedures are carried out on the unconscious animal which is then killed without regaining consciousness. | P7 | Major physiological challenge Animal remains conscious for some or all of the procedure. There is interference with the animal’s physiological or psychological processes. The challenge may cause only a moderate or large degree or pain/distress which is not effectively alleviated. |
| P3 | Minor conscious intervention Animal is subjected to minor procedures which would normally not require anaesthesia or analgesia. Any pain is minor and analgesia usually unnecessary, although some distress may occur as a result of trapping or handling. | P8 | Death as an endpoint i.e. LD50 - a dose of a test substance that is lethal for 50% of the animals in a dose group or LC50 - Lethal concentration of surrounding medium that will kill half of the sample population*Lethality testing (including LD50, LC50)****It does not include:*** *death by natural causes; animals which are euthanased as part of the project; animals which are euthanased if something goes wrong; animals euthanased for dissection or for use as museum specimens; or accidental deaths.* |
| P4 | Minor surgery with recovery Animal is rendered unconscious with as little pain or distress as possible. A minor procedure such as cannulation or skin biopsy is carried out and the animal is allowed to recover. Depending on the procedure, pain may be minor or moderate and post-operative analgesia may be appropriate. Field capture using chemical restraint methods is also included here. | P9 | Production of genetically modified animals This category is intended to allow for the variety of procedures which occur during the **production** of genetically modified animals. As animals in this category may be subjected to both minor *and* major physiological challenges *and* surgical procedures, this category reflects the varied nature of the procedures carried out. It effectively includes ALL animals use in GM productions other than the final progeny which are used in a different category of procedure. |
| P5 | Major surgery with recovery Animal is rendered unconscious with as little pain or distress as possible. A major procedure such as abdominal or orthopaedic surgery is carried out and the animal is allowed to recover. Post operative pain is usually considerable and at a level requiring analgesia |  |  |

|  |  |
| --- | --- |
| **B10** | For each of the procedures you have selected in answer to Question B9, provide details on why you have selected this experimental procedure. Please include the name of each procedure, followed by the explanation.It is very important that you provide all the relevant information and answer the questions as fully as possible. The Checklist that accompanies the application will help you achieve this. |
| Click here to enter text. |

|  |  |
| --- | --- |
|  **B11** | Indicate from the list of purposesprovided those that apply to this protocol. Please **bold** the appropriate **number**(s) & **description**(s): |

|  |  |  |  |
| --- | --- | --- | --- |
| A1 | Stockbreeding Breeding protocols to produce new teaching or research stock. Include the animals used to produce progeny and any breeders or progeny culled in the process, NOT the final progeny themselves (as these will be counted under the protocol in which they go on to be used) | A6 | Research: Animal management or production Research projects which aim to produce improvements in domestic or captive animal management or production |
| A2 | Stock maintenance Holding protocols for animals’ maintained for use in other protocols. These animals may be maintained under the ethics authority because they require special management. If they are not held under an authority (e.g. Normal stock animals kept mainly for commercial production, but occasionally used in research) then they are only counted in the protocol where they are used for teaching/research | A7 | Research: Environmental study Research protocols which aim to increase the understanding of the animals’ environment or its role in it, or aim to manage wild or feral populations. These will include studies to determine population levels and diversity and may involve techniques such as observation, radio tracking or capture and release. |
| A3 | Education Projects carried out for the achievement of educational objectives. The purpose of the project is not to acquire new knowledge, rather to pass on established knowledge to others. This would include interactive or demonstration classes in methods of animal husbandry, management, examination and treatment | A8 | Production of biological productsUsing animals to produce products other than milk, meat, eggs, leather, fur, etc. |
| A4 | Research: Human or animal biology Research protocols which aim to increase the basic understanding of the structure, function and behaviour of animals, including humans, and processes involved in physiology, biochemistry and pathology | A9 | Diagnostic proceduresUsing animals directly as part of a diagnostic process. |
| A5 | Research: Human or animal health & welfare Research protocols which aim to produce improvements in the health and welfare of animals, including humans. | A10 | Regulatory product testing Protocols for the testing of products required by regulatory authorities, such as the APVMA. **If the product testing is not a regulatory requirement, e.g. It is part of a quality assurance system only; those animals should be included in the appropriate category selected from above.** (This would be normally be category 8 in the case of QA testing) |

*(Insert X in the box)*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **B12** | Does this project involve the use of any animals that have been the subject of previous research? If animals are to be re-used, individual records must be kept for each animal, and this must be indicated in the final report. | Yes | [ ]  | No | [ ]  |
| If Yes, what has previously been done to the animals?  | Click here to enter text. |
| Also please provide the relevant AREC Approval number(s) and Project Name: | Click here to enter text. |
| Justify the re-use of the animals in relation to the potential welfare implications for their re-use. The benefits of re-using animals must be balanced against any adverse effects on their wellbeing, taking into account the lifetime experience of the individual animal. Reuse of animals requires particular justification and specific AEC approval. | Click here to enter text. |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **B13** | Are animals likely to be bred from during the period of the protocol? When animals are specifically bred for scientific purposes, the breeding program must be managed in accordance with current best practice to ensure the wellbeing of the colony, herd or flock, and all animals involved. | Yes | [ ]  | No | [ ]  | Unknown | [ ]  |
| **If ‘Yes’,** Provide a full description of the proposed breeding program. Your answer should include detail on the management of the breeding program to ensure current best practices; and to ensure the well-being of the colony, herd, or flock. A monitoring sheet must be included in your answer. This must include data relevant to fertility, fecundity, morbidity, and mortality.  | Click here to enter text. |

#### SECTION C – PROJECT DETAILS – Answer all questions

No animals can be used without first obtaining an Animal Research Authority/ Approval from the Animal Research Ethics Committee, which comprises both scientists and lay representatives; hence **all answers in this section must be written in plain English so a layperson can fully understand your answers.** Researchers must use plain English in the application to ensure that all AEC members are provided with sufficient information to participate effectively with the assessment of the application.Researchers must use plain English in the application to ensure that all AEC members are provided with sufficient information to participate effectively with the assessment of the application.

C1.1 Please provide a list of keywords, technical terms, acronyms or abbreviations to assist the AREC to understand the technical aspects of the study

|  |  |
| --- | --- |
| **Term/Acronym/Abbrev./Procedures** | **Plain English Explanation** |
| *Eg: Cervical Dislocation* | *Breaking the neck or snapping the spine by applying pressure to the neck and dislocating the spinal column from the skull or brain.* |
| *Eg: Blood collection from Rabbits* | *Restrain the animal, shave the hair from the ear, using a 20 gauge needle etc. OR As per SOP123* |
| Click here to enter text. | Click here to enter text. |
| Click here to enter text. | Click here to enter text. |
| Click here to enter text. | Click here to enter text. |
| Click here to enter text. | Click here to enter text. |

|  |  |
| --- | --- |
| **C1.2** | In ‘**plain English’**, state the aims of the experiment and the experimental design specifying the anticipated outcomes. Justify the benefits to either humans or animals. Researchers must use plain English in the application to ensure that all AEC members are provided with sufficient information to participate effectively in the assessment of the application. |
| **Details**(Max 500 words) | Click here to enter text. |

**C1.3** Provide a full **sequential** description of **exactly** what happens to each **animal or group** of animals from the time you obtain them to the time the experiment is completed, including provisions for the animals at the conclusion of their use. [This must be provided in the table below using the headings in the table]. This should also include all methods, measurements, dose rates, frequency, volume etc. **If available, name any relevant** [**SOP(s)**](https://www.une.edu.au/research/ethics-and-grants/animal-research-ethics/resources) **that will be used. It is important to present this section so that it is clear what is happening to the animals form the beginning to the end of the project and over what time. Where several groups of animals are receiving different treatments, listing them in separate tables may assist.**

|  |  |
| --- | --- |
| **Study Day** | **Activity/Procedures** |
| *Eg: -14 to -1* | *Sheep acclimatise to paddock. Sheep drenched (with BZ+LV anthelmintic) and vaccinated if required.*  |
| Click here to enter text. | Click here to enter text. |
| Click here to enter text. | Click here to enter text. |
| Click here to enter text. | Click here to enter text. |
| Click here to enter text. | Click here to enter text. |
| Click here to enter text. | Click here to enter text. |
| Click here to enter text. | Click here to enter text. |
| Click here to enter text. | Click here to enter text. |
| Click here to enter text. | Click here to enter text. |
| Click here to enter text. | Click here to enter text. |
| **C2.1** | **Answer** the following with regard to the experimental procedures outlined in C1.3.This is the person that anyone can ring should they notice a problem with an animal or animals in your research trial. This person would be expected to take the appropriate action to remedy the situation. |
| What will be the effects of the experimental procedures on the animals?* Click here to enter text.
* Click here to enter text.
* Click here to enter text.
* Click here to enter text.
 |
| **C2.2** | **Answer** the following with regard to the experimental procedures outlined in C1.3.This is the person that anyone can ring should they notice a problem with an animal or animals in your research trial. This person would be expected to take the appropriate action to remedy the situation. |
| How will any negative effects of this be minimised?* Click here to enter text.
* Click here to enter text.
* Click here to enter text.
* Click here to enter text.
 |

|  |  |
| --- | --- |
| **C3** | Provide the methods and means by which animals will be monitored and housed during the protocol**.** Provide the details of how the wellbeing of animals will be monitored and assessed throughout the project, the frequency of monitoring and assessment, the actions to be taken if problems are identified. The level of monitoring required will vary according to the type of research and animals used. Some of this information may have already been provided in answer to the question on impact but is should be repeated for the assistance of the Committee. |
| **Type of Housing** (building, cage, pen, or paddock)**:** Click here to enter text.**Dimensions:** Click here to enter text.**Bedding/Shelter:** Click here to enter text.**Food/Water Containers:** Click here to enter text.**What will they be fed?** Click here to enter text.**How often will they be fed?** Click here to enter text.**Other features:** Click here to enter text. |
| What are the min., and max. number of animals per building, cage, pen or paddock |
| Click here to enter text. |
| What arrangements have been made for the monitoring, care, feeding, etc. of the experimental animals during each phase of the project? The level of monitoring required will vary according to the type of research and animals used. Some of this information may have already been provided tin answer to the question on impact but is should be repeated for the assistance of the Committee |
| Click here to enter text. |
| What enrichment will be provided for the animals? (if no enrichment is provided, valid reasoning must be given) For more information about enrichment go to [Animal Ethics Infolink – Animal Care](https://www.animalethics.org.au/policies-and-guidelines/animal-care) if the animal/animals you are using are not included in the Animal Ethics Infolink go to [Appendix A of the European Convention for the protection of Vertebrates Animals used for Experimental and other scientific purposes (ETS No. 123)](https://www.coe.int/t/e/legal_affairs/legal_co-operation/biological_safety_and_use_of_animals/laboratory_animals/2006/Cons123%282006%293AppendixA_en.pdf)  |
| Click here to enter text. |

|  |  |
| --- | --- |
| **C4** | Nominate the initial contact person in the case of an emergency and up to 2 alternate contact persons. Please include relevant phone numbers, including after-hours contact details. This is the person that anyone can ring should they notice a problem with an animal or animals in your research trial. This person would be expected to take the appropriate action to remedy the situation. |
| *This person and the contact detail is listed on the authority as the emergency contact.* |
| Click here to enter text. |

|  |  |
| --- | --- |
| **C5** | Provide the name(s) of the relevant personnel involved in the day-to-day management of the study animals, i.e., farmer/manager, student researcher, etc. The persons responsible for the wellbeing of the animals must be competent at all stages and sites in animal care and use. The scope of day-to-day management must be clearly outlined and communicated to all parties. |
| Click here to enter text. |

#### SECTION D – JUSTIFICATION FOR USE OF ANIMALS FOR SCIENTIFIC AND TEACHING PURPOSES

**This section must be read in conjunction with the following documents:**

* *Animals (Control of Experiments) Act 1957*
* *FNU Code of Care for Research*
* *FNU Constitution of the FNU AREC*
* *The ANZCCART* [*guidelines for the Use of Animals in Experiments and Research*](https://anzccart.adelaide.edu.au/system/files/media/documents/2019-07/aec-induction-package2018-9-1.pdf)*.*
* *World Organization for Animal Health’s Terrestrial Animal Health Code (*[*Chap. 7.8*](https://www.oie.int/index.php?id=169&L=0&htmfile=chapitre_aw_research_education.htm)*)*
* *ICLAS’s* [*Guiding Principles for Biomedical Research Involving Animals*](https://olaw.nih.gov/sites/default/files/Guiding_Principles_2012.pdf)

The project will be undertaken:

*(insert X in the box)*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **D1** | To obtain and establish significant information relevant to the understanding of humans and/or animals; or |  | Yes | [ ]  |  | No | [ ]  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **D2** | To maintain and improve human and/or animal health and welfare; or |  | Yes | [ ]  |  | No | [ ]  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **D3** | To improve animal management or production; or |  | Yes | [ ]  |  | No | [ ]  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **D4** | To obtain and establish significant information relevant to the understanding, maintenance or improvement of the natural environment; or |  | Yes | [ ]  |  | No | [ ]  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **D5** | To achieve educational outcomes in science, as specified in the relevant curriculum or competency requirements. |  | Yes | [ ]  |  | No | [ ]  |

**D6** Methods that replace or partially replace the use of animals must be investigated, considered and, where possible, implemented”

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **D6.1** | Are any alternatives other than the use of animals available for this procedure? Before the use of animals is considered, alternatives to using animals must be investigated and used wherever possible. The AEC must be informed of alternatives that exist and why these cannot be used. All existing information relevant to the proposed aim/s including existing databases, must be examined. Replacement techniques that must be considered include the use of epidemiological data; physical and chemical analysis; computer, mathematical and inanimate synthetic models; simulations; in vitro systems; non-sentient organisms; cadavers; and clinical cases. |  | Yes | [ ]  |  | No | [ ]  |
| **If yes, please give details**(Max 1,000 words) | Click here to enter text. |

The following World Wide Web sites may help identify possible alternatives to using live animals.

* <http://www.ahc.umn.edu/rar/ethics.html> - University of Minnesota – Research Animal Resources – Ethics and Alternatives
* <http://altweb.jhsph.edu/> –John Hopkins Bloomberg School of Public Health – Search for Alternatives <https://www.nal.usda.gov/awic/antibody-production> - [United States Department of Agriculture](https://www.nal.usda.gov/) - [National Agricultural Library](https://www.nal.usda.gov/) - Information Resources for Adjuvants and Antibody Production 1998: Comparisons and Alternative Technologies
* <https://norecopa.no/textbase/a-norwegian-platform-for-alternatives-to-animal-experimentation> – A Norwegian Platform for Alternatives to Animal Experimentation

|  |  |
| --- | --- |
| **D6.2** | If alternatives are not being used, please explain why? |
| **Details** (Max 1,000 words) | Click here to enter text. |

#### SECTION E – PROCEDURES

Procedures must be appropriate for the species and the circumstances, consistent with the current best practice, be compatible with the purpose and aims of the project or activity, cause the least harm, including pain and distress, to the animals and be performed competently, and by a person who is competent for the procedures, or under the direct supervision of a person who is competent to perform the procedures.

|  |  |
| --- | --- |
| **E1** | Justify how the number of animals used is appropriate for the level of significance required, the minimum difference expected, and the variability existing for the trait measured. Clearly explain why the number of animals has been chosen. Too few animals (resulting in statistically insignificant data) may be as much of a problem as too many animals. |
| Click here to enter text. |

|  |  |
| --- | --- |
| **E2** | What procedures are in place to minimise distress in case of injury or major compromise to animal well-being?  |
| Click here to enter text. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **E3** | Will surgery be performed on the animal(s)?  | Yes | [ ]  | No Go to **E6.0** | [ ]  |
| If Yes, describe the procedures and who will perform the surgery. | Click here to enter text. |
| Will it be performed under general anaesthesia, under local anaesthesia or without anaesthesia (quote standard operating procedure if applicable)? | Click here to enter text. |

|  |  |
| --- | --- |
| **E4** | Give details of any anaesthesia process. This should include who will administer any drugs used in this process. |
| Click here to enter text. |

|  |  |
| --- | --- |
| **E5** | What post-operative care will be given, post-operative monitoring will take place, and what analgesia will be used? **Include a copy of the monitoring and anaesthetic record sheet to be used.** |
| Click here to enter text. |

|  |  |
| --- | --- |
| **E6.0** | Indicate from the ‘**Fate of animal’** list provided those categories that apply to this protocol. Please **bold** the appropriate **number**(s) & **description**(s): |
| F1 | Retained in project Animals are not interacted with or, where there is interaction, it would not be expected to compromise the animal’s welfare any more than normal handling, feeding, etc. There is no pain or suffering involved. | F6 | Euthanised or died related to the project Animal remains conscious for some or all of the procedure. There is interference with the animal’s physiological or psychological processes. The challenge may cause only a small degree or pain/distress or any pain/distress is quickly and effectively alleviated. |
| F2 | Retained for use in other projects or supplied to another establishment/individual for research Animal is rendered unconscious under controlled circumstances with little or no pain or distress. Capture methods are not required. Any pain is minor or brief and does not require analgesia. Procedures are carried out on the unconscious animal which is then killed without regaining consciousness. | F7 | Euthanised or died unrelated to the project Animal remains conscious for some or all of the procedure. There is interference with the animal’s physiological or psychological processes. The challenge may cause only a moderate or large degree or pain/distress which is not effectively alleviated. |
| F3 | Retired from research and kept by the establishment/individual Animal is subjected to minor procedures which would normally not require anaesthesia or analgesia. Any pain is minor and analgesia usually unnecessary, although some distress may occur as a result of trapping or handling. | F8 | Euthanised because unsuitable to be rehomed*Examples** *Lethality testing (including LD50, LC50)*

***It does not include:*** *death by natural causes; animals which are euthanased as part of the project; animals which are euthanased if something goes wrong; animals euthanased for dissection or for use as museum specimens; or accidental deaths.* |
| F4 | Privately (non-research) owned and remained with the owner Animal is rendered unconscious with as little pain or distress as possible. A minor procedure such as cannulation or skin biopsy is carried out and the animal is allowed to recover. Depending on the procedure, pain may be minor or moderate and post-operative analgesia may be appropriate. Field capture using chemical restraint methods is also included here. | F9 | Euthanised because unable to find a suitable home This category is intended to allow for the variety of procedures which occur during the **production** of genetically modified animals. As animals in this category may be subjected to both minor *and* major physiological challenges *and* surgical procedures, this category reflects the varied nature of the procedures carried out. It effectively includes ALL animals use in GM productions other than the final progeny which are used in a different category of procedure. |
| F5 | Rehomed (as a companion animal to private (non-research) home or rehoming organisation Animal is rendered unconscious with as little pain or distress as possible. A major procedure such as abdominal or orthopaedic surgery is carried out and the animal is allowed to recover. Post operative pain is usually considerable and at a level requiring analgesia | F10 | Remain free-living in the wild or released to the wild  |

|  |  |
| --- | --- |
| **E6.1** | If animals are to be euthanised how will the carcasses be disposed of? |
| Click here to enter text. |

|  |  |
| --- | --- |
| **E7** | If animals are to be released into the wild, outline the methods for ensuring maximum success, and indicate how the site of capture/release has been considered (*reference should be made to the ANZCCART’s* [*guidelines for the Use of Animals in Experiments and Research*](https://anzccart.adelaide.edu.au/system/files/media/documents/2019-07/aec-induction-package2018-9-1.pdf)).Procedures for any release of wildlife must ensure that; release occurs at the site of capture, unless otherwise approved by the AEC; the timing of release coincides with the period of usual activity for the species, unless safety of the animals is assured by other means, such as release into appropriate cover; animals are protected from injury and predation at the time of their release and animals that have been sedated or anaesthetised have recovered to full consciousness before their release. During their recovery, animals should be held in an appropriate area where they can maintain normal body temperature and are protected from injury and predation |
| Click here to enter text. |

|  |  |
| --- | --- |
| **E8.0** | If, as the result of serious illness, serious accidental injury or to fulfill any other ethical requirement, animals need to be euthanised, please provide details of: |
| The method of euthanasia: |
| Click here to enter text. |
| The names, demonstrated experience or evidence of competency of the persons carrying out the euthanasia: |
| Names:Click here to enter text. |
| Qualifications or relevant experience to carry out the euthanasia:Click here to enter text. |

*(insert X in the box)*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **E8.1** | Are animals to be euthanised as part of this protocol?  | Yes | [ ]  | No | [ ]  |
| If **Yes**, will the people and the methods be the same as in answer to question **E8.0**. If they **are not** the same, please provide details below: | Yes | [ ]  | No | [ ]  |
| The method of euthanasia: |
| Click here to enter text. |
| The names and experience of the persons carrying out the euthanasia: |
| Names:Click here to enter text. |
| Qualifications or relevant experience to carry out the euthanasia:Click here to enter text. |

|  |  |  |
| --- | --- | --- |
| **E8.2** | Where will the euthanasia be carried out: | Click here to enter text. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **E9** | Are any drugs, chemicals, ionising or non-ionising radiation, toxins, or biological agents to be used? | YesGo to **E10** | [ ]  | No Go to **E12** | [ ]  |

**E10** List all drugs, chemicals, toxins, ionising or non-ionising radiation or biological agents to be used.

|  |  |
| --- | --- |
| **For each agent indicate: (Replicate this table for more than one drug, chemical, toxin, ionising or non-ionising radiation or biological agent is used)** |  |
| Name of agent: | Click here to enter text. |
| Dose of agent: | Click here to enter text. |
| Route of administration: | Click here to enter text. |
| Likely effects of agent: | Click here to enter text. |
| Duration of effects: | Click here to enter text. |
| Method of determining the effectiveness of agent: | Click here to enter text. |
| Method of determining pain responses occurring during neuromuscular blockage: | Click here to enter text. |
| Availability of reversing agent(s): | Click here to enter text. |
| Availability of cardio-respiratory support facilities: | Click here to enter text. |
| Possible side-effects of or toxicity reactions to the agent: | Click here to enter text. |

*Copy and paste this section again if more than one agent is used.*

*(insert X in the box)*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **E11** | Are any imported biological products or their derivatives to be used in any of the animals? | Yes | [ ]  | No | [ ]  |
| If Yes, give the Biosecurity of Fiji (BAF) approval numbers: | Click here to enter text. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **E12** | Are there any anticipated health risks to staff? | Yes | [ ]  | No | [ ]  |
| If Yes, describe how these will be minimised. | Click here to enter text. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **E13** | Are there any anticipated health risks to other animals? | Yes | [ ]  | No | [ ]  |
| If Yes, describe how these will be minimised. | Click here to enter text. |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **E14** | Do the proposed waste disposal procedures comply with the [Environmental Management Act (2005)](https://www.ffa.int/system/files/Environment_Management_Act_2005.pdf), the [Occupational Safety and Health Legislation](https://fhta.com.fj/wp-content/uploads/2017/07/Occupational-Health-and-Safety-and-Occupational-Health-Services-Profile-in-Fiji.pdf), and [Radiation Health Act (2009)](https://www.laws.gov.fj/Acts/DisplayAct/544)? | Yes | [ ]  | No | [ ]  | N/A | [ ]  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **E15** | For experiments involving Native wildlife, is a license or permit from the relevant state wildlife authority (e.g. Biosecurity Authority of Fiji, Wildlife Conservation Society Fiji) required? | Yes | [ ]  | No | [ ]  | N/A | [ ]  |
| If **Yes**, Is one held by the Principal Investigator? Name of Licensing Body/Organisation: Licence Class/Descriptions(s) and Number(s): Expiry Date of Licence(s)?**A copy of this permit is to be submitted with this application.** | Click here to enter text. |
| If **No**, explain why a license or permit is not required. | Click here to enter text. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **E16** | Is the research funded by an internal or external grant body or sponsor?  | YesGive details  | [ ]  | NoGo to **E18.0** | [ ]  |
| Organisation or Funding Body | Click here to enter text. |
| Project title on contract or funding application | Click here to enter text. |
| First named investigator  | Click here to enter text. |
| Administering institution | Click here to enter text. |
| If the funding body has ownership of or control over the dissemination of results, provide the relevant details. | Click here to enter text. |

 *Copy this table and repeat it for each contract or grant.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **E17** | Does the funding constitute a conflict of interest for either the researcher(s) or provider(s) of the funding?  | YesGive details  | [ ]  | NoGo to **E18.0** | [ ]  |
| **Details**(Max 300 words) | Click here to enter text. |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **E18.0** | Will data be kept for a minimum of 5 years after the successful submission of the thesis/final publication on the FNU repository or in a locked filing cabinet/facilities?  | Yes Go to **E18.1** | [ ]  | NoGive Details | [ ]  | IndefinitelyGo to **E18.2**  | [ ]  |
| If **No**, please explain how long the data will be kept: | Click here to enter text. |

|  |  |
| --- | --- |
| **E18.1** | What will happen to the data after the minimum 5 year retention period?  |
| **If being disposed of:**Who will be disposing of the data?Click here to enter text.How will it be disposed of?Click here to enter text. |

|  |  |
| --- | --- |
| **E18.2** | If the data is being kept indefinitely, where will it be kept? |
| **Please provide the exact location:** Click here to enter text. |

#### SECTION F – DECLARATION MADE BY THE PERSON(s) RESPONSIBLE:

***It is expected that you will comply with the conditions of this declaration, so please read carefully before signing.***

**(a)** **I acknowledge that:**

 **1.** The care and maintenance of all animals is the responsibility of the Principal Researcher/Supervisor though the work may be delegated to suitably trained or experienced staff or students listed on this application;

 **2.** The *ANZCCART* [*guidelines for the Use of Animals in Experiments and Research*](https://anzccart.adelaide.edu.au/system/files/media/documents/2019-07/aec-induction-package2018-9-1.pdf)*,*  *Animals (Control of Experiments) Act 1957, and FNU Code of Care for Research* requires an autopsy to be performed when any animals die unexpectedly;

 **3.** I may proceed with the experiment only when FNU has issued an Animal Research Authority/ Approval, which names all suitably qualified and/ or experienced persons who are to be involved in the described project and are listed on this application.

**(b)** **I certify that:**

 **1.** My Animal Research Authority/ Approval will be displayed where the animals are housed and where animal experimentation is to occur, and the AREC will be notified immediately should any changes in participating personnel occur;

 **2.**Where appropriate, I am the holder of a current permit from the relevant state wildlife authority to capture and hold Fijian native fauna;

 **3.** All personnel involved in the described animal experiment have appropriate and adequate qualifications and skills and/or they will be under suitably close supervision to enable them to competently carry out the necessary tasks;

 **4.** All unplanned deaths will be appropriately recorded and reported to the FNU Centre for Animal Research & Teaching, Manager and the AREC Secretary within 24 hours of the death;

 **5.** Any information required to facilitate the maintenance of animals will be sought from suitably qualified personnel;

**6.** The care of animals during the proposed experiment will conform with the principles and regulations of the *Animal Research Act 1985,* the *ANZCCART* [*guidelines for the Use of Animals in Experiments and Research*](https://anzccart.adelaide.edu.au/system/files/media/documents/2019-07/aec-induction-package2018-9-1.pdf), the *Animal Research Regulation 2010, and Animals (Control of Experiments) Act 1957.*

 **7.** That all personnel listed have read this application and have agreed to comply with procedures described and any conditions imposed by the AREC.

 **All investigators named at** [**A2**](#B2) **,** [**A3**](#_PART_B3_–) **and** [**A4**](#_PART_B4_–) **are required to sign this declaration.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | ***Print Name*** | ***Signature*** | ***Date*** |
| Principal Researcher or Project Supervisor | Click here to enter text. |  | Click here to enter a date. |
| Co-Researcher, Co-Supervisor, Research Assistants, Technicians, etc. or Student researcher (*Bold whichever is applicable only*) | Click here to enter text. |  | Click here to enter a date. |
| Co-Researcher, Co-Supervisor, Research Assistants, Technicians, etc. or Student researcher (*Bold whichever is applicable only*) | Click here to enter text. |  | Click here to enter a date. |
| Co-Researcher, Co-Supervisor, Research Assistants, Technicians, etc. or Student researcher (*Bold whichever is applicable only*) | Click here to enter text. |  | Click here to enter a date. |

|  |
| --- |
| **Comments**You are invited to add comments to supplement your application if you think something has not been covered or to provide feedback on this form. |
| Click here to enter text. |

**APPENDIX A: Anesthetic Surgical Monitoring Sheet**

**FNU Veterinary Anaesthetic/Surgical Monitoring Sheet**

|  |  |
| --- | --- |
| **Date** |  |
| **Ethics Approval Number** |  |
| **Project Title** |  |
| **Principal Investigator/Supervisor’s Name** |  |
| **Emergency Phone No. (work/mobile)** |  |
| **Strain** |  |
| **Animal ID**  |  |

**Assessment/Preanesthesia score:**

* Abnormal findings contraindicating surgery
* Suitable for anesthesia/surgery
* Requires anesthesia/surgery regardless of ASA score

Procedure:

Surgeon/ Assistant: Anesthetist/ Assistant:

|  |  |
| --- | --- |
| Take Note: |  |
| Pre-operative Assessment |  |

Weight: BCS: Temp: HR: RR:

Pre-existing medical conditions and medications:

Hydration status: mm color/ CRT:

**Anesthesia**

|  |
| --- |
| Premedication: Dose: Dosage size: Volume: Route: Time: |
|  |
| Induction: Dose: Dosage size: Volume: Route: Time: |
|  |
| Induction: Dose: Dosage size: Volume: Route: Time: |
|  |
| Analgesic: Dose: Dosage size: Volume: Route: Time:  |
|  |
| Antibiotic: Dose: Dosage size: Volume: Route: Time: |
| Maintenance: Isoflurane O Mask O Box O ET Tube size (mm) |
|  |

**Anesthetic monitoring**

**Induction** time start stop IV Fluid (type) mL/h

**Procedure**  time start stop Blood product or other:

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Time |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vaporizer % |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 02 flow |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Symbols:PulseRRExtubatedStart sxØ End sxTop up m LS mLsO TattooO Eye LubeTemperatureJaw tone Palpebral reflex 3rd eyelidEye osition | 220 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 200 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 180 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 160 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 140 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 120 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 100 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 80 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 40 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**Recovery**

O Normal Recovery O Prolonged recovery

O Hypotension O Hypothermia O Hyperthermia O Bradycardia/ Dysrhythmias O Apnea O Seizures O Other

VOD:

TOD:

**Surgery Report:**

**Medications dispensed/FoIlow-up recommendations:**

**APPENDIX B: Intensive Observation Sheet**

**Animal Research Ethics Committee (AREC)**

**MONITORING SHEET: INTENSIVE OBSERVATION**

This sheet is for use during periods when the well-being of an animal may potentially be compromised, e.g., disease models, administration of drugs, or other treatments; post-surgery.

**Monitoring criteria**

* + The general clinical signs listed are applicable and are organised by severity grade (1, 2, or 3).
	+ Add any additional clinical signs that are specific to your project in the **‘Project Specific Signs’** sectionand include the severity grade (1, 2, or 3) in brackets. Examples of specific criteria: *Blood glucose; blood pressure; tumour size and ulceration; surgical wound; injection site; temperature; respiratory rate; heart rate; withdrawal reflex.*

**Grades**

* + Grade 1 – Animal must be monitored again within 8 hours; if the signs have not improved, advice must be sought from a veterinarian.
	+ Grade 2 – Advice must be sought from a veterinarian.
	+ Grade 3 – The animal must be immediately euthanised to prevent further suffering.
* Detailed notes and an action plan may be recorded in the **‘Detailed Record.’**

**Monitoring Sheet: Intensive Observation**

|  |  |
| --- | --- |
| **Ethics Approval Number** |  |
| **Project Title** |  |
| **Principal Investigator/Supervisor’s Name** |  |
| **Emergency Phone No. (work/mobile)** |  |
| **Strain** |  |
| **Animal ID**  |  |
| **Frequency of monitoring:** [ ]  Twice Daily [ ]  Daily [ ]  3 x weekly [ ]  Other (specify) |

**NAD (No Abnormalities Detected) –** No action required

**Grade 1 –** Monitor againwithin 8 hours; if not improved seek advice from CI or veterinarian

**Grade 2 –** Seek advice from CI or veterinarian; euthanasia may be required

**Grade 3 –** Euthanise animal immediately to prevent further suffering

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  **Date or Time****Monitoring criteria** |  |  |  |  |  |  |  |  |  |  |  |  |
| **Observer initials** |  |  |  |  |  |  |  |  |  |  |  |  |
| **NAD** |  |  |  |  |  |  |  |  |  |  |  |  |
| Weight (grams) |  |  |  |  |  |  |  |  |  |  |  |  |
| **Grade 1 signs**  |
| Ruffled fur |  |  |  |  |  |  |  |  |  |  |  |  |
| Lethargic or hyperactive |  |  |  |  |  |  |  |  |  |  |  |  |
| Shallow or rapid breathing |  |  |  |  |  |  |  |  |  |  |  |  |
| **Grade 2 signs**  |
| Altered gait |  |  |  |  |  |  |  |  |  |  |  |  |
| Hunched posture |  |  |  |  |  |  |  |  |  |  |  |  |
| Diarrhoea |  |  |  |  |  |  |  |  |  |  |  |  |
| Discharge at any orifice |  |  |  |  |  |  |  |  |  |  |  |  |
| Eyes partially closed |  |  |  |  |  |  |  |  |  |  |  |  |
| Laboured breathing |  |  |  |  |  |  |  |  |  |  |  |  |
| Enlarged abdomen |  |  |  |  |  |  |  |  |  |  |  |  |
| Wounds or other lesions |  |  |  |  |  |  |  |  |  |  |  |  |
| Blood in a cage or on animal |  |  |  |  |  |  |  |  |  |  |  |  |
| Prolapse |  |  |  |  |  |  |  |  |  |  |  |  |
| Repetitive behaviour (e.g backflips; running in circles) |  |  |  |  |  |  |  |  |  |  |  |  |
| Thin |  |  |  |  |  |  |  |  |  |  |  |  |
| Weight loss >15% BW |  |  |  |  |  |  |  |  |  |  |  |  |
| **Grade 3 signs**  |
| Gasping respiration |  |  |  |  |  |  |  |  |  |  |  |  |
| Low response to stimuli |  |  |  |  |  |  |  |  |  |  |  |  |
| Emaciated |  |  |  |  |  |  |  |  |  |  |  |  |
| **Project Specific Signs (Grade 1, 2, or 3 in brackets)**  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

**Monitoring Sheet: Detailed Record**

***\*NOTE:*** *Record animal ID, observations, the progress of an animal’s condition, treatments given, and the plan on this page.*

|  |  |  |
| --- | --- | --- |
| **Date** | **Details of abnormal finding, action taken, and plan** | **Initials** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**APPENDIX C: SCHEDULE OF PRACTICAL CLASSES**

 **Course Code:** Click here to enter text.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Date** | **Lecturer** | **Title/Description of Unit/Course** | **Species** | **No. of Animals** | Purpose No. | **Procedure No.** |
|  | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
|  | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
|  | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
|  | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
|  | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
|  | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
|  | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |

**Checklist**

* What is happening to the animals?
* What will be the effects?
* How will the effects be minimised?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Anaesthesia** | **Diet/Water Modifications** | **Housing** | Sterile technique: instruments, drapes, surgeon | **Transport** |
| Fasting | Type | Location | Location of and housing in the post-operative recovery area | Type |
| Induction & drug, dose, route | Amount | Isolation | Post-operative management | Duration |
| Methods of monitoring anaesthesia and recovery | Effects | Group housing: stocking rates, sexes | Post-operative monitoring: methods, frequency, means of determining the necessity of use | Confinement |
| Additional support during anaesthesia and recovery (e.g. heat, intravenous fluids) | Measurement of intake | Shelter | Expertise | Numbers of animals |
| Location of induction and recovery areas | Animal monitoring | Bedding |  | Air conditioning |
|  |  | Hiding areas | **Teaching** |  |
| **Anaesthesia or analgesia** | **Drug Treatments** | Environmental enrichment | Source of animals | **Tumour/neoplasia induction** |
| Possible side effects | Substance | Duration held | Housing | Method |
| Restraint | Volume | Conditioning period | Duration held | Site |
|  | Frequency/total number per animal |  | Method of disposal | Endpoint |
| **Behaviour Modification** | Local and systemic effects | **In-vitro Studies** |  | Animal monitoring: methods, frequency |
| Stimulus: type, duration, frequency |  | Source of animals | **Toxicology** |  |
|  | **Euthanasia** | Duration held | Substance | **Wildlife Studies** |
| **Blood/Body Fluid Collection** | Method | Euthanasia | Volume | Location |
| Volume | Location: where the procedure will be performed |  | Route | Methods |
| Route | Expertise of personnel | **Surgery** | Frequency of treatments/total number per animal | Capture methods |
| Frequency |  | Anaesthesia | Local and systemic effects | Handling/restraint |
| Anaesthesia or analgesia | **Genetic Manipulation** | Location of pre-operative preparation area | Anaesthesia or analgesia | Housing |
| Restraint | Methods | Pre-operative preparation | Restraint | Monitoring |
| Animal monitoring: methods, frequency | Potential effects | Surgical procedure: site, technique | Animal monitoring: methods, frequency | Release |
|  |  |  | Endpoint/duration | Effects on population |

#### APPENDIX D – How to submit your application

***DO NOT submit these instructions with your application***

**Submitting your application:**

**Before you submit:**

* Ensure your application is complete on the most current version of the form, and all questions have been answered. Incomplete applications will not be accepted.
* The application must identify all of the researchers involved with the project. This includes anyone that will be or potentially will be, handling the animals. They must all sign the Declaration at Section E. A student is not and **cannot** be the Principal Investigator or Project Supervisor. This responsibility must be undertaken by the student’s supervisor.
* **Note:** It is the applicant’s responsibility to ensure the completed declaration is submitted with their application.
* Applications should be submitted electronically either as a word or a colour pdf document. Hard copies will also be accepted but must be submitted in colour.

**Questions can be directed to:**

Manager Research Grants & Ethics/Secretary- Animal Research Ethics Committee

Email: shailin.gonelevu@fnu.ac.fj

Phone: +679 3394000

Extension: 2981

 ***It is advisable to*** ***keep an electronic copy, complete with signatures, for your personal records.***

**Closing time for applications:**

The closing time for applications is **12 noon** on the nominated closing date.