|  |  |  |
| --- | --- | --- |
| C:\Users\Asus Group\Desktop\38817978_398963827300353_4426930041615548416_n.jpg | **The Institutional Animal Care**  **And Use Committee (IACUC)**  **Alexandria university** | LOGO UNIVERSITY FINAL |
| **Application Template for Approval to Use Animals in**  **Research and Teaching** | | |

**Faculty/Institute:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **FILLED BY OFFICE ONLY**  IACUC Protocol Number   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | AU | Code of faculty | YY | MM | DD | MS(1)– MD(2) – research (3)-project(4) | Daily  serial |   Date Application Received : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Approval Period: \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_  **From To** |

**Principal Investigator (PI):**

PI Name: **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Phone: **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Designated Emergency Contact(s):**

Name: **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Phone: **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* **P.I. must be Alexandria University staff member.**
* Corresponding Author.
* Researcher Applicant.
* **Please write the name and contact details of the staff member who the AU\_IACUC can contact for changes or modification in the presented application.**

|  |  |
| --- | --- |
| **Protocol Title** | **Include a clear, descriptive and correctly spelled project title. The title should briefly state procedures to be carried out and the animal species to be used.** |
| **Category** | Research  Teaching  Training  Pilot study  *\* If teaching, state course name and code:*…………………………………. |
| **Duration of Approval requested?** | 1 Year  2 Years  3 Years  *\*Protocol duration begins on the date of approval by the AU- IACUC and continues for the period requested in this section.* |
| **Anticipated Start Date** |  |
| **Type of submission** | New prtocol  Re-Submission  Related to another protocol  (If Re-Submission or related to another protocol, please provide its number……………………….) |
| **This protocol for:** | M.Sc.  Ph.D.  Research  Project  Don’t tick any box if student/s are not known/enrolled yet. |
| **Is the protocol currently funded?** | Yes  No  Pending  Don’t tick any box if student/s are not known/enrolled yet. Funding Source:  Alexandria University  Others (Please specify ………………………….) |

**SECTION 1: Overview of protocol**

**1.1. Research team information (Add more lines if necessary)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Study Team Members** | | | |
| **Principal Investigator** | | | |
| **Name** |  | **Position** |  |
| **Institution** |  | **Department** |  |
| **Phone** |  | **Email** |  |
| **Co-Investigator (s)** |  |  |  |
| **Name** |  | **Position** |  |
| **Institution** |  | **Department** |  |
| **Phone** |  | **Email** |  |

**1.2 Has this protocol been approved by scientific department?**

No  Yes

If yes, please provide thefull name of the reviewing committee

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**1.3. Literature Search for Duplication**

This search must be performed to prevent unnecessary duplication with previous experiments and to assess the possibility of the 3Rs (Reduction, replacement and refinement) alternatives.

|  |  |
| --- | --- |
| * + 1. **Database search engine(s)** | Digital Library unit. Alexandria Uni.  (If others please specify……..) |
| * + 1. **The last date of database search was performed:** | **Day / Month / Year**  **(Must be within the last 3 months)** |
| * + 1. **Time period covered by the search:** | 5 years  10 years  Others  (If others please specify….)  **D/M/Y - D/M/Y (The international guidelines state that the minimum acceptable period of literature search is 10 years, EX. 2006-2016)** |
| * + 1. **Keywords used in the search** | **State all key words that used during your literature search including drug, administration, method** **or the name of animal (s) used in your study)** |
| **5. Acronyms or abbreviations** | **Consider all synonyms and different spellings of keywords (e.g. "liver cells" and "hepatocytes", “anaesthesia” and “anesthesia”, “haemoglobin” and “hemoglobin”)** |

**1.4. The objective(s), hypothesis and outcomes of this protocol**

*Please list the objective(s), hypothesis and anticipated outcomes of the project using lay language*

|  |  |
| --- | --- |
| **Objective(s)** | **Try to answer the following questions to write effective objectives.**  **- Why are the experiments proposed?**  **- What knowledge do you hope to achieve?**  **- How will the use of animals help you investigate this particular problem?**  **- What answers do you anticipate from the proposal?** |
| **Hypothesis** | **To write your hypothesis try using this sentence (If we confirmed……………., we can proof that……………..)** |
| **Outcomes and significance**  **(benefits)** | **Please describe in non-scientific terms the importance of and/or the potential scientific benefit of the proposed study with respect to human or animal health, the advancement of knowledge, or the significance of your research to the broader community.** |

**1.5. Background**

Please provide adequate background with references that indicates the importance of the proposed study.

|  |
| --- |
| **To write your abstract try to apply the following sequence:** |

**1.6. Summary or Synopsis in simple English (layman) language**

Avoid using technical terminology overly. The summary should be simple and concise in a way that makes sense to a person with no discipline-specific training.

\*If this is a thesis research proposal or a grant application, please do not write down the full length proposal.

|  |
| --- |
| - **Provide the common name and scientific name of the animal (s) used in your study.**  - **Provide the total number, source and housing area for the animal (s) used in your study.**  - **Provide a general description of the animal procedures included in the experimental design.**  - **Briefly outline the proposed animal manipulations and provide a time-line of events.** |

**SECTION2. Project Information**

**2.1 Primary purpose**

|  |  |  |
| --- | --- | --- |
| Research | Diagnostic | Other (please specify) |
| Teaching | Product development |  |

**2.2 Social relevance or significance**

|  |  |  |
| --- | --- | --- |
| Conservation/Environment | Veterinary Science | Basic Biology |
| Medical Science | Other (please specify……) |  |

**2.3 Subject area**

|  |  |  |
| --- | --- | --- |
| Behavior | Biochemistry | Biomaterials |
| Cell Biology | Clinical sciences | Drug development development |
| Ecology | Genetics/gene manipulation | Immunology |
| Molecular biology | Parasitology | Neurobiology |
| Pharmacology | Physiology | Toxicology |

Embryology & comparative anatomy  Other (please specify……)

**SECTION 3. Justification of animal use** **and 3Rs:**

The AU-IACUC requires “that animals should be used only if the researcher’s best efforts to find an alternative have failed”. The three Rs (Replacement, Reduction and Refinement) are the cornerstone of ethical animal research, and AU-IACUC requires investigators to implement the 3Rs whenever possible upon preparing to use animals for scientific or teaching purposes.

**3.1 Requested animals**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Species /**  **Common Name** | **Strain/ Breed** | **Weight range and/or Age** | **Sex**  **(M, F)** | **Total**  **Number** | **Source** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

**In female animals, please check its reproductive status**

**Mature female  Immature female**

**Pregnant female  Lactating female**

**3.2. Replacement**

Replacement refers to methods that avoid or replace the use of animals*.*

**3.2.1. Justification of Animal Use**

3.2.1.a. Explain why animals are required for these studies, and why non-animal model replacements, such as cell culture or computer modeling, cannot fully replace animals:

|  |
| --- |
| **Results of the in vitro studies would not be valid in this type of research.**  Results of in vitro studies can not predict the outcome of in vivo animal studies.  Other modalities are not available.  Others.------------------ |

3.2.1.b. **Species – Specific Consideration**

Provide a clear justification explaining choice of species to be used:

What characteristics of this/these species make them appropriate for the proposed study? These might include structural, behavioral, physiological, biochemical, or other features or considerations (such as availability of species-specific reagents, or the use of well-established model) which make the model compatible with the research objectives. **Cost is not a primary consideration**.

|  |
| --- |
| **Justifications for using a particular species may include:**  **1- The presence of previous work in the biomedical literature that validates the use of a particular species as an animal model of a human disease.**  **2- The existence of a large body of previous laboratory data that would have to be repeated if another species was used instead.**  **3- Characteristics of the species that render it uniquely suited to the proposed research (e.g. most similar physiology to humans or other target species).** |

**3.3. Reduction**

Reduction refers to methods that minimize the number of animals required to achieve the aims of the work. Applicants must demonstrate that the minimum number of animals required to attain scientifically meaningful or statistically significant results will be used. Reducing the number of animals used should not result in greater harm, including pain and distress, to the animals that are used.

**3.3.1. Is this a repetition of a previous study?**

**No  Yes** If Yes, please describe the previous work and justify why this needs to be repeated.

**3.3.2. Justification of animal number**

Provide a clear justification explaining the number of animals to be used.

|  |
| --- |
| **Explain and justify how the number of animals requested was determined. Flow diagrams/ tables are recommended to define animal number. In other words explain your experimental design and groups, state the number of animals in each group to illustrate how the total number of animals assigned to each one.** |

**3.3.3. Did three Rs search determine any possible reduction?** Statistical methods should be described where possible.

|  |  |
| --- | --- |
| **Reduction Alternative Category** |  |
| **Experimental design** | Randomised  Double blind  Other (if other please specify) |
| **Sample size calculation** | * Power calculation  Reference  Pilot Study  Other * (if other please specify) |

**3.3.4. Animal Re-use Strategy**

**Does this protocol involve the re-use of any animals** (more than one procedure applied for unrelated experiments on the same animals and in the same project)?

Yes  No

|  |
| --- |
| If yes, please explain**:**  **Animals may be re-used in the following conditions:**   **Animals are healthy and previously unused in an experiment,**   **Animals previously used for breeding and that have undergone no invasive Procedures (genotyping is not considered an invasive procedure).**   **Animals transferred from one protocol to another approved protocol for the purpose of immediate euthanasia by an approved method stated in the protocol.**   **Animals that have been used for simple experimental procedures but in which no invasive or painful procedures have been performed (e.g. single blood draw or injection), with appropriate justification, animals that have undergone an invasive procedure may be reused for training of a non-survival procedure under an approved protocol.** |

## 3.4. Refinement

This refers to practices that reduce or eliminate the animals’ pain, stress and discomfort - not only during experimental procedures, but in relation to the animals’ daily social and physical environments, as well.

**3.4.1. Have you considered pilot studies?**

**Yes  No**

|  |
| --- |
| **If Yes please explain:**  **If No please justify:** |

**3.4.2. Flowchart** of experimental procedures and timelines.

Describe all procedures on the animals and how often they will be done. Surgery should be described here if applicable as it relates to the study design. Specific details on surgery, anesthesia for surgery, and postoperative care are requested in **section 3.5**.

|  |
| --- |
|  |

**3.4.2. 1. Experimental Agents**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| *Experimental agents include investigational new drugs, placebos, tumor cells, stem cells, gene markers, tracers, radioisotopes, imaging contrast agents, viruses and other biological agents, etc.* | | | | | | |
| **Species** | **Drug/Agent** | **Dose**  **(mg/kg body weight)** | **Vehicle** | **Route** | **Frequency** | **Duration** |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

**3.4.2. 2. Collection of biological samples (blood\*, body fluid, tissue, hair, swap, tail clip, etc).**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Collected sample | Site of collection | Method of collection | Amount (size/ volume) Collected | Frequency of Collection(s) |
|  |  |  |  |  |
|  |  |  |  |  |

**3.4.3. Degree of pain severity**

Based on the experimental design and manipulated procedures in this study. Please check ONLY one box.

|  |  |
| --- | --- |
| The most invasive or potentially painful procedure determines the pain severity level. | |
| **No pain** | * Animals being bred, acclimatized, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.   **Examples:**  **1. Animals being bred or housed, without any research manipulation, prior to euthanasia or transfer to another protocol**   * **2. Observation of animal behavior in the wild without manipulating the animal or it’s environment** |
| **Minimum** | -Animals that are subject to procedures that cause no pain or distress, or only momentary or slight pain or distress and do not require the use of pain‐relieving drugs  **Examples:**  **1. Holding or weighing animals in teaching, outreach or research activities**  **2. Observation of animal behavior in the lab**  **3. Ear punching of rodents**  **4. Tail snips in mice ≤ 21 days old**  **5. Peripheral Injections, blood collection or catheter implantation**  **6. Feed studies, which do not result in clinical health problems**  **7. Routine agricultural husbandry procedures approved by the IACUC in a protocol or SOP.**  **8. Live trapping**  **9. Positive reward training or research.**  **10. Chemical restraint**  **11. Research procedures that involve no potential increase in pain or distress on client owned animals that are undergoing Clinical procedures (ex: drawing extra blood, choice of antibiotics).**  **12. Exposure to alterations in environmental conditions (not extreme) with appropriate conditioning and microenvironment**  **13. Food restriction that reduces the animals weight by no more than 20% of normal age matched controls**  **14. Approved euthanasia procedures.**  **15. Euthanasia of breeding animals or unused offspring**  **16. Exsanguination with anesthesia**  **17. Perfusion with anesthesia 18. Unknown genetically engineered phenotype** |
| **Moderate** | -Animals subjected to potentially painful or stressful procedures for which they receive appropriate anesthetics, analgesics and/or tranquilizer drugs.  **Examples:**  **1. Survival surgery 2. Non‐survival surgical procedures**  **3. Laparoscopy or needle biopsies**  **4. Retro‐orbital blood collection**  **5. Exposure of blood vessels for catheter implantation**  **6. Induced infections or antibody production**  **7. Tattooing**  **8. Exposure of skin to UV light to induce sunburn**  **9. Tail snips in mice > 21 days old**  **10. Research procedures that could potentially increase pain or distress (ex: anesthesia/analgesia studies) on client owned animals that are undergoing Clinical procedures.**  **11. Genetically engineered phenotype that causes pain or distress that will be alleviated** |
| **Severe** | -Animals subjected to potentially painful or stressful procedures that are not relieved with anesthetics, analgesics and/or tranquilizer drugs.  **Examples:**  **1. Toxicological or microbiological testing, cancer research or infectious disease research that requires continuation after clinical symptoms are evident without medical relief or require death as an endpoint**  **2. Ocular or skin irritancy testing**  **3. Food or water deprivation beyond that necessary for ordinary pre‐surgical preparation**  **4. Application of noxious stimuli such as electrical shock that the animal cannot avoid/escape**  **5. Any procedures for which needed analgesics, tranquilizers, sedatives, or anesthetics must be withheld for justifiable study purposes**  **6. Exposure to extreme environmental conditions**  **7. Euthanasia by procedures not approved by the AVMA**  **8. Paralysis or immobilization of a conscious animal**  **9. Genetically engineered phenotype that causes pain or distress that will not be alleviated** |

The principle investigator required to document that alternative to procedures that may cause pain or distress to animals have been considered.

**3.4.3.1. Are less painful or stressful alternative available?**

**No  Yes**

|  |
| --- |
| **If yes, justify why they are not going to be used?** |

**3.4.3.2. Describe the anticipated pain or distress for animals?**

|  |
| --- |
|  |

**3.4.3.3. Describe how pain or distress will be monitored?**

|  |
| --- |
|  |

**3.4.3.4. List who will monitor or observe animals?**

|  |
| --- |
|  |

**3.4.3.5. Indicate the schedule of monitoring?**

|  |
| --- |
|  |

**3.4.3.6. Animals in pain or stress**

**Describe the interventions and / or dose, frequency and type of anesthetic or analgesic drugs or tranquilizers if pain or distress occurs.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Agent/Substance** | **Drug** | **Dosage** | **Frequency** | **Route of Administration** |
| **Anesthetic Agent** |  |  |  |  |
| **Analgesic Agent** |  |  |  |  |
| **Tranquilizers** |  |  |  |  |
| **Others** |  |  |  |  |

**3.5. Does this protocol involve surgery?**

**Yes  NO**

**If answer with Yes, complete the following section and if No, proceed to the following section.**

**3.5.1. Surgical procedures**

|  |
| --- |
| Give details and description of the **surgical procedures Guidelines** and pain management during, and/or after surgical intervention. |

**3.5.2. Anaesthetic, analgesic, antibiotic and other drugs used in pain management.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Agent/Substance** | **Drug** | **Dosage** | **Frequency** | **Route of Administration** |
| **Anesthetic Agent** |  |  |  |  |
| **Post-operative Analgesic** |  |  |  |  |
| **Antibiotic** |  |  |  |  |
| **Others** |  |  |  |  |

**3.5.3. Important Surgical Consideration.**

|  |
| --- |
| 1. **Location (Room, Building) of surgery:**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. **Pre-operative Care**  * **Describe any care given to the animals prior to the surgery***: [e.g., fasting, sedation, pre-operative physical exam or blood work, etc.].* * **Describe how the level of anesthesia is assessed to be adequate to begin the procedure?**   **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**   * **Will animals be allowed to recover from anesthesia?**   **Yes  NO**   * **If the answer with Yes, will more than one major survival surgery be conducted on each animals?**   **Yes  NO If the answer with Yes, How many times? (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_).**   * **Provide scientific justification for more than one major, survival surgery on each animal.**   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **3. Aseptic Techniques**  Preparation of the surgical space: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Preparation of the surgeon: [e.g., surgical scrub of hands, donning surgical attire, sterile gloves, etc.] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Preparation of the animal: [e.g., clip fur, clean surgical site with antiseptics, use of sterile drapes, application of eye ointment, etc.]\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **4.** Sterilization of instruments  Describe how instruments will be sterilized: [e.g., autoclave, glass bead sterilizer, chemical sterilant, etc.]\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Will instruments be used in multiple animals? If so, describe how sterility will be maintained.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**SECTION 4: Human Endpoints**

Some experimental manipulations or phenotype abnormalities can be expected to produce a degree of unavoidable pain, distress or illness in experimental animals. These adverse effects will be minimized or alleviated by choosing the earliest endpoints consistent with the scientific objectives of the research.

|  |
| --- |
| **What is the expected time course of the study?** (i.e. how long are animals maintained from the first experimental manipulation until the end of the experiment or planned euthanasia).  **What criteria, appropriate to the species, will trigger the decision to end the study, stop the procedure, or humanely euthanize an animal before the experimental objective is achieved?** Examples could include the following: a weight loss limit (not more than 20%) as a percentage of body weight, allowable durations of anorexia, ulcerative skin lesions.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**SECTION 5: Experimental Procedures**

|  |
| --- |
| **Provide all proposed experiments and different measurements that will be applied on the collected samples.**  Experiment I:  Experiment II:  Experiment III: |

**SECTION 6: Euthanasia**

This must be answered even in a non-terminal study, where an animal may experience a Humane Endpoint not related to the research i.e. in case of planned or unplanned (emergency) euthanasia. Methods of euthanasia must be listed as acceptable by the most recent Report of the AVMA (American Veterinary Medical Association) Guidelines on Euthanasia (<https://www.avma.org/KB/Policies/Documents/euthanasia.pdf>).

**Euthanasia is part of the study design**

**Euthanasia is NOT part of the study design**

**6.1 Methods of euthanasia\***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Species** | **Method** | **Drug** | **Dose (mg/kg)/**  **For gas use%** | **Route** |
|  | Anesthetic overdose |  |  |  |
|  | Decapitation under anesthesia or tranquilization |  |  |  |
|  | Cervical dislocation (CD) under anesthesia or tranquilization |  |  |  |
|  | Exsanguination/cardiac perfusion under anesthesia |  |  |  |
|  | **Other method (Please specify)** |  |  |  |

*\*If more than one method is used per species please list all methods.*

**6.2** [**Confirmation of Death in Animals**](http://www.research.uci.edu/compliance/animalcare-use/research-policies-and-guidance/euthanasia.html#euth4)

|  |  |  |
| --- | --- | --- |
|  | Open chest inspection of the heart | |
|  | Exsanguination (cutting a major blood vessel) | |
|  | Physical method *(specify)*: |  |
|  | Other *(describe below)*: | |

|  |
| --- |
| * 1. **If you are using any one of the previous methods of euthanasia without using anesthesia, please provide scientific justification (with references if available) for why anesthesia cannot be used.** |

**SECTION 7: Animal Housing**

**Animal Housing Requirements.** (Select and check)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Specify intended Animal Housing Facility** | | |  |  |
| **Animal Facility Supervisor** | | |  |  |
| **Micro environment** | **Housing**  **Cage type**  **Bedding**  **Feeding**  **Watering** | Group  Conventional  Normal  Normal  Normal | Individual  IVC  Special  Special diet  Supplemented | Micro-isolator  Special regime  Special regime |
| **Macro environment** | **Temperature Humidity Containment** | Ambient  Ambient  Normal | Other (Details…………………….)  Other (Details…………………….)  Other (Details…………………….) | |

**SECTION 8: Animal disposition**

|  |
| --- |
| **If animals are not to be euthanized at the completion of the protocol, please describe their ultimate use.**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **Identify and explain if any individual animal in this project will be used in any other project.**  **Please state IACUC protocol number (if known) and justify its use.**  **What will be the method of disposal of dead animals?** |

**SECTION 9***:* **Safety**

**Does this protocol involve the use of substances that may pose any health risk (infectious, carcinogenic or toxic) to humans and/ or animals (e.g. bacteria, viruses, fungi, parasites, cell lines, primary cells, tissue, fluids, blood, recombinant DNA, chemicals, laser or radiation)?**

YES NO

If yes, please indicate the hazards that the agent(s) may pose to humans and/or animals and mention the precautions that will be followed to minimize health risk.

|  |  |  |
| --- | --- | --- |
| **Agent** | **Method of Administration** | **Method used to capture wastes** |
|  |  |  |
|  |  |  |

**SECTION 10: Technical /Training requests**

**Will researchers perform technical procedures on animals in addition to routine husbandry?**

Yes  No

**If yes, please fill the following table:**

|  |  |  |
| --- | --- | --- |
| **Procedure** | **Name of the researcher** | **Training\*** |
|  |  |  |
|  |  |  |

**\*Please explain how the researcher was trained to perform this procedure (Certificate, personnel training, video………).**

**- CU. IACUC request for additional training.**

Yes  No

* **Details\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**SECTION 11: List of References**

|  |
| --- |
|  |

|  |
| --- |
| **INVESTIGATORS DECLARATION** |

**Project title**

|  |
| --- |
|  |

I/we the undersigned have read the Animal care Guidelines and accept responsibility for the conduct of the experimental procedures detailed in this proposal in accordance with the guidelines contained in the Guide for the Care and Use of Laboratory Animals 8th Edition 2011 (the Guide).

I/We understand that I must notify the IACUC of Alex University through the amendment process of any changes in the research use of the animals, including the changes of personnel, the number of animals, species used, or procedures performed, and understand that no additional procedures can be started without express prior approval from the IACUC.

At the end of each year, an annual protocol report should be submitted to the IACUC.

**I/We (all investigators) confirm that the research team will comply with any other condition laid down by the Alex. University Institutional animal and care and use committee.**

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| **Faculty Recommendation** |

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| **Head of Department** | **Signature** | **Date** |
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*N.B. If the protocol is resubmitted after response to AU\_IACUC member's comments, please be sure that the resubmitted protocol is signed from the designated reviewing members.*

*Designated reviewing members.*

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| **Name** | **Date** | **Signature** |
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