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| --- | --- | --- |
| **For IACUC Use Only** |  |  |
| **Protocol #A** | **Approval Date:** | **Expiration Date:** |

****

**Institutional Animal Care and Use Committee**

Application to Use Live Vertebrate Animals in Research or Educational Programs

*Instructions: Complete the form and submit as a Microsoft Word document*

**PART A: General Project Information**

A.1 Project Title (use same title as grant proposal, if applicable):

|  |
| --- |
| Click or tap here to enter project title. |

A.2.1 This is a: Choose the protocol type.

A.2.2 If replacement or amendment, enter expiring or existing Protocol #A Click or tap here to enter expiring/existing protocol number.

A.2.3 If replacement, does it include: New funding?  Substantial changes?

A.2.4 If amendment, does it include: New funding?

A.2.5 Please describe in two to three sentences why a replacement is necessary:

|  |
| --- |
| Click or tap here to enter text. |

A.3.1 Estimated start date of project: Click or tap to enter a date.

A.3.2 Estimated completion date of project: Click or tap to enter a date.

**A.4.1 Project Support:** Choose support status.

*Note: If Awarded is selected above, the study has undergone an extramural peer review for scientific merit by the funding agency referenced below. If Pending or N/A is selected the PI must request a peer review from two appropriately qualified HPU scientists to confirm scientific/technical merit. The certification form for use can be found* [*here*](https://www.hpu.edu/oaa/iacuc/index.html)*.*

A.4.2  Grant\*: Agency Click or tap here to enter sponsor name.

*\*A copy of the grant proposal must be submitted with this application*

OSP-1 submitted?

A.4.3  Intramural Support

If Dept Support, Enter Department Name: Click or tap here to enter department.

If Teaching Course, Enter Course #(s) Click or tap here to enter course code.

Other: Specify Click or tap here to enter other support.

**PART B: Confidential Project Information**

*The information in this part will be omitted from requests for release under public records law to the extent permitted by law.*

**B.1. Research Team Members**

Provide contact information for the P.I. and all research team members (faculty, staff, students, volunteers) who will oversee and/or conduct the animal related procedures described in the protocol. If a team member is to be an emergency contact for the IACUC, please indicate in Section “B.2 Project responsibilities” below. If additional space is needed, check the box below and complete an [Additional Personnel Appendix](https://www.hpu.edu/oaa/iacuc/index.html). Instruct all research team members to complete a [health risk assessment form](https://www.hpu.edu/oaa/iacuc/index.html) and enter the certification date.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Role | E-mail Address | Department | Online IACUC Training Date | Health Screening Date |
| Click or tap here to enter PI Name. | Principal Investigator | Click or tap here to enter email address. | Click or tap here to enter department. | Click or tap to enter a date. | Click or tap to enter a date. |
| Click or tap here to enter name. | Choose a role. | Click or tap here to enter email address. | Click or tap here to enter department. | Click or tap to enter a date. | Click or tap to enter a date. |
| Click or tap here to enter name. | Choose a role. | Click or tap here to enter email address | Click or tap here to enter department. | Click or tap here to enter a date. | Click or tap to enter a date. |
| Click or tap here to enter name. | Choose a role. | Click or tap here to enter email address. | Click or tap here to enter department. | Click or tap here to enter a date. | Click or tap to enter a date. |
| Click or tap here to enter name. | Choose a role. | Click or tap here to enter email address. | Click or tap here to enter department. | Click or tap here to enter a date. | Click or tap to enter a date. |

Check if Personnel Appendix is attached

B.2 Project responsibilities: List responsibilities and duties for EACH project team member listed above. The IACUC will use the PI as the emergency contact unless otherwise indicated in this section.

|  |
| --- |
| Click or tap here to enter project responsibilities. |

B.3. Experience: List experience and applicable training for EACH project team member listed above. Provide years of experience with the species or hands-on training by PI or other qualified personnel.

|  |
| --- |
| Click or tap here to enter team member experience. |

B.4. Locations

B.4.1. Experimental Location(s):

*Provide campus, building and room number of facility, or if animals in the wild will be used, state the location of the field study and state whether the study will involve observation or interaction.*

|  |
| --- |
| Click or tap here to enter experimental location(s). |

B.4.2. Animal Housing Location(s): *Provide campus, building and room number. Animals are considered “housed” in a facility subject to inspection twice per year when they are held there for more than 12 hours. If animals will be in a location for 12 hours or less, please describe the circumstances.*

|  |
| --- |
| Click or tap here to enter housing location(s). |

B.4.3. Planning for Emergencies and Disasters: *If you indicated above that you plan to house animals in a HPU facility, you are required to develop and maintain a plan to ensure animal safety in the event of an emergency or disaster. Please submit a* [*Disaster Plan*](https://www.hpu.edu/oaa/iacuc/) *with your protocol.*

Disaster Plan is Attached  Yes  N/A (not housing animals)

B.5. Public Disclosure: Does this protocol describe any unpublished techniques, procedures or data for which copyright or patent may be sought, or the disclosure of which would place your research effort at a competitive disadvantage?

No  Yes

If yes, indicate below the protocol section number(s) you wish to be considered for exemption from disclosure.

|  |
| --- |
| Click or tap here to enter sections that should be exempt from disclosure. |

*End of confidential section.*

# HPU Institutional Animal Care and Use

Application to Use Live Vertebrate Animals in Research or Educational Programs

**PART C: Lay Summary**

*Under each question below, write a brief and simple summary of the research (250-300 words) as if it were a newspaper article. Use general terms so that a well-educated lay person (non-scientist) can understand the nature of the proposed work as this section may be provided to the public if needed. Medical and technical terms and phrases should be avoided, and if necessary to include, be defined in lay terms.*

C.1. What are you trying to find out? Why is it important to know this (what is the benefit)?

|  |
| --- |
| Click or tap here to enter SIMPLE description of what you are trying to find out. |

C.2. What will you do with the animals? *(Include common name for animal(s) and provide a summary of activities in SIMPLE terms. DO NOT INCLUDE detailed experimental procedures here.) Please do not simply copy and paste from Part D.*

|  |
| --- |
| Click or tap here to enter SIMPLE description of what you will do to the animals. |

C.3. Why is this type of animal needed?

|  |
| --- |
| Click or tap here to enter SIMPLE explanation of why this type of animal is needed. |

**PART D: Technical Methods and Procedures**

D.1 State the scientific aims of the study and/or hypotheses of the study. If this is related to a grant proposal, the specific aims and associated procedures should match one or more of the aims listed in the proposal. If this protocol deals with a subset of the aims in the proposal, please specify which aims are covered. *\*\*If submitting for, or awarded funding, a copy of the grant proposal must be submitted.\*\**

|  |
| --- |
| Click or tap here to enter scientific aims of the study. |

D.2 Experimental Design and Methods: Describe the experimental groups and outline the procedures involving live animals that will be used to accomplish the specific aims of this study. *As appropriate, describe the observation method, type of interaction, and whether the animals will be disturbed or affected.* Surgical details and procedures performed on tissues removed from animals need not be described in detail*.*

|  |
| --- |
| Click or tap here to enter experimental design and fully describe methods. |

**PART E: Species Type and Three R Justification**

E.1 Technical Species Description and Information (Animal Chart)

The animal chart is completed in an Excel spreadsheet that can be found [here](https://www.hpu.edu/oaa/iacuc/index.html). Please complete the animal chart and submit the spreadsheet with this protocol form.

E.2.1 Are any species on the attached animal chart endangered or protected? Choose yes or no.

If Yes, explain:

|  |
| --- |
| Click or tap here to explain the nature of the protection. |

E.2.2 Do you need any special permits or licenses to capture any species listed in your animal chart? Choose Yes or No.

If yes, explain

|  |
| --- |
| Click or tap here to explain any permits or licenses needed. |

E.2.3  If permit is needed: By Checking this box, the principal investigator certifies that neither s/he nor any member of the research team will conduct any of the activities described in this protocol without first obtaining the necessary permits/licenses.

*According to the PHS Policy on Humane Care and Use of Laboratory Animals, the Guide for the Care and Use of Laboratory Animals, and HPU IACUC Policy, researchers must apply the Three Rs when deciding to use animals in research and in designing humane animal research studies.*

E.3.1. Three Rs: Replacement

*Explain how you have investigated alternatives to animal use and why alternatives are not appropriate. List websites checked (such as Alt.web-* [*https://www.altex.org/index.php/altex/search/search*](https://www.altex.org/index.php/altex/search/search) *or the Animal Welfare Information Center -* [*http://www.nal.usda.gov/awic/*](http://www.nal.usda.gov/awic/)*).*

|  |
| --- |
| Click or tap here to describe how you investigated possible alternatives to using animals. |

E.3.2 Date of Web Search for Alternatives

\*\*Recent web search required\*\* Click or tap to enter a date.

E.3.3. Three Rs: Reduction

Now that you explained above why there is no alternative to using animals, please explain why the number requested is the minimum number of animals you can use to achieve valid results. **Provide journal citations in which a similar number of animals have been used for the specific type of research proposed, or include a suitable power calculation.** If you are unable to provide one or the other, explain why.

|  |
| --- |
| Click or tap here to describe how you arrived at the MINIMUM number of animals possible. |

E.3.4 Three Rs: Refinement

Explain how procedures have been refined to eliminate or reduce unnecessary pain and distress.

|  |
| --- |
| Click or tap here to describe refinement of methods. |

**PART F: Safety and Special Concerns**

F.1. Transport of animals: If you will transport animals between locations, describe containment method and what safety precautions are in place for the animals and staff during transport.

|  |
| --- |
| Click or tap here to describe transportation procedures, if any. |

F.2. Staff Safety

F.2.1. Safety Issues Associated with this Study

*Please check any safety issues that personnel may encounter in performing the live, vertebrate research activities or husbandry responsibilities.*

*NOTE: By checking a box the PI certifies that staff has been appropriately trained on minimizing the risk of injury and has discussed any health-related issues with staff.*

|  |  |
| --- | --- |
|  | Back injury (from lifting cages/ feedbags)  *- Train on proper lifting procedures* |
|  | Slip/fall injuries (wet floors/boats)   * *Train on proper shoes to wear in lab/on boats* * *Train on proper lab maintenance procedures to avoid wet floors* |
|  | Bites (from handling animals)   * *Train on proper handling procedures* * *Provide protective gloves or other gear* |
|  | Needle stick   * *Train on proper sharps disposal* * *Provide protective gloves or other gear* |
|  | Burns (washing cages, chemical burns)   * *Train on proper use of hot water/steam cleaner* * *Provide protective gear* |
|  | Eye injuries (from bedding particles, UV lights, chemicals)   * *Provide goggles* * *Train on proper use of eyewash station* * *Periodic inspection of eyewash station* |
|  | Allergens (animal hair, serum, animal proteins)   * *Provide protective garments* * *Fit-test for respirator* |
|  | Field Work  - Train on procedures applicable to field environment |
|  | Other exposures (biohazard, chemical, radiation)  - *HPU Chemical Hygiene Training* |
|  | No safety issue identified |

F.2.2 If “Other exposure” is checked above, please describe:

|  |
| --- |
| Click or tap here to enter text. |

F.3. Special Concerns: List any special concerns or requirements pertaining to special housing needs, equipment, or animal care, etc.

|  |
| --- |
| Click or tap here to enter special concerns not elsewhere described. |

**PART G: Disposition of Animals**

*If drugs are being administered for euthanasia only, they must be identified in section H below.*

G.1. Euthanasia - - NOTE: Use section G.1 ONLY if euthanasia is the planned disposition method. Otherwise proceed to Section G.2 below which is required.

G.1.1 Method - must be consistent with the recommendations of the [2020 AVMA Guidelines on Euthanasia](https://www.avma.org/sites/default/files/2020-01/2020-Euthanasia-Final-1-17-20.pdf)*.* Provide a detailed justification if the method is not recommended by the AVMA.

|  |
| --- |
| Click or tap here to enter planned euthanasia method(s). |

G.1.2 Confirmation of Death - Describe how death will be confirmed. Note: unsuccessful euthanasia must be reported to the IACUC immediately.

|  |
| --- |
| Click or tap here to describe how death will be confirmed. |

G.1.3 Disposal – Provide specific method of disposal*.*

|  |
| --- |
| Click or tap here to enter specific disposal method. |

G.2. Other Methods of Disposition - - NOTE: Use section G.2 when euthanasia is not the planned method of disposition.)

G.2.1. Describe if animals will be released, returned to pet store or other method of disposition.

|  |
| --- |
| Click or tap here to describe disposition method not involving planned euthanasia. |

G.2.2. \*\*\*Required only if euthanasia is NOT the planned method of disposition\*\*\*In the event a distressed animal cannot be released as stated above and requires euthanasia, please state the method that will be used, and include how death will be confirmed and how remains will be disposed. This *must be consistent with the recommendations of the* [*2020 AVMA Guidelines on Euthanasia*](https://www.avma.org/sites/default/files/2020-01/2020-Euthanasia-Final-1-17-20.pdf).

|  |
| --- |
| Click or tap here to enter text. |

**PART H: Drug Administration**

Check here and skip if this section is not applicable (no drug administration involved)

*Please list all drugs and dosages to be used even if they are being used for euthanasia only, and even if euthanasia is not the planned method of disposition.*

H.1. What is the estimated time period the animal will be anesthetized per exposure to the anesthetic drugs? Please include exposure to euthanasia drugs.

|  |
| --- |
| Click or tap here to enter estimated time period. |

H.2. If neuromuscular blocking agents are used, how will the plan of anesthesia be monitored? Please include how euthanasia will be monitored.

|  |
| --- |
| Click or tap here to describe how anesthesia plan will be monitored for neuromuscular blocking agents . |

H.3. Describe the tracking and security of controlled drugs (Drug Enforcement Administration requirements).

|  |
| --- |
| Click or tap here to describe tracking and security of controlled drugs. |

H.4. Are the drugs pharmaceutical grade? Choose Yes or No.

If no, please describe and justify below.

|  |
| --- |
| Click or tap here to justify if not pharmaceutical grade. |

**Table H.A. Anesthetic drugs (including neuromuscular blocking agents and euthanasia drugs) administered to live animals.**

|  |  |  |  |
| --- | --- | --- | --- |
| Drug (generic name) | Initial Dose (mg/kg or alternative units) | Additional Maintenance Dose (mg/kg or alternative units) | Route |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
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| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |

**Table H.B. Post Surgical/Post Procedural Analgesic or Tranquilizing Drugs**

|  |  |  |  |
| --- | --- | --- | --- |
| Drug (generic name) | Dose (mg/kg) | Route | Frequency of Administration |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |

**Table H.C. All other Drugs or Agents (Experimental or therapeutic.)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Drug/Agent  (generic name) | Dose (mg/kg) | Route | Frequency | Estimated Duration of Treatment |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
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**PART I: Surgery**

Check here and skip if this section is not applicable (no surgery involved)

I.1. Is the procedure terminal or survival? Choose Terminal or Survival.

I.2. Details of procedure: Provide a brief (less than 1 page) description of the surgical procedure(s)*.*

|  |
| --- |
| Click or tap here to describe surgical procedure(s). |

I.3. Qualifications of personnel: Please describe how personnel performing procedures are qualified.

|  |
| --- |
| Click or tap here to describe qualifications of personnel to perform surgery(ies). |

**Table I.4. Surgery Table**

|  |  |  |  |
| --- | --- | --- | --- |
| Experimental Group | Number of Major Survival Surgeries per Animal \* | Number of Minor Survival Surgeries per Animal | Previous Major Surgeries per animal from other studies |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
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| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |

\*Definition: Major survival surgery is any surgical intervention into a body cavity or having the potential for producing a permanent handicap in an animal that is expected to recover. The body cavity involved may be cranial, vertebral, thoracic, abdominal, peritoneal or joint.

I.5. If more than one major survival surgery is planned, provide scientific justification and list interval between procedures. You must also consider major surgery that has been performed prior to an animal’s inclusion in this protocol.

|  |
| --- |
| Click or tap here to enter text. |

I.6. Post-Surgical care

I.6.1 Name(s) of individual(s) responsible for providing post-surgical care.

|  |
| --- |
| Click or tap here to identify individual who will provide post-surgical care. |

I.6.2 Frequency of animal monitoring

|  |
| --- |
| Click or tap here describe frequency of post-surgical animal monitoring. |

I.6.3 Signs of distress monitored

|  |
| --- |
| Click or tap here to describe what signs of distress will be monitored. |

I.6.4 Criteria for analgesics

|  |
| --- |
| Click or tap here to describe the criteria for analgesics. |

I.6.5 Criteria for removal from protocol

|  |
| --- |
| Click or tap here to describe what criteria will be used to remove animal from protocol. |

**PART J: Dietary Manipulations**

*Complete only if animal diets will be manipulated or restricted for more than 24 hours.*

Check here and skip if this section is not applicable (no dietary manipulation/restriction for more than 24 hours)

J.1 Will the animals be fed experimental diets? Choose Yes or No.

If yes, describe the features of the experimental diets and any potential adverse consequences related to the diets.

|  |
| --- |
| Click or tap here to describe dietary manipulation. |

J.2. Does the protocol involve food or water restriction? Choose Yes or No.

If yes, provide a description of the procedures involving food or water restriction, and the methods use to monitor the health of the animals.

|  |
| --- |
| Click or tap here to describe food or water restrictions. |

**PART K: Pain and/or Distress**

*Complete only if animals will experience more than momentary or slight pain or distress, or if unanesthetized animals will be restrained for prolonged periods.*

Check here and skip if this section is not applicable (no more than momentary or slight pain or distress)

FEDERAL REGULATIONS REQUIRE RESEARCHERS TO CONSULT WITH THE ATTENDING VETERINARIAN FOR ANY PROCEDURE INVOLVING PAIN OR DISTRESS. PLEASE CONTACT [IACUC@HPU.EDU](mailto:IACUC@HPU.EDU) FOR PROCEDURE PRIOR TO COMPLETING THIS SECTION.

K.1. Pain or Distress

K.1.1. Please describe the nature of pain or distress that will be experienced by the animals.

|  |
| --- |
| Click or tap here to describe pain or distress, or enter N/A if not applicable. |

K.1.2 Will appropriate analgesia be used? Choose Yes or No.

K.1.3 Will appropriate anesthesia be used? Choose Yes or No.

\*\*If No to both, provide justification:

|  |
| --- |
| Click or tap here to enter text. |

K.2. Prolonged Restrain

Provide justification for the use of prolonged restraint on unanesthetized animals.

|  |
| --- |
| Click or tap here to describe nature of restraint or enter N/A if not applicable. |

**Certifications and Signatures**

*Please read and check off each statement below, then sign the document using your electronic signature.*

I hereby apply for a three-year protocol approval (with annual review required at the end of the first and second years) for the project described below, and assume responsibility for the animal care and use associated with this research.

I understand the requirements of the [PHS Policy on Humane Care and Use of Laboratory Animals](http://grants.nih.gov/grants/olaw/references/phspol.htm), applicable USDA regulations if any, and [HPU policies](https://www.hpu.edu/oaa/iacuc/index.html) governing the use of vertebrate animals for research, testing, teaching or demonstration purposes. My signature certifies that I will conduct the project in full compliance with the aforementioned requirements.

I certify that the activities listed in this protocol do not unnecessarily duplicate previous experiments.

I certify that all personnel involved in the animal care, treatment and use aspects of this protocol are, or will be, adequately trained prior to participation in this study.

I certify that I will obtain approval from the IACUC before initiating any changes to the study.

I certify that I have contacted the HPU Office for Sponsored Projects for any applicable laboratory or other safety training for myself and/or my research team members, and have obtained the required HPU approval for any activities that involve hazards materials, such as radio nuclides, biological agents, hazardous chemicals or drugs, or recombinant DNA.

I certify that I will notify the IACUC regarding any unexpected study results that impact the animals. Any unanticipated pain or distress, morbidity or mortality will be reported to the attending veterinarian and the IACUC.

If this involves pain and/or distress, I certify that I have reviewed the pertinent scientific literature and the sources and/or databases as noted in the application and have found no valid alternative to any procedures described herein which may cause more than momentary pain or distress, whether it is relieved or not..

I certify that I have reviewed the health clearance forms for all individuals listed in section B1 above, and have addressed any recommendations noted.

To append an electronic signature:

Make sure your cursor is on the PI Signature line.

Click Insert 🡪Pictures, upload a jpg image of your signature, adjust alignment as necessary.

|  |
| --- |
|  |

|  |
| --- |
| Click or tap to enter a date. |

Principal Investigator Signature Date

|  |
| --- |
| *Please submit this signed form,* [*animal chart*](https://www.hpu.edu/oaa/iacuc/index.html)*, and any* [*applicable appendices*](https://www.hpu.edu/oaa/iacuc/index.html) *to* [*IACUC@hpu.edu*](mailto:IACUC@hpu.edu) |