**University of Delaware**

**Institutional Animal Care and Use Committee**

**Application to Use Animals in Noninvasive Teaching or Demonstrations**

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| **Title of Protocol:** Click here to enter text. | |
| **AUP Number:** Click here to enter text. | **🡨 (4 digits only — if new, leave blank)** |
| **Principal Investigator:** Click here to enter text. | |
| **Common Name (Strain/Breed if Appropriate):**  Click here to enter text.  **Genus Species:**  Click here to enter text. | |
| **Date of Submission:** Click here to enter text. | |

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| **Official Use Only**  IACUC Approval Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Date of Approval: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**Principal Investigator Assurance**

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| 1. I agree to abide by all applicable federal, state, and local laws and regulations, and UD policies and procedures. |
| 1. I understand that deviations from an approved protocol or violations of applicable policies, guidelines, or laws could result in immediate suspension of the protocol and may be reportable to the Office of Laboratory Animal Welfare (OLAW). |
| 1. I understand that the Attending Veterinarian or his/her designee must be consulted in the planning of any research or procedural changes that may cause more than momentary or slight pain or distress to the animals. |
| 1. I declare that all experiments involving live animals will be performed under my supervision or that of another qualified scientist. All listed personnel will be trained and certified in the proper humane methods of animal care and use prior to conducting experimentation. |
| 1. I understand that emergency veterinary care will be administered to animals showing evidence of discomfort, ailment, or illness. |
| 1. I declare that the information provided in this application is accurate to the best of my knowledge. If this project is funded by an extramural source, I certify that this application accurately reflects all currently planned procedures involving animals described in the proposal to the funding agency. |
| 1. I assure that any modifications to the protocol will be submitted to by the UD-IACUC and I understand that they must be approved by the IACUC prior to initiation of such changes. |
| 1. I understand that the approval of this project is for a maximum of one year from the date of UD-IACUC approval and that I must re-apply to continue the project beyond that period. |
| 1. I understand that any unanticipated adverse events, morbidity, or mortality must be reported to the UD-IACUC immediately. |
| 1. I assure that the experimental design has been developed with **consideration of the three Rs: reduction, refinement, and replacement, to reduce animal pain and/or distress and the number of animals used in the laboratory.** |
| 1. I assure that the proposed research does not unnecessarily duplicate previous experiments. ***(Teaching Protocols, including cooperative extension demonstrations, Exempt)*** |
| 1. I understand that by signing, I agree to these assurances.   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_  Signature of Principal Investigator Date |

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| **Names of All Persons working on This Protocol**  I certify that I have read this protocol, accept my responsibility and will  perform only those procedures that have been approved by the IACUC.   |  |  | | --- | --- | | **Name** | **Signature** | | 1. Click here to enter text. |  | | 2. Click here to enter text. |  | | 3. Click here to enter text. |  | | 4. Click here to enter text. |  | | 5. Click here to enter text. |  | | 6. Click here to enter text. |  | | 7. Click here to enter text. |  | | 8. Click here to enter text. |  | | 9. Click here to enter text. |  | | 10. Click here to enter text. |  |   If after hours participation is required by students on project involving **agricultural animals**, please describe how this is handled and the times and days that students may be on site  Click here to enter text. |

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| The Animal Use Protocol form has been developed to facilitate review of requests for specific research, teaching, or biological testing projects. The review process has been designed to communicate methods and materials for using animals through administrative officials and attending veterinarians to the Institutional Animal Care and Use Committee (IACUC). This process will help assure that provisions are made for compliance with the Animal Welfare Act, the Public Health Service Policy on Humane Care and Use of Laboratory Animals and the Guide for the Care and Use of Laboratory Animals.  Please read this form carefully and fill out all sections. Failure to do so may delay the review of this application. Sections that do not apply to your research must be marked “NA” for “Not Applicable.”  This application form must be used for all NEW or THREE-YEAR RENEWAL protocols.  *All answers are to be completed using Arial 12 size font.*  All questions must be answered in their respective boxes and NOT as attachments at the end of this form.  Please complete any relevant addenda:  Hybridoma/Monoclonal Antibodies (“B”)  Polyclonal Antibodies (“C”)  Survival Surgery (“D”)  Non-Survival Surgery (“E”)  Wildlife Research (“F”)  If help is needed with these forms, contact the IACUC Coordinator at extension 2616, the Facility Manager at extension 2400 or the Attending Veterinarian at extension 2980. |

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| **1. Principal Investigator Information:** | | |
| a. Name: | | Click here to enter text. |
| b. University/Company: | | Click here to enter text. |
| c. Department: | | Click here to enter text. |
| d. Building/Room: | | Click here to enter text. |
| e. Office Phone: | | Click here to enter text. |
| f. Lab Phone(s): | | Click here to enter text. |
| g. Home Phone: | | Click here to enter text. |
| h. Mobile Phone: | | Click here to enter text. |
| i. E-Mail Address: | | Click here to enter text. |
| **2. Protocol Status:** | | |
| a.  New Protocol ***OR***  Re-submission due to three (3) completed years.  If re-submission, enter Protocol Number: Click here to enter text. | | |
| b.  Laboratory Animals ***OR***  Wildlife ***OR***  Agricultural Animals  If “Wildlife” please complete Addendum “F”  For agricultural animal protocols, please list the name and contact information for the veterinarian who is on-call. The veterinarian should receive a copy of the protocol Click here to enter text. | | |
| c. Proposed Start Date: Click here to enter text. | | |
| d. Proposed Completion Date: Click here to enter text. | | |
| e. Funding Source: Click here to enter text. | | |
| f. Award Number if applicable: Click here to enter text. | | |
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| **3. Non-Scientific Summary:** In language understandable to a ***high-school senior, very briefly*** ***describe*** the goals and significance of this study.   1. Specific Scientific Goals: Click here to enter text. 2. Significance of this Teaching or Cooperative Extension Demonstration (including the possible benefits to human and/or animal health, the advancement of scientific knowledge, or the betterment of society): Click here to enter text. | | |
| **4. Description of Teaching or Demonstration Procedures** (note: if procedures involve experimental research, any potential for pain or distress to the animal, or any biohazards, please use the “Application to Use Animals in Research and Teaching”)  Be sure to include all animal events and related details, i.e.,   * **All Procedures**-bleedings, injections, identification methods, physiological measurements, euthanasia, etc. * **Procedural details**–number of animals involved in procedure, approximate animal weight, if relevant (for injections, bleeding, etc.), route, frequency, volume, etc. * **Pharmaceutical**-**grade and non-pharmaceutical grade compounds** – Identify any drugs, biologics, or reagents that will be administered to animals.   ***(Describe)***: Click here to enter text. | | |
| 1. **Administration of compounds**  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | **Drug name or class of drug** | **Volume** | **Dose or range of doses** | **Route (IP, IV, SC, IM, PO)** | **Frequency** | **Duration** | **Pharma-grade**  **Yes or No** | |  |  |  |  |  |  |  | |  |  |  |  |  |  |  | |  |  |  |  |  |  |  | |  |  |  |  |  |  |  | |  |  |  |  |  |  |  | |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |   **If non-pharmaceutical grade compounds are used (with the exception of oral administration), they must be justified (such as pharmaceutical-grade not available) and the method to ensure appropriate preparation must be described**: (for example: pharmaceutical grade drugs are not available. Sterile saline will be used as a vehicle and the solution will be sterile-filtered. Click here to enter text. | | |
| **Refinement, Reduction & Replacement**  **When using animals for research, it is important to consider the three Rs: reduction, refinement, and replacement to reduce both animal distress and the number of animals used in the laboratory.**  **Reduction:**   Minimizing the number of animals used **Refinement:** Using techniques and procedures to reduce pain and distress **Replacement:**   Using non-animal methods or lower phylogenetic organisms | | |
| 1. **Justification for the Use of Animals** (instead of models *in vitro* methods)   Click here to enter text. | | |
| 1. **Justification for Number of Animals Requested**: **(Note: numbers should include animals used for breeding and all animals born)** Specify the number of students in the class, the student to animal ratio and how that ratio was determined: Animal numbers should be minimized to the fullest extent possible without compromising the quality of the hands-on teaching experience for students or the health and welfare of the animals. ***(Explain)***: Click here to enter text. | | |
| 1. **Animals Requested:**  |  |  |  | | --- | --- | --- | | **Common Name** | **Genus and Species** | **Total Number of Animals for**  **Three Years** | | 1. Click here to enter text. | Click here to enter text. | Click here to enter text. | | 2. Click here to enter text. | Click here to enter text. | Click here to enter text. | | 3. Click here to enter text. | Click here to enter text. | Click here to enter text. | | 4. Click here to enter text. | Click here to enter text. | Click here to enter text. | | 5. Click here to enter text. | Click here to enter text. | Click here to enter text. | | | |
| 1. **Where will animals be obtained and are there any special shipping requirements?** Click here to enter text.   **If these are privately owned animals please attach an owner consent form**  **Are agricultural animals obtained from a non-traditional source such as poultry from a commercial production company or swine from commercial herd?**  Yes  No  If **yes**, please describe how the animals are tested and determined to be free of diseases which could potentially infect other animals on site, and any special precautions, such as isolation housing that is required. | | |
| 1. **10. Where will animals be housed (or captured for wildlife)?** Click here to enter text. | | |
| 1. **Will any untreated or non-manipulated animals be humanely euthanized to obtain tissue, cells, etc.?**  Yes  No   If **Yes,** list types of tissue, etc: Click here to enter text. | | |
| 1. **Dietary Manipulations**  Yes  No   If **Yes,** list and explain (Note: if food or fluid will be restricted, describe method for assessing the health and wellbeing of the animals. Body weights must be recorded at least weekly. Amount earned (if animals work for food or fluid) during testing and amount freely given must be recorded. A scientific justification must be provided for departures from the recommendations of the Guide.) Click here to enter text. | | |
| 1. **Environmental Stress (e.g. cold, prolonged restraint, forced exercise)**  Yes  No   If **Yes,** list and explain: Click here to enter text. | | |
| 1. **Special Study Requirements or Exceptions to Standards:** Please describe any special study requirements such as single housing of the animals, exemption from environmental enrichment, or special caging Click here to enter text. | | |
| **15. Will any animal undergo anesthesia for any reason other than surgery? Box4** Yes **Box4** No  If **Yes**,   1. List Procedures and Reason(s) for using anesthesia: Click here to enter text. 2. Check the type of anesthesia to be used.   Isoflurane  Injectable **(*For injectable,* c*omplete the following):***   |  | | --- | | Drug: Click here to enter text. | | Dose: Click here to enter text. | | Route: Click here to enter text. | | | |
| **16. Please describe criteria for when an animal will be euthanized (humane endpoints – possible examples include 20% weight loss, ulceration of subcutaneous tumors, difficulty ambulating, hunched posture);**  Click here to enter text. | | |

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| **Disposition of Animals**  **17. What is the expected disposition of animals at the end of the experiments?**  ***(Check all that apply)***: |
| Euthanized |
| Maintained |
| Released ***(Wildlife Only)*** |
| Other ***(Specify)***:Click here to enter text. |

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| **18. Euthanasia\***  Select methods that will be used in case of emergency and/or at the end of the procedure/experiment.  **\*NOTE:**   * Methods must be approved by the AVMA or must be scientifically justified. * A “Primary” and “Secondary” method must be selected (UD Double Kill Policy). * **If different methods will be used for different groups** of animals, indicate the group after the procedure (e.g., write “Neonates” after Decapitation, “Adults” after CO2, “Terminal Surgery Animals” after Isoflurane Anesthesia Overdose, etc.).   Please include all names of personnel and qualifications of those who would be performing any manual method of euthanasia, such as decapitation:   |  |  |  | | --- | --- | --- | | **Name**  Click here to enter text. | **Qualifications:**  Click here to enter text. | | | **Name**  Click here to enter text. | **Qualifications:**  Click here to enter text. | |
| Animals will NOT be under anesthesia when euthanasia is performed. |
| Animals will be under anesthesia when euthanasia is performed**. (C*heck drug used below)***: |
| Isoflurane |
| Injectable **(*Complete the following)***:   |  | | --- | | Drug: Click here to enter text. | | Dose: Click here to enter text. | | Route: Click here to enter text. | |
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| **PRIMARY** method(s) of euthanasia |
| CO2 by compressed gas cylinder ***(Not for animals already under anesthesia or neonates)*** |
| Barbiturate Euthanasia Solution - Injectable ≥150mg/kg **(*Check route below)***:  IV  IP  IC |
| Cervical Dislocation ***(acceptable with anesthesia, or for poultry, without anesthesia if personnel are trained)*** |
| Decapitation ***(only under anesthesia or neonates)*** |
| Exsanguination or Perfusion ***(only under anesthesia)*** |
| Incision of Chest Cavity – Bilateral Pneumothorax ***(only under anesthesia)*** |
| Pithing – ***(only under anesthesia)*** ***( amphibians, reptiles only)*** |
| Removal of Vital Organ(s) ***(only under anesthesia) (Check all that apply):***  Brain  Kidneys  Heart  GI Tract  Liver  Lungs  Other Vital Organ(s) – ***(Specify):*** Click here to enter text. |
| Other Method of Euthanasia: ***(Describe and Scientifically Justify)***: |
| **SECONDARY** method(s) of euthanasia that will be used to ensure that the animal does not survive: |
| Cervical Dislocation |
| Decapitation |
| Exsanguination or Perfusion |
| Incision of Chest Cavity – Bilateral Pneumothorax |
| Barbiturate Euthanasia Solution - Injectable ≥150mg/kg **(*Check route below)***:  IV  IP  IC |
| Pithing – Double pithing required ***(fish, amphibians, reptiles only)*** |
| Monitor for lack or respiration and heart beat (agricultural animals only) |
| Removal of Vital Organ(s): ***(Check all that apply)***:    Brain  Kidneys  Heart  GI Tract  Liver  Lungs  Other Vital Organ(s) – ***(Specify):*** Click here to enter text. |
| Other Method of Euthanasia: ***(Describe and Scientifically Justify)***: Click here to enter text. |
| **Personnel and Training**  **19. Personnel involved in Protocol *(Include Principal Investigator):***  ***Status*:** Indicate Prof, Post-Doc, Grad Student, Lab Manager, Research Assistant, Technician, etc.  ***Qualifications*:** Include **procedures this person is proficient in performing** on proposed species and the time they have been doing the procedure.  **Be specific** (e.g. sub-mandibular bleeding on mice-2yrs, performing castrations on mice and rats-1yr, tail-vein injections on mice-2yrs, etc.) **(If no experience, list who will train.)**  ***Responsibilities*:** Include **all responsibilities** this person will have with live animals on this protocol, including euthanizing animals. |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Name**  Click here to enter text. | **E-mail**  Click here to enter text. | **Office phone number**  Click here to enter text. | **Home/Cell phone number**  Click here to enter text. | **Received IACUC-required training**  **Yes**  **No** |   Status: Click here to enter text.  Qualifications: Click here to enter text.  Responsibilities: Click here to enter text. |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Name**  Click here to enter text. | **E-mail**  Click here to enter text. | **Office phone number**  Click here to enter text. | **Home/Cell phone number**  Click here to enter text. | **Received IACUC-required training**  **Yes**  **No** | |
| Status: Click here to enter text.  Qualifications: Click here to enter text.  Responsibilities: Click here to enter text. |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Name**  Click here to enter text. | **E-mail**  Click here to enter text. | **Office phone number**  Click here to enter text. | **Home/Cell phone number**  Click here to enter text. | **Received IACUC-required training**  **Yes**  **No** |   Status: Click here to enter text.  Qualifications: Click here to enter text.  Responsibilities: Click here to enter text. |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Name**  Click here to enter text. | **E-mail**  Click here to enter text. | **Office phone number**  Click here to enter text. | **Home/Cell phone number**  Click here to enter text. | **Received IACUC-required training**  **Yes**  **No** |   Status: Click here to enter text.  Qualifications: Click here to enter text.  Responsibilities: Click here to enter text. |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Name**  Click here to enter text. | **E-mail**  Click here to enter text. | **Office phone number**  Click here to enter text. | **Home/Cell phone number**  Click here to enter text. | **Received IACUC-required training**  **Yes**  **No** |   Status: Click here to enter text.  Qualifications: Click here to enter text.  Responsibilities: Click here to enter text. |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Name**  Click here to enter text. | **E-mail**  Click here to enter text. | **Office phone number**  Click here to enter text. | **Home/Cell phone number**  Click here to enter text. | **Received IACUC-required training**  **Yes**  **No** |   Status: Click here to enter text.  Qualifications: Click here to enter text.  Responsibilities: Click here to enter text. |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Name**  Click here to enter text. | **E-mail**  Click here to enter text. | **Office phone number**  Click here to enter text. | **Home/Cell phone number**  Click here to enter text. | **Received IACUC-required training**  **Yes**  **No** |   Status: Click here to enter text.  Qualifications: Click here to enter text.  Responsibilities: |