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| Syracuse University  Institutional Animal Care and Use Committee  **APPLICATION TO USE VERTEBRATE ANIMALS IN RESEARCH, TEACHING OR TESTING**  Revision date: March 2017  For Office Use Only | | | |
| DATE RECEIVED: | APPLICATION NUMBER: | DATE APPROVED:    RENEWAL DATE: | |
| 1ST RENEWAL DATE: | 2ND RENEWAL DATE:    RENEWAL DATE: |
| IMPORTANT -- ALLOW 4-6 WEEKS FOR APPROVAL **INCOMPLETE FORMS MAY CAUSE REVIEW TO GO INTO THE NEXT REVIEW CYCLE DELAYING APPROVAL AN ADDITIONAL 4-6 WEEKS**  **NO RESEARCH OR TEACHING IS TO COMMENCE PRIOR TO SECURING IACUC APPROVAL**  **THIS FORM MUST BE SUBMITTED AS A WORD FILE VIA EMAIL TO:** [**mltouche@syr.edu**](mailto:mltouche@syr.edu) **or** [**lar@syr.edu**](mailto:lar@syr.edu)   1. The Collaborative Institutional Training Initiative (CITI), required electronic training for animal users, can be found at: http://www.citiprogram.org 2. New protocol submissions and resubmissions must be sent **4 weeks** prior to the IACUC meeting for pre-review. Deadlines for final submission are posted at <http://researchintegrity.syr.edu/animal-research/iacuc-meeting-dates-and-submission-deadlines/> 3. Please send an attachment via e-mail to [mltouche@syr.edu](mailto:mltouche@syr.edu). Comments and revision requests will be e-mailed to the Principal Investigators. 4. **After pre-review the signed original and Twelve (12)** **copies**, of the final revised protocol must be submitted to the Office of Research Integrity and Protections 214 Lyman Hall, **2 weeks** prior to the IACUC meeting.   If you have any questions and/or concerns regarding this new submission procedure, please contact our office at 443-1690, 443-3013 or [mltouche@syr.edu](mailto:mltouche@syr.edu) or [orip@syr.edu](mailto:orip@syr.edu).  Approval is renewable annually for up to an additional two years. Continuation of the approved animal usage beyond three years requires completion of a new application form and complete IACUC review.  **In order to expedite the processing of this application, the IACUC strongly encourages the Principal Investigator to attend the IACUC meeting at which this protocol is discussed. We will contact you with the date and location of the meeting so you may attend while your protocol is being discussed.** | | | |

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| **GENERAL INFORMATION**  **This section must be completed by all PI’s**  **The Animal Use Application is now split into sections please check the following boxes for all sections you are including with this submission** | | | | | | | | |
|  | [Breeding Colony (A)](http://researchintegrity.syr.edu/wp-content/uploads/2017/03/SECTION-A-Breeding-Colonies.doc) | |  | [Food/Fluid Restriction (D)](http://researchintegrity.syr.edu/wp-content/uploads/2017/03/SECTION-D-Food-Fluid-Restriction.doc) | |  | [Physical Restraint (G)](http://researchintegrity.syr.edu/wp-content/uploads/2017/03/SECTION-G-Physical-Restraint.doc) | |
|  | [Surgical Procedures (B)](http://researchintegrity.syr.edu/wp-content/uploads/2017/03/SECTION-B-Surgical-Procedures.doc) | |  | [Hazardous Materials (E)](http://researchintegrity.syr.edu/wp-content/uploads/2017/03/SECTION-E-Hazardous-Materials.doc) | |  | [USDA Category E](http://researchintegrity.syr.edu/wp-content/uploads/2017/03/SECTION-H-Category-E.doc) –See page 4 of application (H) | |
|  | [Wildlife Field Research (C)](http://researchintegrity.syr.edu/wp-content/uploads/2017/03/SECTION-C-Wildlife-Field-Research.doc) | |  | [Antibody/Ascites Production (F)](http://researchintegrity.syr.edu/wp-content/uploads/2017/03/SECTION-F-Antibody_Ascites-Production.doc) | |  | [Death as an Endpoint (I)](http://researchintegrity.syr.edu/wp-content/uploads/2017/03/SECTION-I-Death-as-an-Endpoint.doc) | |
| PRINCIPAL INVESTIGATOR  **\*NOTE\* The Principal Investigator (PI) must be a person who holds a faculty appointment or other administrative position of Director or higher. If you have questions regarding this Office of Research requirement call the Office of Research Integrity and Protections office at 315-443-3013 for guidance.**  **administrative position of Director or higher. If you have any questions regarding this IRB requirement call the IRB office at 315.443.3013 for guidance.** | | | | | | | | |
| LAST NAME:  Click here to enter text. | | FIRST NAME:  Click here to enter text. | | | MIDDLE INITIAL:  Click here to enter text. | | | SUID NUMBER:  Click here to enter text. |
| ACADEMIC RANK / TITLE:  Click here to enter text. | | | | | | | | PRIMARY SCHOOL/COLLEGE:  Click here to enter text. |
| DEPARTMENT:  Click here to enter text. | | | | | | | | CAMPUS TELEPHONE NUMBER:  Click here to enter text. |
| MAILING ADDRESS:  Click here to enter text. | | | | | | | | FAX NUMBER:  Click here to enter text. |
| EMAIL ADDRESS:  Click here to enter text. | | | | | | | | EMERGENCY/CELL NUMBER:  Click here to enter text. |
| CO-PRINCIPAL INVESTIGATOR | | | | | | | | |
| LAST NAME:  Click here to enter text. | | FIRST NAME:  Click here to enter text. | | | MIDDLE INITIAL:  Click here to enter text. | | | SUID NUMBER:  Click here to enter text. |
| ACADEMIC RANK / TITLE:  Click here to enter text. | | | | | | | | PRIMARY SCHOOL/COLLEGE:  Click here to enter text. |
| DEPARTMENT:  Click here to enter text. | | | | | | | | CAMPUS TELEPHONE NUMBER: |
| MAILING ADDRESS:  Click here to enter text. | | | | | | | | FAX NUMBER:  Click here to enter text. |
| EMAIL ADDRESS:  Click here to enter text. | | | | | | | | EMERGENCY/CELL NUMBER:  Click here to enter text. |

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| **INVESTIGATORS’ ASSURANCE AND SIGNATURE** | |
| I agree to abide by all federal and state regulations, Syracuse University (SU) and Institutional Animal Care and Use Committee (IACUC) policies concerning the use of animals.  I agree that all use of vertebrate animals will be covered by an Animal Use Application that has been reviewed and approved by the SU IACUC and that IACUC approval must be obtained before ordering animals and/or performing any animal procedure described in this form.  I accept responsibility that all personnel working on this project are aware of and will follow the approved procedures outlined in this form. I assure that the personnel are adequately trained and have demonstrated competence in the animal procedures.  I will promptly notify the Attending Veterinarian or designee regarding any unexpected study results that negatively impact the animals, including any unanticipated pain or distress and/or morbidity or mortality.  I agree that any proposed changes to this protocol will be requested by submitting an amendment form to the IACUC outlining the changes. IACUC approval must be obtained prior to performing the revised animal procedures described therein. Proposed changes include the addition or deletion of research personnel.  I will maintain appropriate animal records (e.g., drug, health, census, euthanasia, surgery, anesthesia, etc.).  I will make every effort to safeguard the health and well-being of each animal under this protocol.  I understand that approval of projects is for a maximum of three years from the date of approval, and requires completion of an annual renewal signed and returned to the IACUC office. I understand that the IACUC can call for a complete re-review of the project as needed  By submitting this form, I agree to protocol-related activities including post-approval monitoring and communications with representatives of the IACUC.  The information contained herein does not materially conflict with and/or deviate from information contained in related grant proposal documents submitted to extramural funding agencies listed in the protocol, subject to IACUC review. | |
| PRINCIPAL INVESTIGATOR: | DATE: | |
| CO-PRINCIPAL INVESTIGATOR: | DATE: | |

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| **PROJECT/COURSE TITLE AND FUNDING SOURCE**  **(if you have more than one project,**  **please copy and paste this page as many times as needed)** | | | | | | | | | | | | | | | |
| PROJECT / COURSE TITLE (this has to match the grant title, if available):  Click here to enter text. | | | | | | | | | | | | | | | |
| PRESENT OR POTENTIAL SOURCE OF FUNDING:  Click here to enter text. | | | | | | | | | | | | | | | |
| FOR EXTERNAL FUNDING, PLEASE FILL IN THE BOXES BELOW | | | | | | | | | | | | | | | |
| FUNDING AGENCY GRANT NUMBER:  Click here to enter text. | | | | SU CONTRACT & GRANT APP NUMBER:  Click here to enter text. | | | | | ACCOUNT NUMBER:  Click here to enter text. | | | | SUB-ACCOUNT NUMBER:  Click here to enter text. | | |
| CLASSIFICATION OF THIS PROJECT | | | | | | | | | | | | | | | |
|  | Biomedical |  | Agriculture | | |  | Teaching/Instruction | | | | |  | | Wildlife/Field | |
|  | Testing (Drug, Behavioral) |  | Other: | | | | | | | | | | | | |
| FOR THE ABOVE PROJECT THE FOLLOWING ANIMALS WILL BE USED | | | | | | | | | | | | | | | |
| **IF THIS IS A THREE YEAR RENEWAL, PLEASE FILL IN THE FOLLOWING** | | | | | | | | | | | | | | | |
| All animals remaining on the expiring protocol must be officially transferred to the new protocol. When the old protocol expires, there can be no animals remaining. Transferred animals will reduce the number of animals counted on the first year of this new protocol. If the remaining animals on the old protocol are not needed for the new protocol, consult with the IACUC Administrator/LAR Facilities Manager about options for using the remaining animals. If you fail to have a new protocol approved before the old one expires, the remaining animals will be transferred to the LAR Holding protocol. | | | | | | | | | | | | | | | |
| SPECIES1  COMMON NAME  (PLEASE DO NOT INCLUDE THE STRAIN) | | | | | List total # of animals to be used  In each of the appropriate categories | | | | | | | | | | TOTAL  NUMBER  OF  ANIMALS |
| B2 | | | C | | D | E | | | |
| 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. |
| **THE FOLLOWING ANIMALS ARE THE NEW ANIMALS REQUIRED FOR THIS RESEARCH** | | | | | | | | | | | | | | | |
| For each species, estimate the total number of animals that will be used over the next 3 year period (or for the life of the project if less than 3 years), in the boxes under each appropriate Humane Use Category B, C, D, or E (see next page for description of categories). For field studies estimate the number of animals per species you expect to observe or collect. For transgenic animals, provide the complete nomenclature. Add additional rows to the table as necessary. | | | | | | | | | | | | | | | |
| SPECIES1  COMMON NAME  (PLEASE DO NOT INCLUDE THE STRAIN) | | | | | List total # of animals to be used  In each of the appropriate categories | | | | | | | | | | TOTAL  NUMBER  OF  ANIMALS |
| B2 | | | C | | D | E | | | |
| 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. |
| 1If these animals are coming from another institution or an SU PI, a Transfer Form (orip.syr.edu) must be completed and submitted to the IACUC office at [mltouche@syr.edu](mailto:mltouche@syr.edu) or [lar@syr.edu](mailto:lar@syr.edu) .  2For protocols involving generation of offspring, list the number of breeders required and the expected offspring from all breeding | | | | | | | | | | | | | | | |
| Explanation of USDA Reporting Codes:  **USDA Category B:** Animals that will be bred or purchased for breeding, but not used for experiments. This includes breeders, offspring that cannot be used because of improper genotype or gender and any other animals that will not participate in the research studies.  **USDA Category C:** Animals used in research, experiments, or tests which involve no pain or distress or only momentary or slight pain or distress that WOULD NOT REQUIRE anesthetic, analgesic or tranquilizing agents (examples: s.c., i.m., i.p. or percutaneous i.v. injection, a brief period of restraint, tissue harvesting after euthanasia has been performed).  **USDA Category D:** Animals used in research, experiments, or tests where appropriate anesthetic, analgesic, or tranquilizing agents are used to avoid pain or distress (examples: major and minor surgery, tissue or organ collection prior to euthanasia, retro-orbital blood collection, prolonged restraint accompanied by tranquilizers or sedatives). Animals used in research, experiments, or tests which, if they experience pain or distress cannot be treated with an anesthetic, analgesic or tranquilizer, but the agent or procedure producing the pain/distress is immediately discontinued or the animal is euthanized to prevent pain and/or suffering.  **USDA Category E:** Animals used in research, experiments, or tests involving pain or distress in which the use of appropriate anesthetic, analgesic or tranquilizing agents would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests (examples: studies which allow endpoints that are painful or stressful, addictive drug withdrawals without treatment, pain research, noxious stimulation). ***IF YOU LIST ANIMALS IN THIS CATEGORY YOU MUST PROVIDE A DETAILED JUSTIFICATION (see Page 2 and complete Section H)*** | | | | | | | | | | | | | | | |

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| **LAY SUMMARY-PURPOSE AND POTENTIAL VALUE OF STUDY** |

1. Using terminology that a non-scientist could understand, explain what you are going to do and how these procedures involving animals should be designed and performed with due consideration of their relevance to human or animal health, the advancement of knowledge, or the good of society (human/animal health). A few clear, succinct well-written sentences will suffice. Abbreviations and acronyms should be spelled out and explained the first time they are used. A section from your grant application, using highly technical terms, is not acceptable. *Note that representatives of the general community who have no scientific background will be among the readers.*

Click here to enter text.

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| **RATIONALE FOR ANIMAL USE/HARM-BENEFIT ANALYSIS** |

2. Please **list** the alternatives to the use of live animals that you have considered (e.g., the availability or

appropriateness of the use of less invasive procedures, isolated organ preparation, computer simulation, and cell

or tissue culture).

Click here to enter text.

3. Please give detailed reasons why vertebrate animals are necessary (**replacement**).

Click here to enter text.

1. Please give detailed reasons why this vertebrate is the most appropriate species, rather than another or less sentient species (**replacement**).

Click here to enter text.

5. Animal welfare regulations do not allow **unnecessary** duplication of previous experiments. If this is a research protocol then provide written assurance that the proposed research activity does not unnecessarily duplicate previous work. If this work does replicate a previous experiment, explain why it is **scientifically necessary**.

Click here to enter text.

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| **SCIENTIFIC JUSTIFICATION FOR THE NUMBER OF ANIMALS TO BE USED** |

6. Please provide scientific justification for the number of animals to be used:

a. **Teaching protocols**: (e.g., animal numbers are typically determined by a specified student-to-animal ratio, which must be explained in the justification narrative. Animal numbers should be minimized to the fullest extent possible without compromising the quality of the hands-on teaching experience for students or impact animal welfare)

Click here to enter text.

b. **Tissue harvest required for *in-vitro* work, including antibody production**: (e.g., animal numbers are typically determined by the amount of tissue/cells required and the number of individual animals needed to provide the appropriate amount of tissue/cells or antibodies, etc.)

Click here to enter text.

c. **Exploratory or pilot studies use of live animals to demonstrate success or failure of a desired goal, such as the production of transgenic mice, proof of concept, or survey of a population**: (e.g., animal numbers are typically justified based on the probability of the experimental procedure, and the PI’s experience and professional judgment)

Click here to enter text.

d. **Hypothesis driven research**: (e.g., if possible, animal numbers should be determined by statistical power analysis. Alternatively, appropriate numbers of animals may be determined based on comparable studies for which the desired effect sizes were shown to be statistically significant)

Click here to enter text.

e. **Field studies**: (e.g., especially those with the intent of characterizing abundance, the number of animals are usually based on past experience)

Click here to enter text.

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| **VETERINARY CONSULTATION** |

7. There will be a pre-review conducted by the University’s veterinarian. If you wish to consult with the veterinarian prior to submitting this application contact Dr. Robert Quinn, DVM, [quinnr@upstate.edu](mailto:quinnr@upstate.edu).

I have consulted with the veterinarian prior to submitting this application:

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| --- | --- | --- | --- |
|  | Yes |  | NO |

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| **PROCEDURES WITH THE POTENTIAL TO CAUSE PAIN AND/OR DISTRESS**  **(Category D or E)** |

8. With respect to the procedures proposed that have the potential to result in pain and/or distress (e.g. surgery, anxiety/depression models, etc.), how have you determined that there are no alternative procedures that could be used instead?

Click here to enter text.

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| **DATABASE SEARCH** |

9. The USDA believes that database searches remain the most effective and efficient method for demonstrating compliance with the requirement to consider alternatives to painful/distressful procedures. When a database search is the primary means of meeting this requirement, the narrative about the search must include the following: The names of the databases used (there must be a minimum of two searched), the date on which the search was performed, what years were covered, and the keywords (the word alternative must be included in the keywords) or search strategy used.

|  |  |  |  |
| --- | --- | --- | --- |
| Database Name | Date Search was performed | Years Covered | Keywords/Search Strategy  (must include the word “alternative”) |
| 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. |

10. What were your findings with respect to alternatives to potentially painful procedures?

Click here to enter text.

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| **ANIMAL CARE**  **Please note that animals must be observed at least once a day, seven days a week, and health records must be readily available** |

11. Who is responsible for daily animal care?

|  |  |  |  |
| --- | --- | --- | --- |
|  | Laboratory Animal Resources |  | Principal Investigator & Staff |
|  | Other (explain):  Click here to enter text. | | |

11A. If animals will be observed more often than once every 24 hours, please list frequency and responsible personnel.

Click here to enter text.

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| **ANIMAL HOUSING** |

12. Housing location: Please check the appropriate box below

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| --- | --- | --- | --- |
|  | Life Sciences Complex (LSC) |  | 621 Skytop Road |
|  | Center for Science and Technology (CST) |  | Field Study |
|  | Other (please specify): Click here to enter text. | | |

13. Will your animals be maintained outside approved housing areas for more than 12 hours?

|  |  |  |  |
| --- | --- | --- | --- |
|  | Yes: this must be justified and approved by the IACUC |  | No |

Justification:

Click here to enter text.

14. Will animals be transported between facilities? If so, describe how they will be transported (i.e. climate controlled, discrete transport). List personnel responsible for transport and personnel responsible for receiving animals (trained animal care staff only).

Click here to enter text.

15. Will social animals be singly housed?

|  |  |  |  |  |  |
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|  | Yes: this must be justified below |  | No |  | N/A |

Provide justification for singly housing social animals.

Click here to enter text.

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| **EXCEPTIONS TO THE GUIDELINES** |

16. If you are proposing to depart from the pertinent guidelines, state what the exception is and the reason for the exception. See the following for guidelines and check all boxes that apply.

• *Guide for the Care and Use of Laboratory Animals*

<http://www.nap.edu/readingroom/books/labrats/>,

• *Animal Welfare Act* *Regulations*

<http://www.aphis.usda.gov/animal_welfare/downloads/awa/awa.pdf>,

• or standard husbandry practices for the species you are using,

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Temperature/ Humidity |  | Lighting Intensity Photo period |  | Air Quality / Ventilation |
|  | Space Requirements |  | Sanitation / Waste Disposal |  | Pest Control |
|  | Feed |  | Noise |  | Water |
|  | Social Environment Activity |  | Bedding |  | Other |

Describe and justify exception:

Click here to enter text.

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| **ENRICHMENT** |

17. Include any additional enrichment you are providing other than standard Lab Animal Resources (LAR) enrichment (Contact Misty Touchette at 443-1690 or [mltouche@syr.edu](mailto:mltouche@syr.edu) if you have questions).

|  |  |  |  |
| --- | --- | --- | --- |
|  | Nestlets/nesting material |  | Toys |
|  | Group housing |  | Food treats: |
|  | Exercise areas |  | Other: Click here to enter text. |
|  | No additional enrichment |  |  |

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| **USE OF CELL LINES** |

18. If you will be using rodent cell lines in your research, has the cell line been tested?

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| --- | --- |
|  | Yes. Please attach a copy of the results. |
|  | No. Approval of your Animal Use Application will be held up until the line has been screened. Contact LAR to find a laboratory to do this. |
|  | N/A. I will not be using rodent cell lines. |

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| **PROCEDURES**  **(shaded areas are for office use only)** |

19. Please check ***all*** boxes below that best describe what will be performed on the animals to be used in this application, and provide an explanation or complete appropriate section addendum.

|  |  |
| --- | --- |
| **PROCEDURE/STUDY AREA** | |
|  | Amputation (including toe/tail clipping)  Provide description in 19A. |
|  | Antibody Production ([complete Section F](http://researchintegrity.syr.edu/wp-content/uploads/2017/03/SECTION-F-Antibody_Ascites-Production.doc)) |
|  | Behavioral modification  Provide description in 19A. |
|  | Biological Material / Recombinant DNA / Controlled Substances ([complete Section E](http://researchintegrity.syr.edu/wp-content/uploads/2017/03/SECTION-E-Hazardous-Materials.doc)) |
|  | Breeding ([complete Section A](http://researchintegrity.syr.edu/wp-content/uploads/2017/03/SECTION-A-Breeding-Colonies.doc)) |
|  | Food/water restriction (excluding surgical) ([complete Section D](http://researchintegrity.syr.edu/wp-content/uploads/2017/03/SECTION-D-Food-Fluid-Restriction.doc)) |
|  | Hazardous Chemicals (Biological, Chemical, Radioactive) ([complete Section E](http://researchintegrity.syr.edu/wp-content/uploads/2017/03/SECTION-E-Hazardous-Materials.doc)) |
|  | Induced experimental infectious disease (up to and including BSL2)  Provide description in 19A. |
|  | Induced experimental non-infectious disease  Provide description in 19A. |
|  | Injections or inoculations  Provide description in 19A. |
|  | Paralytics  In 19A Scientifically justify why you need to use a Paralytic. |
|  | Injury/trauma  Provide description in 19A. |
|  | Nutritional studies  Provide description in 19A. |
|  | Obesity (experimental)  Provide description in 19A. |
|  | Organ/system failure/dysfunction experimentally induced  Provide description in 19A. |
|  | Pain Research  Provide description in 19A. |
|  | Paralysis experimentally induced  Provide description in 19A. |
|  | Pharmacological studies  Provide description in 19A. |
|  | Restraint of a conscious animal longer than 3 hours ([complete Section G](http://researchintegrity.syr.edu/wp-content/uploads/2017/03/SECTION-G-Physical-Restraint.doc)) |
|  | Sample collection (blood, urine, tissue, etc). Provide description in 19A. |
|  | Surgical procedure, non-survival ([complete Section B](http://researchintegrity.syr.edu/wp-content/uploads/2017/03/SECTION-B-Surgical-Procedures.doc)) |
|  | Surgical procedure, survival ([complete Section B](http://researchintegrity.syr.edu/wp-content/uploads/2017/03/SECTION-B-Surgical-Procedures.doc)) |
|  | Surgical procedure, multiple major survival ([complete Section B](http://researchintegrity.syr.edu/wp-content/uploads/2017/03/SECTION-B-Surgical-Procedures.doc)) |
|  | Trapping/capture of wildlife ([complete Section C](http://researchintegrity.syr.edu/wp-content/uploads/2017/03/SECTION-C-Wildlife-Field-Research.doc)) |
|  | Tumor growth experimentally induced / implantation  Provide description in 19A. |
|  | Weight loss  Provide description in 19A. |

19A. Describe what procedure(s) will be performed on the animals. (Complete this item if there is no corresponding section addendum listed above).

Click here to enter text.

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| **PROJECT DESCRIPTION**  **DO NOT CUT AND PASTE FROM A GRANT PROPOSAL. INCLUDE ONLY THE INFORMATION THAT EXPLAINS WHAT IS BEING DONE TO THE ANIMALS. FOR BREEDING COLONIES, PLEASE FILL OUT SECTION B.**  **(if you have more than one procedure/experiment please copy and paste Question 20-22 as many times as needed)** |

20.

|  |  |
| --- | --- |
| Procedure/Experiment:  Click here to enter text. | |
| Species:  Click here to enter text. | Number of animals:  Click here to enter text. |
| Building:  Click here to enter text. | Room Number:  Click here to enter text. |

Explain the experimental design of the procedure/experiment. Provide a timeline for the procedure/experiment proposed. This description should provide an understanding of what happens to animals from acquisition to final disposition. Provide a brief overview of work done on tissue post euthanasia. In depth descriptions of surgical procedures should be explained in Section B. Your target audience is an external inspector and/or a faculty member from a discipline that may be unrelated to yours.

Click here to enter text.

21. Provide scientific justification for how you determined the number of animals needed for this procedure/experiment/activity.

Click here to enter text.

22. **Flow Diagram** (sample provided) For each different type of experiment, provide a flow diagram or sequential list of procedures to help the Committee understand what happens experimentally to each animals from initiation of experiment to euthanasia.

*Sample flow chart:*

Acclimation Drug Tx

Arrival in Lab Animal Euthanasia

Facilities (48 hours) Control

(3 weeks)

23. List and describe adverse consequences that the animals could experience as a direct result of the procedures described above. These are consequences that you could reasonably predict based on your experience or knowledge of the literature.

**Please note: If any unanticipated adverse consequences not described below do occur during the course of the study, a complete description of these consequences and the steps taken to mitigate them must be submitted to the Attending Veterinarian or designee.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Indicators of pain and adverse consequences**:  *Note*: There is considerable interspecies and individual variability in response to pain. | | | |
|  | Biting or resistance to handling (in adapted animals) |  | Abnormal breathing pattern |
|  | Guarding the painful area |  | Excess salivation |
|  | Vocalization |  | Inappetence (loss of appetite/weight loss) |
|  | Self-mutilation/Self-trauma |  | Shivering |
|  | Looking at, licking, chewing, or smelling painful area |  | Assuming unusual positions |
|  | Reluctance to bear weight, limping |  | Acting “anxious” |
|  | Reluctance to move or rise |  | Unkempt coat |
|  | Lethargic behavior |  | Difficulty rising |
|  | Inflammation |  | Paralysis |
|  | Ascites |  | Other: Click here to enter text. |

Describe:

Click here to enter text.

24. What care will be provided for animals suffering from these adverse consequences and who will provide that care?

Click here to enter text.

25. Describe the clinical signs that dictate when an animal will be euthanized. Please use the following chart as a guide:

|  |  |  |
| --- | --- | --- |
|  | | **Score** |
| **Appearance** | Normal (coat smooth, eyes/nose clear) | **0** |
|  | Reduced grooming | **1** |
|  | Dull/rough coat, ocular/nasal discharge | **2** |
|  | Absence of grooming, piloerection, hunched up | **3** |
| **Natural Behavior** | Normal | **0** |
|  | Minor changes, less peer interaction | **1** |
|  | Little peer interaction, less mobile & alert, isolated | **2** |
|  | No peer interaction, vocalization, self-mutilation, restless or still | **3** |
| **Provoked Behavior/Mobility** | Normal | **0** |
| Subdued but normal when stimulated | **1** |
|  | Subdued even when stimulated | **2** |
|  | Unresponsive when stimulated, no movement | **4** |
| **Arthritis Score** | Normal (no evidence of swelling or erythma) | **0** |
|  | Slight swelling and/or erythema | **1** |
|  | Low-to-moderate edema | **2** |
|  | Pronounced-excessive edema | **3** |
| **Body Weight** | < - 5% decrease | **0** |
|  | 6-10% decrease | **1** |
|  | 11-20% decrease | **2** |
|  | > 20 % decrease | **4** |
|  | **Total Score** | **0-17** |
|  |  |  |
| **Score** |  |  |
| **0-2** | Normal |  |
| **3-11** | Monitor Frequently |  |
| **12-17** | Moribund, Euthanize |  |

Describe the clinical signs that dictate when an animal will be euthanized:

Click here to enter text.

26. Death as an End Point: Please provide scientific justification why it is not possible to euthanize the animals at an earlier point in the study (“death as an endpoint” refers to acute toxicity testing, assessment of virulence of pathogens, neutralization tests for toxins, and other studies in which animals are not euthanized, but die as a direct result of the experimental manipulation.). If you can euthanize the animals at an earlier point, describe the clinical signs which will dictate when an animal will be euthanized. Complete Section I of the application.

Click here to enter text.

|  |
| --- |
| **NON-SURGICAL DRUGS AND/OR AGENTS**  **PIs are expected to use pharmaceutical-grade medications whenever they are available, even acute procedures. Non-pharmaceutical-grade chemical compounds should only be used after specific review and approval by the IACUC (Surgical drugs should be listed in section A).** |

27. List all non-surgical drugs and/or agents used in this project (drugs and/or agents used in Surgical procedures should be included in Section A).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Check if not pharma grade | drug name(s)  (generic only) | volume | dosages (range) | route of  administration | frequency of  dosages | duration of treatment  (# of days or hours) |
|  | 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. |

|  |
| --- |
| **SAMPLE COLLECTION** |

28. Complete the table below for any specimen collection (tissue or body fluid) from **LIVE** animals

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Types of  Samples Collected | Site of  Sample Collection | Method of  Sample Collection | Volume  of Sample | Number of  Samples | Frequency  of Collection |
| 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. |

|  |
| --- |
| **FINAL DISPOSITION SECTION** |

29. Check all options that could happen:

|  |  |
| --- | --- |
|  | Euthanasia |
|  | Adoption (a record of adoption must be kept in the files) |
|  | Wildlife release |
|  | Other (please explain) Click here to enter text. |

30. Even if your study does not involve euthanizing the animals, you should provide an emergency method that you would use in the event of unanticipated injury or illness.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **EUTHANASIA METHOD**  **(must be approved by the Veterinarian)**  Dosages provided below **must** be in **mg/kg** and **generic** names of all agents must be provided. Any information not in this format will cause this form to be returned. | | | | |
| Species | **Generic** name of agent | Dose (mg/kg) | Volume of Injection | Anatomical site & route of administration |
| 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. |

31. If the method of euthanasia that is not recommended by the current AVMA Guidelines on Euthanasia (<https://www.avma.org/KB/Policies/Documents/euthanasia-highres.pdf> ), you must provide scientific justification.

Click here to enter text.

32. How will you ensure that the animal will not revive, i.e. what is the secondary method used to ensure euthanasia (e.g., removal of heart, induction of bilateral pneumothorax, observation of cessation of heart beat and respiration accompanied by fixed and dilated pupils and loss of corneal reflex, etc.)?

Click here to enter text.

|  |
| --- |
| **RISK TO PERSONNEL** |

33. What are the potential hazards to people working in your laboratory, teaching facility, or in the field? What efforts will be made to minimize or eliminate the risk to these people? Examples of issues to be dealt with include hazardous materials, containment/removal of allergens and pathogens, and use of temporary/permanent areas. Please use Section E to provide detailed information.

Click here to enter text.

|  |
| --- |
| **PERSONNEL**  Please list in the table below all personnel (including Principal Investigator, co-Principal Investigator(s), Post-Docs, students, lab technicians, etc) who will work with live vertebrate animals or animal tissues as part of this Animal Use Application and complete and attach a Personnel Form/Compliance Form (see attachment) for each person listed below. The PI is responsible for ensuring that their employees and students are adequately trained in the specifics of their tasks.  **Training Forms to be completed for each individual can be found at:** <http://researchintegrity.syr.edu/animal-research/forms/>  Personnel added or deleted from the protocol post protocol approval must be added or deleted using the IACUC amendment form: <http://researchintegrity.syr.edu/animal-research/forms/> . The Office of Laboratory Animal Resources will update this original form in the protocol file for accurate records of research personnel. |

|  |  |  |
| --- | --- | --- |
| PERSONNEL NAME | | |
| LAST NAME:  Click here to enter text. | FIRST NAME:  Click here to enter text. | TITLE AND INSTITUTION:  Click here to enter text. |
| LAST NAME:  Click here to enter text. | FIRST NAME:  Click here to enter text. | TITLE AND INSTITUTION:  Click here to enter text. |
| LAST NAME:  Click here to enter text. | FIRST NAME:  Click here to enter text. | TITLE AND INSTITUTION:  Click here to enter text. |
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