

AUP #: _____



PROTOCOL FORM FOR USE OF VERTEBRATE ANIMALS IN RESEARCH AND EDUCATION

NOTE: A separate form must be filed for each different project or protocol.

Please answer the following questions. If any of the questions require elaboration, either as requested or because you wish to add material, please do so on additional sheets. Be sure to number your answers with the same number as the question in order to help us more easily evaluate your application. If you have questions or need assistance please contact Dr. Erica Kennedy (Psychology, x4742) or Dr. Karen Keller (Biology, x4174), IACUC Co-Chairs. Please email your completed protocol form and any necessary supplemental documents to IACUC@frostburg.edu and include a facsimile of the signature page as a PDF.

Project title: _____

Anticipated start date: _____ Anticipated completion date: _____

Please check just one of the following categories:

Faculty Research Undergraduate Research Graduate Research Teaching

Other: please explain _____

Principal Investigator:	Date of Submission:
Department:	Phone:
E-mail:	FAX:
Alternate PI (only required when animals will be housed on campus and identifies the person who will assume responsibilities for animal care should the PI becomes unable to do so)	
Department:	Phone:
E-mail:	FAX:

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Co-Investigators (e.g. graduate advisor): _____

Collaborating Scientists
(Postdocs, visitors, etc.): _____

Undergraduate/Graduate students: _____

Technicians: _____

A. SUPPLEMENTAL FORMS

1. Occupational Health and Safety Program for Animal Care and Use
Required for all AUP's. Signature on last page is required for each person participating in the project. The form is located on the website at:
[Animal Care and Use - Frostburg State University](#)

2. Permit Number(s)
Not required for all AUP's. Usually required for field research or animal collections. Please list all permit numbers below:

3. Standard Operating Procedures (SOP's)
Not required for all AUP's. May be used for researchers using procedures repeated across multiple studies. The first time an SOP is submitted, it must be approved with the AUP. Subsequent AUP's using the same procedures may refer to the approved SOP's on file in the Experimental Procedures section. Please list all SOP numbers below:

SOP #/title _____ Copy of SOP attached for approval
 Copy of approved SOP on file

SOP #/title _____ Copy of SOP attached for approval
 Copy of approved SOP on file

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 Copy of approved SOP on file

U.S. Government’s *Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research and Training* states: “The animals selected for a procedure should be of an appropriate species and quality and the minimum number required to obtain valid results.”

5. What species will be used?

6. Why is this the most appropriate species to use?

Unless there is a specific reason to procure wild caught animals (e.g. no others are available or the research/teaching involves study of natural populations), the FSU IACUC strongly encourages the use of captive bred or farm-reared animals. This is particularly pertinent to fishes, amphibians and reptiles. Over-collecting of some amphibian populations to supply research/teaching needs has reduced many wild populations.

7. What is the source of the animals to be used? Please check on of the following categories.

___ Wild caught by investigator

___ Purchased from supplier:

name of supplier _____

Do you know or can you ascertain whether the supplier provides wild caught or captive bred specimens?

If the supplier provides only wild caught animals, indicate if you have explored other suppliers to ascertain whether alternatives such as farm-reared or captive-reared animals are available. Please provide the supplier names and contact information.

___ Other: Please explain _____

8. How many animals do you plan to use for this research/teaching? Please complete the following table to define the number(s) of animal(s) to be used in each category. Use the following categories.

CATEGORY

- 0. No pain
- 1. Little or momentary pain or discomfort (e.g. Peripheral blood collection, injections, vaccinations, sedation, etc)
- 2. Potential discomfort or pain which is relieved by the appropriate anesthetic or analgesic (e.g. surgery under anesthesia, cardiac puncture under anesthesia)
- 3. Discomfort or pain which is not relieved (e.g. toxicity studies, disease studies)

CATEGORY	EXPERIMENTAL GROUPS OR ANIMAL SPECIES			
0				
1				
2				
3				

(Note, numbers on chart must equal those presented in the research/teaching description)

You MUST provide a breakdown of the animals into experimental groups (identify each experimental group and the numbers of animals in each group) AND you must provide a justification for the numbers of animals used. It would be beneficial to include in your justification any statistical analysis used to determine the proposed sample size (e.g. a power analysis). You can either provide that information on a separate sheet inserted here or in your description of the animal procedures.

The Animal Welfare Act states: “The principal investigator has considered alternatives to procedures that may cause more than momentary or slight pain or distress to the animals, and has provided a written narrative description of the methods and sources, e.g., the Animal Welfare Information Center, used to determine that alternatives were not available:”

Please remember that in discussing alternatives, we are considering the “3Rs”:

- a. Replacement: Those methodologies (computer programs, tissue culture techniques, epidemiological data, etc.) that replace the use of animals.
- b. Reduction: Those methodologies that reduce the numbers of animals used in the protocol.
- c. Refinement: Those methodologies that refine the procedure to minimize the amount of discomfort that the animal may experience.

C. EXPERIMENTAL PROCEDURES

- 1. General Procedures:** Describe the animal procedures that are to be performed and the necessity of conducting these experimental procedures in fulfilling the goals of the project. Be sure to be specific about any procedures that may impact on the health and comfort of the study animals (Ex: frequency of performance of any procedures, methods of restraint, blood sample volumes, etc.) As mentioned earlier, you may wish to include in this section the experimental groups. When defining your experimental groups include the numbers of animals within each group. Please provide a justification for the animal numbers used.

The Animal Welfare Act states that: "Procedures that may cause more than momentary or slight pain or distress to animals will: a) Be performed with appropriate sedatives, analgesics or anesthetics unless withholding such agents is justified for scientific reasons, in writing, by the principal investigator and will continue for only the necessary period of time; b) Involve in their planning, consultation with the attending veterinarian, c) Not include the use of paralytics without anesthesia...."

- 2. **Anesthetics and Analgesics: If anesthetics or analgesics are to be used, please be sure to include information about the type of anesthetic and the dosage and method of administration in the appropriate place in your procedures.**

<u>Procedure</u>	<u>Anesthetic</u>	<u>Dose and Method of Administration</u>

The Animal Welfare Act states: "Activities that involve surgery include appropriate provision for pre-operative and post-operative care of the animals in accordance with established veterinary medical and nursing practices. All survival surgery will be performed using aseptic procedures, including surgical gloves, masks, sterile instruments, and aseptic techniques."

3. Surgical Procedures:

If Surgery is to be performed:

a. Surgery location/room: _____

Is it a terminal procedure? ___ Yes ___ No

Is it a survival procedure? ___ Yes ___ No

b. Describe the surgical procedures to be performed. Be sure to include the procedures to be followed to ensure asepsis (surgical site preparation, instrument sterilization, etc.). If aseptic procedures are not to be performed, use this space to justify why not and describe the procedure of choice.)

- c. Describe the post-operative care, both immediate and long-term (next day and thereafter). If described in the above answer, do not repeat here.

4. Euthanasia:

Will the animals be terminated at the end of the experiment? YES NO

IF YES, the planned method of euthanasia is:

Who will conduct euthanasia?

The Animal Welfare Act states: "Personnel conducting procedures on the species being maintained or studied will be appropriately qualified and trained in those procedures"

- 5. Training:** Please describe the training and qualifications of yourself and other individuals (including students in classes) who are included in this protocol. In particular, please be very specific about the hands-on training of those individuals performing procedures which may produce animal discomfort, i.e. restraint, injections, blood collection, surgery, euthanasia, etc. If you are teaching a procedure to students please attach a copy of the instructions distributed to students for IACUC review.

D. ENVIRONMENTAL SAFETY

1. Are chemical hazards (including drugs) to be used? ___ YES ___ NO

IF YES, the chemical hazard is: _____

If YES, then IACUC approval is contingent upon IACUC receipt of written approval of your procedures by the Chemical Safety Officer. (A form is available on the IACUC website.)

2. Are radioisotopes to be used? ___ YES ___ NO

IF YES, the radioisotope is: _____

3. Are infectious agents to be used? ___ YES ___ NO

IF YES, the agent is: _____

IF YES, is the agent infectious to humans? ___ YES ___ NO

4. Are other biohazards to be used? ___ YES ___ NO

IF YES, the biohazard is: _____

If any of the questions 2-4 is answered YES, IACUC approval is contingent upon IACUC receipt of written approval of your procedures by the Office of Public Safety.

E. ASSURANCE

I attest to the accuracy and completeness of the information provided. I acknowledge responsibility for the conduct of these procedures with animals. I promise to conduct this work with animals in accordance with the protocol as approved by the IACUC and FSU animal care and use guidelines. I will not make any changes in the above protocol without first obtaining approval from the IACUC and I will not use any procedures that are not included in this form.

Principle Investigator: _____ Date: _____

Faculty Advisor: _____ Date: _____
(required when the PI is a student)

I agree to assume responsibility for the care of these animals, if the primary principle investigator becomes unable to do so.

Alternate Principle Investigator: _____ Date: _____
(required when animals will be housed on campus)

STATEMENT ON CONFIDENTIAL INFORMATION

The Animal Welfare Act, Section 27, states that it is unlawful for any member of an Institutional Animal Care and Use Committee to release any confidential information including “ process, operations, style of work, apparatus, buildings used, confidential statistical data, etc. FSU considers ALL information on protocol forms confidential and will not forward these forms to any institution that does not honor this confidentiality.