IACUC Protocol#      

Date Received:      

**REVIEW PROTOCOL**

**INDIANA UNIVERSITY OF PENNSYLVANIA  
Institutional Animal Care and Use Committee (IACUC)**

* **All information must be typed. Handwritten proposals are not accepted.**
* **Submit one hard copy with original signatures to: Institutional Animal Care and Use Committee, Office of the Dean, Kopchick College of Natural Sciences and Mathematics, 305 Weyandt Hall.**
* **Also submit an electronic copy (DOCX or PDF) to** [**iacuc-submissions@iup.edu**](mailto:iacuc-submissions@iup.edu) **(1Mb file size limit).**
* **Protocols submitted by the 7th of each month normally can be reviewed in the same month.**

***Please click in the shaded fields to complete the form.  
Use the arrow keys, Tab key, or PgUp/PgDn keys to navigate  
Use the space bar or mouse to activate/deactivate check boxes***

**1. Principal Investigator or Instructor:**NameIUP Email address Campus address Department/Division

Daytime phone:

Status (check one): Faculty  Staff  Doctoral student  
 Masters student  Undergraduate student

**2. For applications authored by students: identify the faculty member providing direct supervision:**Faculty Advisor Department/Division   
Position/Rank IUP Email address Daytime Phone   
Campus address

**3. Project Title**Date of submission Dates during which project will be conducted: From To   
*NOTE: IACUC approval is for a maximum of 3 years.*

**4. Project Funding Source** (check all that apply)  
Extramural grant (Provide agency name: )  
IUP or PASSHE grant (Identify: )Non-funded faculty or student research  
Other (Explain: )

**5. Purpose** (check all that apply)  
Teaching (Provide course department, number, and name )  
Research  
 Other (Explain below)

**6. Please discuss the following information as it relates to your use of animals for research or teaching. Information should be discussed at a level suitable for a layperson but without omission of relevant information.**

**A.** Purpose of the study –State concisely what the study is intended to accomplish.

**B.** Background **–** Briefly state the background and rationale for your study, including some relevant references. Identify the main questions the proposed research or exercise is designed to address.

**C.** Characteristics of the subject population **–** Describe the animals you wish to involve in this study. If multiple species are involved, be sure to identify each one and describe their individual involvement.

**a.** Species

**b.** The conservation status of these animals is (check all that apply; use text to explain, if needed):

Endangered  Threatened  Of least concern  Unknown  Not applicable

**c.** Age range and/or weight range

**d.** Sex

**e.** Source

**f.** Why does this project require the use of animals (i.e., could results be obtained in another manner, such as via computer simulation)?

**g.** Why does the project require the use of this particular species?

**h.** Identify, and justify, the number of animals needed for your project. Please provide this information in tabular form (e.g., numbers of experimental groups x sample size of each group = total number of animals requested).

**i.** Will the animals be held captive?  Yes No

If “Yes”, at what location(s)?

Do these facilities meet USDA Animal Welfare regulations for animal housing and care?  
 Yes No (explain below) Not applicable

Will the animals be bred while in captivity?  
 Yes No (explain below) Not applicable

Is an animal breeding protocol or husbandry Standard Operating Procedure document on file?

Yes No (explain below) Not applicable

If yes, please identify SOP title and version/date:

**j.** Specifically where are the animals to be utilized during your project?

**k.** At the conclusion of this project what will be done with the animals?

**7. Methods and Procedures – Provide the following information regarding your methods and procedures.**

**A.** Describe your experimental design, including a description of all manipulations (except surgeries) to which the animals would be subject. (Surgical procedures are to be described in section 8).

**B.** Does this project duplicate previous work? If so, what is the justification for duplication (e.g., teaching, verification of results, etc.)? If a literature search was performed to rule out duplication of previous work, please give the date of the search, keywords that were used to perform the search, period covered by the search, databases searched, and results of the search.

**8. Surgical Procedures**

Is surgery to be performed on any animal(s)? Yes No  
If “No” proceed to section 9. If “Yes” please complete the rest of this section.

**A.** Please indicate whether this protocol includes procedures for  
 survival surgeries non-survival surgeries  both  
  
If “Both”, explain below.

**B.** Please indicate where the surgical activity will take place (e.g., lab, room number, etc.).

**C.** Describe the surgical procedure.

**D.** Will anesthetic, analgesic, or tranquilizer drugs be administered before or during surgery?  
 Yes  No If Yes, please indicate

**a.** Drug(s) to be used:

**b.** Person who will administer the doses:

**c.** Timing of dosage:

**d.** Dose concentrations, volumes, and routes of administration:

**E.** Describe the post-surgical or post-treatment monitoring and care procedures, including duration of monitoring period, interval between welfare checks, criteria for animal recovery.

**F.** Will anesthetic, analgesic, or tranquilizer drugs be administered following surgery?   
 Yes  No If “Yes”, please indicate

**a.** Drug(s) to be used:

**b.** Person who will administer the dose:

**c.** Timing of dosage and/or criterion for dosage:

**d.** Dose concentration, volume, and route of administration:

**G.** Will more than one survival surgery be performed on the same animal?  Yes No  
If “Yes” please justify.

**9. Pain**

**A.** For each of the species to be utilized, choose the description listed below which most closely describes the potential for discomfort or pain as a result of the proposed procedures. Classify each animal under the highest pain category it will experience during its time under this protocol.   
  
**c.** This procedure should cause only minor or no pain or distress.  
**d.** This procedure can cause moderate pain and/or distress. However, appropriate anesthetic, analgesic, or tranquilizer drugs will be administered to eliminate or minimize pain and/or distress.  
**e.** This procedure can cause moderate pain and/or distress. However, no anesthetic, analgesic, or tranquilizer drugs will be administered to minimize pain and/or discomfort.

Species Pain categorization  
1) c  d e  
2) c  d e  
3) c  d e  
4) c  d e  
5) c  d e

If individual subjects of any one species differ in their ultimate pain categorization, choose as many categories as are needed to fully describe all planned procedures, and provide textual clarification below.

If any animals are to be subject to painful procedures without the use of drugs to mitigate the pain (category ‘e’), provide full justification for the necessity of the procedure.

**B.** Federal guidelines require documentation that you have considered alternatives (e.g., tissue culture, computer simulation, etc.) to procedures that cause more than momentary or slight pain (procedures in category ‘d’ or ‘e’, above). Provide evidence for this consideration of alternatives below. If a literature search was performed, please give the date of the search, keywords that were used to perform the search, period covered by search, databases searched, and a description of the results of the search.

**10. Potential Hazards**

**A.** Identify any potentially hazardous materials proposed for use in this study:  
  
Carcinogens / teratogens Highly toxic compounds (e.g., poisons)  
Infectious agents Radiation, radioisotopes  
Genetic recombinants

Please identify the specific hazardous material(s) to be used, if any:

If you plan to use a substance(s) that constitutes one of the above hazards or an unknown hazard, please describe procedures to minimize risks to the animals, yourself, and others.

**11. Euthanasia  
  
*All investigators are required to identify the euthanasia procedure they would utilize for animals involved in this study, whether euthanasia is planned, or reserved for animals whose condition becomes irrevocably compromised.***

**A.** Describe the method of euthanasia you intend to use for animals involved in this project. Please include drugs, dosages, and routes of administration, if appropriate.

**B.** After euthanasia, please state what method will be used for disposal of the carcasses.

**C.** What, if any, specific animal group(s) is/are slated for planned euthanasia?

**D.** A euthanasia plan must be ready, should any of the animals involved in this project experience an irrevocable decline in their welfare. Please identify all animal welfare criteria that might be justification for the unplanned euthanasia of the animals involved in this project.

**12. Experience of Investigators/Instructors**

**A.** Describe the Principal Investigator’s or instructor’s training and experience in relation to this project:

**13. Permits**

**A.** Are any state, federal, or other permits required for the proposed research?  Yes  No  
If “Yes”, please identify the permitting authority and permit type:

**B.** Have you attached copies of the approved permits?  Yes  No  
*(Copies of approved permits, if required, must be provided before IACUC approval will be granted)*

**14. Statement of Student Supervision – If students will perform any of the animal manipulations described in this protocol, please complete the following section.***NOTE: This section should be completed only for those students actively involved in animal manipulations, not for those who only observe the procedures. The number of students should encompass the entire period of proposed activities.*

**A.** Identify the student groups actively involved in this project (check all that apply), and estimate the number of students :  
Undergraduate student actively involved as part of class instruction  
 # of students   
Undergraduate student actively involved as part of individual student research training  
 # of students    
 names of students (if already identified)   
Graduate student actively involved as part of class instruction  
 # of students   
Graduate student actively involved as part of individual student research training  
 # of students

names of # of graduate students (if already identified)

**B.** Describe the training that you will provide for these students prior to the proposed activities.

**C.** Describe the supervision that you will provide for these students during the proposed activities.

**D.** In order to ensure that University activities involving animals are conducted with the highest degree of consideration for animal welfare, IUP has made available online Animal Care and Use (ACU) training. Current guidelines for student ACU training are as follows:

* *Students involved in this project only as observers or as University course participants are NOT REQUIRED to undergo any specific animal use and welfare training.*
* *Students involved in this project as active participants from which individual training or achievement is derived are REQUIRED to complete online ACU training. This includes students pursuing any sort of Independent Study, Honors, thesis, or dissertation project.*

Please confirm that students operating under this protocol for their individual training or benefit have completed or will complete CITI Animal Care and Use (ACU) training **prior** to working on this project.

I confirm that the students identified above have completed CITI-ACU training.

I confirm that any additional students that become involved in this project for their own individual benefit will first

* complete CITI-ACU training
* be formally added to the roster of protocol personnel via protocol modification request to the IACUC

**15. Affirmation of Principal Investigator or Instructor  
  
By signing below you are agreeing to the following statements:**

*(i)* I understand that I cannot use animal subjects until I have received approval from the IACUC.

*(ii)* I agree to ensure the welfare of the animal subjects being used.

*(iii)* I understand that as the Principal Investigator or Principal Instructor I am ultimately responsible for the conduct of those operating under my supervision.

*(iv)* I will conduct this protocol as approved, and I will report to the IACUC any problems or adverse events associated with the use of animal subjects.

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Signature of Principal Investigator / Instructor Date**

**16. Signature of Faculty Sponsor (for applications authored by students)**I confirm that this research  
 Does not duplicate procedures described in any other of my approved IACUC protocols  
Duplicates (in part or in total) procedures for which I have already received IACUC approval  
  
If the procedures herein duplicate procedures which have already been approved by the IACUC, indicate below the title and log # of the IACUC protocols in question, and explain the degree of and necessity of the duplication.  
  
IACUC protocol title(s):  
IACUC log #(s):  
Extent of, and rationale for, procedural duplication:

**By signing below, the Faculty Sponsor***(i)* affirms the accuracy of this application, and  
*(ii)* accepts responsibility for the proper conduct of the procedures herein, and  
*(iii)* agrees to provide the necessary training and supervision of the student(s) involved  
 **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Signature of Faculty Sponsor (only required for applications authored by students)**