



Berry College
Institutional Animal Care and Use Committee
Request for Protocol Review

All applications must be approved prior to the acquisition of animals or initiation of any research involving vertebrates.

Prior to submission make sure that you complete the following:

- This cover page
Part I (General Information)
Applicable portions of Part II (list here):
Receive signatures from the attending vet, Department Chair, and Dean

All signed applications should be submitted to IACUC@berry.edu by the Dean of the appropriate school.

Basic Protocol Information:

Project title:

Principal Investigator:

Department:

Email:

Co-PI:

Department:

Email:

Investigator Signature Statement:

I have read and I understand the Berry College policy on the protection of animals used in research. To the best of my knowledge, I have provided a complete and factual description of the animal care and use procedures to be followed in the proposed experimental study. I have taken appropriate measures to ensure that I am using the minimum number of animals required to achieve my experimental objective and that I am not unnecessarily duplicating previous studies. I assure that all personnel under my direction are/will be appropriately trained to perform procedures with animals. I understand that I may not begin any animal procedure prior to approval of this protocol by the Institutional Animal Care and Use Committee, and I understand that significant changes in this protocol must be submitted and approved as an amendment to the protocol by the IACUC prior to implementation of the changes. I accept responsibility for compliance with provisions of the Federal Animal Welfare Act, the Public Health Service Policy on Humane Care and Use of Laboratory Animals, the NIH Guide for the Care and Use of Laboratory Animals, and the USDA "Ag Guide."

Signature of PI:

Date:

Signature of Co-PI:

Date:

IACUC Use Only

Protocol Number:

Date Received:

Full Committee Review:

Designated Member Review:

Approval Start Date:

Approval End Date:

## Part I: General Protocol Information

### A. Application Basics

1. Application Type

New

Continuation    If checked provide the following information:

Protocol Number:

Title:

Summary of work accomplished under previous protocol:

2. Funding Source (check all that apply)

NIH

Startup

NSF

Student Grant through CSR

USDA

Other (Please specify):

Faculty Scholarship Grant

3. Timeline:

Start Date:

End date:

4. Location of work to be performed (check all that apply)

MAC animal suite

Gunby Equine Center

MAC aquatics lab

Laboratory Classroom

Rollins Research Center

Other (Please specify):

### B. Description of the Animals

1. Animal specifics

Species	Breed/Strain	Number	Sex	Age	Source

2. Justify your selection of the species chosen for the work in this protocol.
  
3. Explain how the number of animals requested was determined. You should provide evidence that this number will allow for detection of statistical significance.
  
4. Animal Housing (check all that apply):
  - Cage(wire mesh)
  - Barn/Pen
  - Tank
  - OtherHow many animals will be together in one cage/pen/tank?
5. How will you differentiate between individual animals?
  
6. Will this project require any alterations of routine animal care procedures that deviate from the SOPs on file? If so, describe in the space below.
  
7. How will animals be disposed of after the study?
  - Returned to original habitat/location
  - Euthanized
  - Transferred to another protocol
  - Describe:

**C. Non-technical Summary:** In the space below, include a summary of the proposed project including the following items

- Research objectives
- Significance of research area
- Expected outcomes

**D. Description of Research Protocols:** In the space below outline all experimental protocols. Make sure to include the general timeline and sequence of procedures.

**E. Personnel Qualifications**

Berry College has contracted with the Collaborative Institutional Training Initiative at the University of Miami (CITI) for on-line IACUC training. To complete your training, proceed to [www.citiprogram.org](http://www.citiprogram.org). Once at the CITI site, please register and set up a user id and password. When ready to complete your training, following the initial directions and choose “Working with the IACUC” under the Laboratory Animal Welfare user group. You must complete the Basic Module. It typically requires 30-45 minutes. The CITI certificate of completion for animal care and use modules is 3-years.

The PI and any Co-PI’s must submit a PDF copy of a current certificate of completion of the CITI – Researcher – basic training with the submission of a completed IACUC request of protocol review form before a protocol will be reviewed. If additional personnel individuals (such as undergraduate research assistants), have not yet completed their CITI training at the time of submission, the PI can receive “contingent approval”. However, the PI is responsible for providing a PDF copy of a current certificate of completion of the CITI-Research-basic training for all personnel listed to IACUC@berry.edu prior to research initiation to receive full “approval”.

Note: In some cases, the IACUC may require completion of additional specialty training modules in addition to the Basic Researcher module.

- 1. Personnel with Experience in Vertebrate Research: The following individuals **HAVE** experience with the specific animals and procedures proposed in this study. Please indicate the following:

Name	Experience with what procedures?	Has worked with what animals?	Where trained?

Additional comments:

2. Personnel without Experience in Vertebrate Research: The following individuals **DO NOT** have experience with the specific animals and procedures proposed in this study. Please indicate the following:

Name	Completed CITI training?	Other training needed?	How training will be obtained?	Animal species working with?

Additional Comments:

## **G. Duplication of Research**

1. Does the research proposed in this protocol duplicate any previous work?

No                      Yes

What sources were used to reach this conclusion? Fill out the information below:

- Databases searched:
- Date search was performed:
- Years of citations covered by searches:
- Key words and/or search strategy used when searching a database:
- Results of search:

If yes, why is repeating this working necessary?

## **H. Alternatives to Animal Use and Painful Procedures**

The Animal Welfare Act requires that the PI consider alternatives to procedures that may cause more than momentary or slight pain or distress to the animals and provide a written narrative description of the methods and sources used to identify alternatives.

8. Is there an alternative to animal use for this research?

No                      Yes

If yes, please justify why you are requesting to use animals in this research.

9. What procedures and sources did you use to determine that non-painful alternatives were not available or appropriate?

- Databases searched:
- Date search was performed:
- Years of citations covered by searches:
- Key words and/or search strategy used when searching a database:
- Results of search:





**Section A: Non-surgical Procedures**

1. **Type of non-surgical procedure.** Please check all items that apply to the protocol and fill out appropriate parts of this section.

Anesthesia or analgesia (non-surgical only)

Blood draw

Injections

Tissue collection/Biopsy

Nutritional deficiency

Tumor or disease induction

Toxicity testing

Behavior testing

Antibody production

Restraint for more than 30 minutes

Genetically modified animals expected to exhibit signs of disease/abnormal behavior

Other:

2. For each item selected above, use the space below to describe the specifics of how the procedure will be conducted.

3. **Health Assessment:** How often will the clinical condition of animal subjects be assessed during experimental investigation? Describe how these assessments will occur.

4. Describe methods used to minimize the degree and duration of discomfort during experimental procedures.

**Section B: Surgical Procedures:**

**1. Surgery Type:**

Survival Surgery: any surgical procedure, including biopsies, where an animal is allowed to recover from anesthesia, however short the survival period.

Non-Survival Surgery: In non-survival surgery, the animal is euthanized while still anesthetized.

In the space below provide a description of the purpose of the surgery:

**2. Name of person(s) performing surgery**

Name	Surgery	Role in Surgery

**3. Location of housing and procedural areas. Be as specific as possible.**

	Building(s)	Room(s)
Surgery site		
Recovery Site		
Housing after surgery		

**4. Describe surgical procedure:** In addition to the general procedure, make sure to include the anticipated duration of surgery and steps taken to ensure aseptic technique (if applicable).

**5. Health status of animals:**

a. How will health status of animals be assessed before initiation of procedure?

b. Will animals be fasted prior to surgery?

No                      Yes (how long?):

c. Will water be withheld prior to surgery? **(Water should not be withheld from rodents and should not be withheld for more than 12 hours from non-rodents.)**

No                      Yes (how long?):

**6. Anesthesia**

	Dose	Route
Pre-anesthetic Agent(s):		
Anesthetic Agent(s):		

Describe indices and methods to be used to monitor level of anesthesia (e.g., blood pressure, heart rate, pedal reflex, jaw tone).

**7. Post-operative care procedures (Survival Surgery only)**

a. What is the anticipated duration for recovery from anesthesia?

b. How often will animal(s) be monitored during recovery? What specifically will be monitored?

c. After recovery and during experimental study, what criteria will be used to assess pain, distress and discomfort? (Post-surgical observations of behavior, appetite and body temperature, where warranted, should be recorded at least daily for three days postoperatively).

**d. Analgesics:**

	No, provide justification for withholding analgesics:			
	Yes, only if indicated by clinical assessment: Describe Criteria:			
	Yes, routinely, provide the following:			
	Agent	Dose (mg/kg)	Dose (mg/kg)	Frequency

**Section C: Field Studies Involving Wild Animals**

1. **List any Permits Required.** Email a copy of the permit to [IACUC@berry.edu](mailto:IACUC@berry.edu) prior to performing work.

Agency	Permit Number

2. **List Study Site(s) and provide identifying information:** This could include street addresses, property names, map coordinates, parks, state forests etc. Please also include the county and state for each study site.

3. **Please check the following items that apply and fill out appropriate parts of this section.**

Observational studies (where behavior or environment is modified). If checked answer the following questions:

How is behavior or environment modified?

What and how will observations be collected?

Live capture and release. If checked, answer the questions below:

Describe method(s) of capture to be used including device(s) to be used, frequency with which these devices will be checked, and estimated maximum time animals will be restrained before release.

What are the expected injury and/or mortality rates?

What precautions will be used to minimize injury and/or mortality?

What precautions will be taken to reduce non-target captures?

Describe the procedures that will be performed while the animal is captured

Non-survival collection. If checked, answer the questions below:

Describe method(s) of capture to be used including device(s) to be used, frequency with which these devices will be checked.

What precautions will be taken to reduce non-target captures?

Describe procedure(s) that will be performed on each animal.

Describe the following regarding disposal of animal remains:

How will carcasses be disposed of?	
What paperwork will be maintained to document proper disposal?	
Where will the disposal paperwork be located?	

**Section D Hazardous Agents**

1. Will this project require the use of hazardous biologic agents (human/animal pathogens, tumor cells) or recombinant DNA?

	No				
	Yes, describe the following:				
	Agent	Hazard Level	Concentration	Administration Route	Exposure Duration

2. Will this project involve the use of toxic chemicals or carcinogens?

	No				
	Yes, describe chemicals:				
	Agent	Hazard Level	Route	Dosage	Exposure Duration

3. Will this project involve the use of controlled substances?

	No
	Yes, list who is dispensing the controlled substance:

4. Describe waste and animal disposal requirements related to your protocol.

**Section E: Euthanasia**

1. What is/are the method(s) of euthanasia?

Chemical/Gas: if checked, fill out the chart below

	Agent	Dose	Route
	MS-222		
	Carbon Dioxide		
	Pentobarbital		
	Isoflurane		
	Other:		

Physical: MUST include a justification below if the method is not recommended as acceptable or acceptable with conditions by the latest edition of the **AVMA Guidelines for the Euthanasia of Animals**.

Cervical Dislocation: Manual cervical dislocation is acceptable with conditions for euthanasia of small birds, poultry, mice, rats weighing <200 g, and rabbits when performed by individuals with a demonstrated high degree of technical proficiency. In lieu of demonstrated technical competency, animal must be unconscious or anesthetized prior to cervical dislocation.

Decapitation: This method is acceptable only if performed correctly by a trained individual and it may be used in research settings when its use is required by the experimental design and approved by the Berry IACUC. Complete justification below for using decapitation as a method of euthanasia.

Exsanguination Under Anesthesia

Other (please describe):

2. Indicate how death will be confirmed:

3. Name of person(s) performing euthanasia:

4. Method of disposal. Euthanized animal carcasses must be disposed of appropriately.

	Incinerate
	Carcass will contain hazardous agents and will be autoclaved prior to disposal.
	Carcass will contain hazardous agents and will be segregated and incinerated.
	Other (please describe):

5. If you are unable to use the method described above, what euthanasia protocol will you use instead? Describe how this will be performed.



**Section F: Protocols in the Classroom**

1. What class(es) does this protocol apply to?

Class	Semester	Number of students

2. Each student in the class must complete CITI IACUC training (including any organism specific courses) prior to any work with vertebrates. Describe how you plan to integrate this into your course and include the date by which you anticipate having training complete. All CITI training certificates should be sent to [IACUC@berry.edu](mailto:IACUC@berry.edu).

3. Describe the specific parts of this protocol that students will be involved in.

**Signatures**

The signatures below indicates that the individual has read this protocol and supports the proposed research project.

Attending vet  
comments:

Signature:

Date:

Department chair  
comments:

Signature

Date:

Dean Comments:

Signature

Date:

**IACUC Use only:**

Designated Review

Full Committee Review

Date of Review

IACUC chair

Signature:

Date: