Southern Arkansas University

General IACUC 3 Year Research Protocol Form

Rev.2 Fall 2024

**General Information**

Principal Investigator:Click or tap here to enter text. Department:Click or tap here to enter text.

Phone: Click or tap here to enter text. E-mail:Click or tap here to enter text.

Initial Submission: Renewal: Modification:

Protocol Title:Click or tap here to enter text.

Funding Sources:Click or tap here to enter text.

Brief Project Overview (state the research or teaching objectives in two or three sentences):

Click or tap here to enter text.

Project Outcomes (briefly describe how this research or teaching will benefit society, advance knowledge, or benefit human or animal health):

Click or tap here to enter text.

**Personnel**

Note all faculty and students who will have contact with the animals.

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Position\*** | **Role\*\*** | **SAU CITI training\*\*\*** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**\*Position:** Faculty, Staff, or Student. Also note who is the PI for this protocol.

**\*\*Roles:** Surgery (S), Injections (In), Anesthesia (An), Euthanasia (Eu), Hazard Material Administration (Hz), Drug/Diet Administration (DD), Handling/Husbandry (HH), Breeding Management (Br), Blood/Tissue Collection (BT), Non-invasive Testing (NI), Observation (Ob), Surgical Records (SR), animal collection (Col)

**\*\*\*CITI Training:** Date individual completed CITI training at SAU. Attach completion certificates to your submission.

# Animal Requirements

**Animals to be used or housed in lab or captivity (excludes animals involved in field studies, unless individuals will be held for more than 12 hours)**

Species (common and scientific names): Click or tap here to enter text.

Strain or breed: Click or tap here to enter text.

Approximate age, weight, or size:Click or tap here to enter text. Sex:Click or tap here to enter text.

Source (e.g., name of vendor or breeder, or bred in-house):Click or tap here to enter text.

Primary housing location (building and room number):Click or tap here to enter text.

Location where manipulation will be conducted:Click or tap here to enter text.

Number of animals to be used:

Year 1: Click or tap here to enter text.

Year 2: Click or tap here to enter text.

Year 3:Click or tap here to enter text.

Total:Click or tap here to enter text.

**Animals to be used/captured in field studies**

Species (common and scientific names): Click or tap here to enter text.

Locations of capture:Click or tap here to enter text.

Number of animals to be used/captured:

Year 1: Click or tap here to enter text.

Year 2: Click or tap here to enter text.

Year 3:Click or tap here to enter text.

Total:Click or tap here to enter text.

State/Federal Permits for work (Agency and permit number):

\*Attach copies of all appropriate permits to your submission

Are any of the listed species Threatened/Endangered/Protected by local, state, federal or international agencies?

YES NO

**Experimental Details**

Describe your experimental design in detail. Include all procedures, manipulations, timelines, & endpoints. Detailed descriptions of specific procedures should be provided in the sections below. Please be sure to provide as much detail as possible to allow a thorough review by the committee. Failure to do so may result in delays of the protocol review and approval. Descriptions should be written for a general audience; technical terms and procedures should be defined. Also include any relevant citations that support the use of the proposed procedure. Several resources are available on the SAU IACUC website (<https://web.saumag.edu/iacuc/>)

Click or tap here to enter text.

Breeding of animals  Yes  No

If yes, please describe:Click or tap here to enter text.

Behavioral studies  Yes  No

If yes, please describe:Click or tap here to enter text.

In vivo blood/fluid/tissue collection  Yes  No

If yes, please describe (note the tissue, collection site, frequency, volumes, and any sedation or restraint):

Click or tap here to enter text.

Administering any anesthetics, analgesics, therapeutic, or experimental compounds  Yes  No

If yes, please describe (note the compound, dose, route, and frequency):

Click or tap here to enter text.

Surgery  Yes  No

If yes, please describe (note the type of surgery, expected duration, preventatives for ill effects, anesthesia, and post op care):

Click or tap here to enter text.

Food or Water restriction  Yes  No

If yes, please provide a detailed scientific justification and protocol:

Click or tap here to enter text.

Extended restraint  Yes  No

If yes, please describe (do not include short periods of restriction for blood collection or injection):

Click or tap here to enter text.

Introduction/Injection of biologicals (tissues, cell lines, tumors, stem cells, blood components, body fluids)

Yes  No

If yes, please describe:

Click or tap here to enter text.

Transgenic materials (will any sort of recombinant DNA materials be introduced into the animals?)

Yes  No

If yes, please describe:

Click or tap here to enter text.

Other procedures (describe any procedures not discussed above, Ex. Non-surgical procedures, monitoring, measurements, etc):

Click or tap here to enter text.

**Potential Animal Pain & Distress/Euthanasia**

Are there any health issues due to the phenotype of the study animals?  Yes  No  
If yes, please describe the issues, how they will be recognized/monitored, and steps to alleviate the problem):

Click or tap here to enter text.

Describe in detail any criteria for euthanasia of study animals (both as a part of animal care or as a research endpoint):

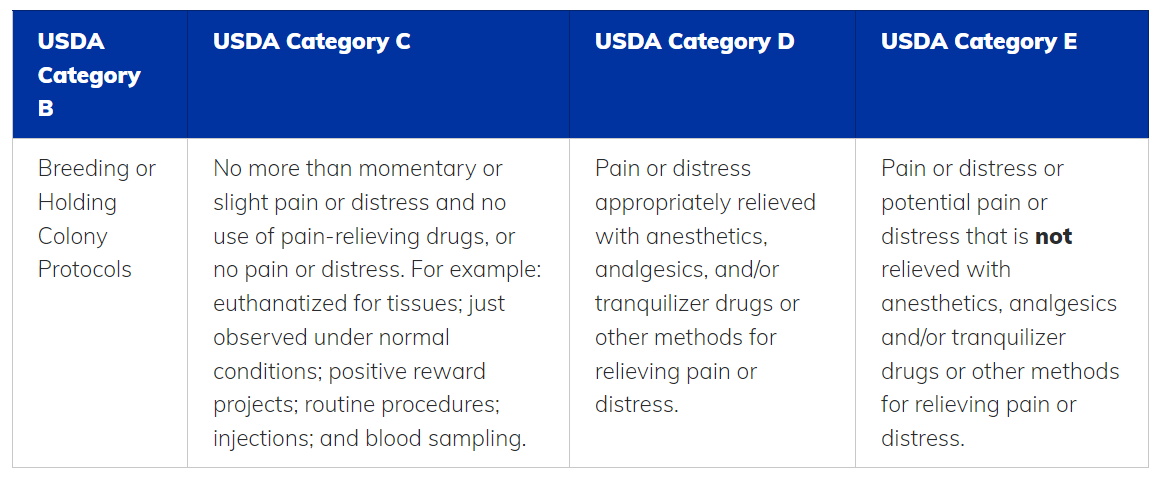
Click or tap here to enter text.

Method of euthanasia (The SAU IACUC requires investigators to follow the AVMA *Guidelines for the Euthanasia of Animals: 2020 edition* [(https://web.saumag.edu/iacuc/](https://muleriderssaumag-my.sharepoint.com/personal/jchamberlain_saumag_edu/Documents/Desktop/(https:/web.saumag.edu/iacuc/)) unless justification is provided. Please include all methods of euthanasia as well as secondary physical methods used with rodents euthanized by CO2.)

Click or tap here to enter text.

Fill out this section if any study animals in this protocol fall into Pain Categories C, D, or E. See the Pain Categories descriptions below

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Number of Animals in Each Category of Pain/Distress | | |  | |
| Group Name | C | D | E |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  | Total C+D+E |
| Subtotals |  |  |  |  |



# Federally Required Information & Assurances

In accordance with Public Law 89-544 (Animal Welfare Act Amendments of 1970), Public Lab 94-279 (Animal Welfare Act Amendments of 1976), Public Law 99-196 (Food Security Act of 1965, Subtitle F – Animal Welfare), Code of Federal Regulations, Title 9, Chapter 1, Subchapter A – Animal Welfare & the Public Health Service Policy on Humane Care & Use of Animals, the SAU IACUC is required to obtain the following:

1. Why are living animals required for your study? Why can’t you use replacements such as cell culture, computer modeling or other non-animal models? Check all that apply

The complexity of the processes begin studied cannot be duplicated or modeled in simpler systems

There is not enough information known about the processes being studied to design non-living models

Pre-clinical studies in living animals are required by federal regulations prior to human testing

This is a behavioral, learning, or developmental study

Other:Click or tap here to enter text.

1. Why is the proposed species the most appropriate? Why can’t a less sentient, phylogenetically lower species be used? Check all that apply:

A large database exists for this species allowing comparisons with previous data.

The anatomy, genetics, physiology or behavior of this species is uniquely suited to the study of proposed. Please describe: Click or tap here to enter text.

This is the phylogenetically lowest species that provides adequate size, tissue, or anatomy for the proposed study.

This species provides a particularly good model for duplicating the human situation.

Please describe: Click or tap here to enter text.

The results will be directly applicable to the health or care of this species.

Please describe: Click or tap here to enter text.

Previous studies using this species formed the background for this project.

The species has unique features that make it the best choice available for this study.

Please describe: Click or tap here to enter text.

1. Duplication of Research

By checking here, I certify that in planning this experiment I have reviewed the relevant literature (by computer database literature search, use of comprehensive review articles, consultation with Animal Welfare Inforamtion center, etc.). Based on the literature, I certify that the activities involving animals described in this protocol do not unnecessarily duplicate previous research. Assure that I will retain my search records for three years past the end of the snimal studies & that these search records will be available to Inspectors at any time.

1. Consideration of Alternatives to Painful Procedures

Are you:

Proposing procedures that fall into the USDA Pain Category D or E (Causing more than momentary or slight pain or distress)

If box is checked:

Federal regulations require consideration of the use of alternatives (such as *in vitro* studies, computer models or less sentient animals) to procedures that may cause more than momentary or slight pain or distress to animals. The IACUC is required to document that you have made such considerations.

No alternatives exist -this must be documented by completing the following:

Literature search conducted. The Animal Welfare Information Center is a good source to utilize in conducting your search. Information is also available from the National Agricultural Library ([http:www.nal.usda.gov](http://www.nal.usda.gov)).

Consultation with colleagues (names and dates):Click or tap here to enter text.

Other information services utilized.

Please describe: Click or tap here to enter text.

Alternatives exist but are not appropriate for these studies.

Please describe: Click or tap here to enter text.

1. Provide any additional justification for the number of animals requested. How were the sample size, number of groups, & number of repetitions determined? Check all that apply.

Power analyses indicate that the proposed number of experiments is the lowest required for statistically valid tests of the hypothesis.

Please describe: Click or tap here to enter text.

The experiments will compare the effects of several independent variables & therefore require many groups or cohorts.

Please describe: Click or tap here to enter text.

The outcome measures or phenomena being measured are variable & large sample sizes are necessary for statistically valid sampling.

Please describe: Click or tap here to enter text.

Differences from controls are expected to be small, & large sample sizes are necessary to distinguish differences reliably.

Please describe: Click or tap here to enter text.

The experiments are technically difficult & multiple attempts will be needed to obtain satisfactory data from each experiment.

Please describe: Click or tap here to enter text.

These animals will be used to produce antibodies or tissues. Describe the amount of tissue needed & how much is produced from each animal below.

Please describe: Click or tap here to enter text.

This is a pilot study to obtain preliminary data to determine if a larger study can be done.

**Field Studies**

If animals in the wild will be used, describe how they will be observed, any interactions with the animals,

whether the animals will be disturbed or affected, and any special procedures anticipated. Also include any human health and safety concerns of working with the study species. Provide a description of safety procedures and equipment needed by personnel when handling the study animals in the field.

Click or tap here to enter text.

**Transportation**

Will study animals be transported to or from campus or to different buildings within the campus?

Yes  No

If so, please describe the transport methods:

Click or tap here to enter text.

If your experiment will be conducted on non-SAU locations please describe in detail the facilities:

Click or tap here to enter text.

**Hazardous Agents**

Does this project utilize hazardous chemicals, microbial organisms, recombinant DNA, human cells, radioactive materials, or animals that carry zoonotic diseases.

Yes  No

If any hazardous agents are used in live animals, please describe below. A project that uses hazardous agents may not begin until the investigator has obtained any necessary university approval. Please discuss with the IACUC to determine appropriate approval.

|  |  |
| --- | --- |
| Agent |  |
| BSL/ABSL level |  |
| Specific Detail of Hazard (strain, type, etc.) |  |
| How is hazard used? |  |

**Principal Investigator Certifications**

* I certify that I have attended the institutionally required investigator training course.

**Initials**: Click or tap here to enter text.

* I certify that I have determined that the research proposed herein is not unnecessarily duplicative of previously reported research.

**Initials**: Click or tap here to enter text.

* I certify that all individuals working on this proposal who are at risk are participating in the institution's Occupational Health and Safety Program.

**Initials**: Click or tap here to enter text.

* I certify that the individuals listed in the “**Personnel**” section are authorized to conduct procedures involving animals under this proposal, have attended the institutionally required investigator training course, and received training in: the biology, handling, and care of this species; aseptic surgical methods and techniques (ifnecessary); the concept, availability, and use of research or testing methods that limit the use of animalsor minimize distress; the proper use of anesthetics, analgesics, and tranquilizers (if necessary); and procedures for reporting animal welfare concerns.

**Initials**: Click or tap here to enter text.

* For all USDA Classification D and E proposals (see section H.1.): I certify that I have reviewed the pertinent scientific literature and the sources and/or databases as noted and have found no valid alternative to any procedures described herein which may cause more than momentary pain or distress, whether it is relieved or not

**Initials**: Click or tap here to enter text.

* I certify that I will obtain approval from the IACUC before initiating any significant changes in this study.

**Initials**: Click or tap here to enter text.

* I certify that I will notify the IACUC regarding any unexpected study results that impact the animals. Any unanticipated pain or distress, morbidity or mortality will be reported to the attending veterinarian and the IACUC.

**Initials**: Click or tap here to enter text.

* I certify that I am familiar with and will comply with all pertinent institutional, state, and federal rules and policies.

**Initials**: Click or tap here to enter text.

This form is required for any activity involving vertebrate animals for biomedical research conducted at Southern Arkansas University or its affiliated properties. Refer to the IACUC Guide for the Care and Use of Laboratory Animals [(https://web.saumag.edu/iacuc/](https://muleriderssaumag-my.sharepoint.com/personal/jchamberlain_saumag_edu/Documents/Desktop/(https:/web.saumag.edu/iacuc/)) and the SAU IACUC Guide for assistance with writing your protocol. Any protocol questions and form questions can be directed to SAU IACUC members. The completed form can be submitted to the chair of the SAU IACUC. Approved protocols are valid for 3 years from the approval date. Any modifications to an approved protocol can be made via the protocol modification form. Annual review of all protocols is required. An Annual Review Form will be sent to the Principal Investigator approximately 30 days prior to the Annual Review Due Date.

This form may be submitted as a PDF to the IACUC chair, Dr. Jeremy Chamberlain (jchamberlain@saumag.edu). Any questions regarding submission, policy, or procedures may be emailed to Dr. Chamberlain or any other IACUC member. Contact information, documents, and forms can be found at the SAU IACUC web page, [https://web.saumag.edu/iacuc/.](https://web.saumag.edu/iacuc/.%20)

**PI Name Printed: Signature: Date**

**FINAL APPROVAL**

**Certification of review and approval by the Institutional Animal Care and Use Committee:**

**IACUC Member Name: Signature: Date:**

**(Chairperson)**

**IACUC Member Name: Signature: Date:**

**(Attending Veterinarian)**

**IACUC Member Name: Signature: Date:**

**(Non-affiliated Member)**

**IACUC Member Name: Signature: Date:**

**IACUC Member Name: Signature: Date:**

**IACUC Member Name: Signature: Date:**

**A close-up of a card

Description automatically generated**