

The University of Scranton
Institutional Animal Care and Use Committee (IACUC)

**ANIMAL USE PROTOCOL
Guidelines**

The animal facilities and programs of the University of Scranton are operated in conformity with the [2010 Guide to the Care and Use of Laboratory Animals](#), the [Animal Welfare Act](#) (CFR 1985), the [Public Health Service Policy on Humane Care and Use of Laboratory Animals](#) (1996), and other applicable federal, state, and local laws, regulations, and policies.

The Institutional Animal Care and Use Committee (IACUC) is charged with the responsibility to assure that no animals are used unnecessarily for research or instruction and that every effort is made to insure animal well-being and to minimize pain and distress.

Protocols must be submitted in the University's approved IACUC format to the IACUC for all proposed research or instructional use of vertebrate animals.

Students and research technicians/assistants must complete *IACUC Student/Research Assistant Training Certification* and *IACUC Training in Techniques Required for a Protocol Certification* as appropriate to the protocol.

In evaluating protocols for approval, the IACUC utilizes the following criteria:

- Alternatives to the use of animal subjects for research or instruction have been explored.
- The protocol does not unnecessarily duplicate previous research or instruction.
- The number of animals is the minimum necessary to produce valid results.
- The species of animal is appropriate to the research proposed.
- Every effort is made to minimize pain and distress. If pain and distress cannot be relieved because of the research design, justification is provided.
- The research design and work plan are clearly described and follow applicable standards and regulations.
- Step-by-step explanation of all procedures is provided. An animal subject can be clearly tracked through the project.

ANIMAL USE PROTOCOL INSTRUCTIONS (5/08)

Please carefully read these instructions prior to completing your protocol. Be sure to follow the outline and address each item. Submit the Cover Sheet and Protocol Narrative electronically as e-mail attachment to gary.kwiecinski@scranton.edu and send one signed copy of the Cover Sheet to Gary Kwiecinski, Biology Department, LSC292, at least one week prior to a scheduled IACUC meeting.

An outline for the Narrative follows the cover sheet form for your convenience.

1. **Name of Investigator(s) and Title of Protocol**

2. **Brief Project Description.**

Provide a description the purpose of your research or instructional project and the experimental design in “layperson’s” terms so that it is easily understood by IACUC members who are not in your academic discipline.

3. **Project Design and Methodology**

3.1. **Purpose and objectives**

What do you plan to accomplish? Why?

3.2. **Is this a field study?** ___yes or ___no

If no, continue with section 3.3

If yes,

- a) Does the PI conducting field studies know zoonotic diseases, safety issues, laws, and regulations applicable in the study area and are assurances provided? ___yes or ___no
- b) This protocol must be submitted to the Office of Health and Safety (OHS) for review. IACUC will facilitate OHS review after initial submission of the protocol and will facilitate checking the boxes below to ensure OHS compliance.
 - a) OHS has reviewed this protocol ___ yes
 - b) OHS suggestions/requirements are incorporated in this protocol ___yes
 - c) A copy of the ORS review is attached to the final draft of the approved protocol ___yes

3.3. **Rationale for choice of animal species; alternative methods explored**

Why are animal subjects, and this species in particular, required for the research or instruction? Clearly and completely explain why your research or instructional goals cannot be met using alternative approaches, e.g., simpler species, tissue culture, computer models, video, or written materials.

3.4. **Rationale for numbers of animals.**

Why is this number of animal subjects required? Describe your statistical methodology.

3.5 **Duplication of research or instructional use?** ___yes ___ no If yes, justify.

How have you determined that this project is not unnecessary duplication, e.g., bibliographic searches? If it is duplication of previous research or instruction, why is it required?

3.6. Detailed description of procedures

3.6.1 Step by step description of all procedures

Provide a clear, step-by-step description of all procedures including details of methods of anesthesia. IACUC reviewers should be able to track the animals through the protocol. A flow chart is recommended.

If the animals are to be sacrificed at the end of the protocol, give details of the method by which they will be euthanized. (Ref: [2007 Report of the AVMA Panel on Euthanasia](#)). If the animals will not be sacrificed, what do you plan to do with them?

3.6.2 Special Considerations

If the protocol includes invasive survival surgery procedures or multiple surgeries, you must include a detailed description of the following: (1) pre-operative care, including special diets, (2) surgical preparation, (3) anesthesia, (4) **aseptic** surgical techniques and procedures, and (5) post-operative care and handling, including analgesics, antibiotics, and special diets.

If the protocol requires multiple surgical procedures on a single animal, (1) the surgeries must be justified and (2) outcomes evaluated, (3) Assurances provided that multiple surgical procedures on non-regulated species conform to regulated species standards, and (4) Major versus minor surgical procedures are evaluated on a case-by-case basis.

If the protocol requires restraint of animals, you must justify the use of restraint. (1) Describe how or by what device the animals will be restrained. (2) Alternatives to restraint considered? (3) Is the period of restraint minimum to meet scientific objectives? (4) How will animals be trained to adapt to restraint? (5) Provide assurance that animals that fail to adapt will be removed from the study. (6) Appropriate observation intervals of restrained animals are defined. (7) Provide assurance that veterinary care will be provided if lesions or illness result from restraint. (8) Provide assurance that explanation of purpose and duration of restraint are provided to study personnel.

3.7. Competency in techniques to be used in the protocol

Are you competent in the techniques involved in this proposal? If not, how will you acquire the necessary expertise? Ref: [Policy and Procedure, Training in Techniques Required for a Protocol](#).

3.8. Procedures to minimize pain/distress [A rule of thumb definition of pain and distress - if the procedure would be painful to a human or if it requires anesthetic or sedation, e.g. surgery or cardiac puncture.]

Describe procedures to minimize pain and/or distress. How will anesthesia or euthanasia be administered? What is route of injections?

Pharmaceutical grade drugs must be used. All drugs must be used prior to their expiration date - assure that you are licensed to administer pharmaceutical anesthesia by providing your DEA license number and its expiration date.

USDA animals - if procedures are used which cause more than momentary pain/distress, whether relieved by anesthesia or not, you must provide justification in the form of either

- **A literature search using an appropriate comprehensive database;** documentation of database* searches must include name of database, date of search, keywords used, and date range of search; OR
- **Another more appropriate, well documented search method**, e.g., if the procedure is “cutting-edge science” and there is no body of literature as yet, provide dates and names of experts contacted and information gathered to determine that alternatives to the procedure are not available.

Ref: [USDA Policy Manual, Policies #11 & #12](#)

*For assistance with searching, contact a reference librarian at the Weinberg Memorial Library.

All other species - if there is reasonable likelihood that the procedures will cause more than momentary pain/distress, not relieved by anesthesia, you must provide justification as specified above for USDA animals.

- 3.9 If animal subjects may become ill as a result of the procedures**, what are the parameters for determining intervention, e.g., medication or euthanasia. What are the anticipated interventions? What is the time frame for determining the type or length of intervention? Ill or injured animals must be monitored on a regular basis and documented on the [Quarantined Animal Record](#).

4. Animal Maintenance

4.1. Location and duration of housing.

Where will the animal be housed and for how long? Purchase orders for animals to be housed in Loyola Hall must be signed by the facilities director or designee.

4.2. Special Requirements/Instructions

Describe any special requirements, e.g., special housing, diet, extra cage cleaning, light, temperature, or humidity. It is the responsibility of the investigator to provide for special requirements in the maintenance of animals. The Animal Caretaker is not authorized to provide special maintenance services or research assistance.

5. Other investigators, students or research technicians/assistants

Provide a list of all others who will work on the protocol, including levels of expertise and limits on duties or procedures. The following forms must be completed and filed with the Office of Research Services:

- [IACUC Student/Research Assistant Training Certification](#)
- [IACUC Training in Techniques Required for a Protocol Certification](#)

- 6. External funding sources.** If this protocol is related to a proposal which has been or will be submitted for external funding, list the agency, source, and proposal status.

The University of Scranton
 Institutional Animal Care and Use Committee (IACUC)
 ANIMAL USE PROTOCOL - COVER SHEET (2/2011)

For ORS Use Protocol # _____ Date Approved _____
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Principal Investigator		Department	Ext: E-mail:
Co-Investigator		Department	Ext: E-mail:
TITLE OF PROTOCOL:			
Type of Protocol: ___ Research ___ Instructional			
Species		Age	Size
No. Males	No. Females	Source/Supplier	

PROJECTED DURATION OF PROJECT _____

INVESTIGATOR’S ASSURANCES:

I am familiar with those aspects of the *2010 Guide for the Care and Use of Laboratory Animals* and/or the *Animal Welfare Act* that pertain to this research or instructional protocol and further certify that this protocol does not represent or include unnecessary duplication of previous research or instructional use of animals.

I am familiar with all procedures of the animal facilities, and I am familiar with the safety guidelines as set forth in the *Chemical Hygiene Plan for the University of Scranton*.

I understand that it is my responsibility to assure daily monitoring and record keeping for all animals under this protocol.

I certify that all students and research technicians/assistants caring for animals and/or performing procedures under this protocol will receive complete training, and the *IACUC Student Research Assistant Training Certification form* and the *IACUC Training in Techniques Required for a Protocol Certification form* will be filed with the Office of Research Services. No student or research technician/assistant may perform invasive procedures without supervision until fully certified.

When solicited in mid-October of each year, I will provide the IACUC with an annual report containing the species and number of animals used in each of my approved protocols. I understand that the information I provide will be used to complete the University of Scranton’s annual USDA and other federal reports.

I will notify the IACUC, in writing, if animals purchased for this protocol are transferred to another investigator for use in a different protocol.

Signature of Principal Investigator

Date

Signature of Co-Investigator

Date

Submit the <i>COVERSHEET</i> and <i>PROTOCOL NARRATIVE ELECTRONICALLY</i> as an e-mail to gary.kwiecinski@scranton.edu and send one signed copy of the Cover Sheet to Gary Kwiecinski, Biology Department, LSC292, at <u>least one week prior</u> to a scheduled IACUC meeting.

The University of Scranton
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ANIMAL USE PROTOCOL - NARRATIVE OUTLINE (2/2011)

1. *Name of Investigator(s):*

Date Submitted:

Title of Protocol:

2. *Brief Project Description*

3. *Project Design and Methodology*

3.1. Purpose and objectives

3.2. Field study assurances

3.3. Rationale for choice of animal species; alternative methods explored

3.4. Rationale for numbers of animals

3.5. Duplication of research or instructional use? yes no If yes, justify:

3.6. Detailed description of procedures

3.7. Competency in techniques to be used in the protocol

3.8. Procedures to minimize pain/distress

3.8.1. What pharmaceutical anesthesia is being used?

3.8.1.a. Type: _____;

3.8.1.b. Brand name: _____;

3.8.1.c. Expiration date: _____.

3.8.2. DEA License # _____ Expiration date _____

3.9. If animal subjects may become ill as a result of the procedures

4. *Animal Maintenance*

4.1. Location and duration of housing

4.2. Special Requirements/Instructions

5. *Other investigators, students or research technicians/assistants*

6. *External funding sources*