

**Roger Williams University
Institutional Animal Care and Use Committee (IACUC)**

Application to Use Live Vertebrate Animals
in Research on Campus

	Page
Section A: General Information.....	1
Section B: Project Description.....	2
Section C: Animals to be Used	5
Section D: Procedures	7
Section E: Drugs and Substances	14
Section F: Personnel	16
Section G: Assurances and Signature	17
Appendix: Additional Information.....	18

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Application to Use Live Vertebrate Animals
in Research on Campus

All research projects or classroom activities involving the use of live vertebrate animals must be reviewed and approved by the Institutional Animal Care Committee (IACUC) prior to project initiation and/or animal acquisition. If the study involves field or observation work and will not involve bringing animals into campus facilities, please use the RWU Animal Use Application form that is specific to Observational Studies ([link](#)).

Roger Williams University policy requires that all investigators make an effort to limit the use of vertebrate animals to studies which have scientific merit and/or significant educational value and for which alternative model systems do not exist. For a more complete statement of university policy, please visit the RWU IACUC webpage: <https://www.rwu.edu/who-we-are/administration-and-governance/committees-governance/iacuc>.

All faculty, staff and students preparing to submit a protocol to the IACUC committee must first complete the online training course at <http://www.citiprogram.org>. Please select "Roger Williams University" in the "participating institutions" drop down box. New users will be prompted to create a user name and password. Select the CITI Recommended Learner group.

This application may be submitted electronically or printed out as hard copy.

Electronic submissions will be accepted at iacuc@rwu.edu provided the principal investigator provides an electronic signature.

Section A. General Information

1. Type of Protocol: Faculty Research Student Research Breeding Colony

2. Project Title:

3. Project Directors / Principal Investigators *Student PIs must include a RWU faculty advisor.*

Name	Title	Department	E-mail	Campus Phone #
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1.

2.

3.

4. External Collaborators

Name	Title	Institution	E-mail	Phone#
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1.

2.

IACUC USE ONLY

Protocol Number

Date Received

5. Proposed Start Date:

6. Sponsoring Agency / Funding Source *(if any)*

Section B . Project Description

7. Abstract

Briefly describe the proposed research in lay, non-scientific terms (i.e., language found in the newspaper). Include a brief explanation of the scientific background, the gap in current knowledge, the scientific question being addressed, and the significance of the work, including the probable benefits to human/animal health, the advancement of knowledge, or the good to society.

NOTE: This lay summary is important for non-specialists on the IACUC to understand the work being carried out and may be used by university administrators in the case of external inquiry into the project. Define all acronyms and provide definitions for all terms that are not in lay/common English.

8. Rationale

The purpose of this section is to provide reviewers with a clear understanding of the rationale behind the work, including scientific aims, objectives and methods. This section must also be written in lay language. Texts may be continued in the "Additional Information Appendix" at the end of this application if necessary.

8a. Background

Expand on the background, ideas and reasoning behind the proposed work. After reading this section, reviewers should be clear on why this work is justified/necessary.

8b. Objective / Hypothesis

Expand on the scientific question(s) to be tested and the relevant hypotheses. Present evidence or rationale that supports the hypotheses.

8c. Study Design

Briefly describe the design of the study being carried out, including experimental groups, sample size, the use of controls, and a general timeline of procedures that animals will experience. In the following section you can expand on the details of each procedure.

8d. Duplication

Activities involving animals must not unnecessarily duplicate previous experiments. Your signature on this application will provide assurance that the activities of this project remain in compliance with the federal requirement that there must be no unnecessary duplication.

Will your project duplicate previous experiments?

Yes

No

If yes, please justify duplication of previous experiments:

Section C: Animals to be Used

9.a : List specifications, where known, in the appropriate spaces. If animals will be euthanized or released prior to arriving on campus, specify 'N/A' for housing information. To include more species, please complete and attach APPENDIX: Additional Species form

	Species 1		Species 2		Species 3	
Species						
Common Name						
Breed / Strain						
Vendor / Source						
Sex						
Total # Animals for Three-Year Approval Period						
Maximum # on Hand at Once						
Location if Housed or Method of Capture						
Permit(s) Required?	Yes	No	Yes	No	Yes	No

If "Yes", please attach copies of applicable State or Federal Permits and list them in the Appendix to this form.

Check here if there are additional species that will be utilized. Please complete and attach APPENDIX: Additional Species form

9.b : Explain how the number of animals proposed above was calculated. Describe why this amount reflects the fewest number of animals that is statistically and scientifically justifiable.

9.c: Describe the appropriateness of the species used and rationale for using this species

9.d: Explain why alternative models cannot be used in this study to replace or reduce the number of animals used. It is the investigator's responsibility to seek alternative model organisms, non-animal or non-vertebrate animals when possible"

9.e: Will any of the animals identified in this research be obtained through wild capture? Yes No

If Yes: While it is inevitable that some non-target vertebrates may be captured during wild harvest, please explain how you intend to minimize the capture of by-catch in your attempts to catch the target specie(s).

Section D: Procedures

10: *In lay terminology, describe all procedures an animal will undergo as part of the protocol. If capturing in the field, include details of capture methodology and transport methods if animals are to be returned to the laboratory from the wild. Be sure to refer to the RWU Standard Operating Procedures (SOP) appropriate to your study procedures.*

11. Will you perform **painful or distressful procedures** (with or without anesthesia, analgesia, tranquilizers)?

Yes

No

If No, go to Section 12.

If Yes, indicate the highest level of pain/distress that is anticipated on any species of animal indicated in Question 8:

- Category B: Animals being bred, conditioned or held for use in teaching, testing, experiments, research or surgery but not yet used for such purposes.
- Category C: Animal use activities that involve no more than momentary or slight pain or distress (no greater than an injection) where there is no need for use of pain-relieving drugs.
- Category D: Animal use activities that involve accompanying pain or distress to the animals and for which appropriate anesthetics, analgesics, tranquilizing drugs and/or humane endpoints are used to avoid pain, distress or discomfort.
- Category E: Animal use activities that involve accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, tranquilizing drugs or other methods for relieving pain or distress are not used. Category E procedures require strong scientific justification as to why pain-relieving drugs or other methods for relieving pain cannot be used. This includes citation(s) to published studies if applicable — describing the alternatives that were considered and how alternatives will be used whenever possible, clarifying whether animals will be euthanized when moribund, and if not, what information is to be gained in the interval between moribundity and death.

Search for Alternatives:

Federal regulations require that all investigators provide a narrative describing the rationale for using animals and methods (including specific sources) used to determine that alternatives to the use of animals and to procedures that cause more than momentary pain and distress have been considered. The USDA requires that you specify two or more databases that have been used with appropriate keywords or search strategy (Link: [National Agricultural Library: Alternative Search](#))

To meet these requirements at RWU, two databases must be searched for: (a) alternatives to the use of animals and (b) alternatives to procedures that cause more than momentary pain or distress (Category 2 and 3 studies, only). Examples of databases include: Biological Abstracts, Medline/PubMed, CRIS, and the Animal Welfare Information Center (AWIC). Websites that may be helpful include: <http://altweb.jhsph.edu>, www.nal.usda.gov/awic/, <http://agricola.nal.usda.gov/>, and <https://www.nlm.nih.gov/>.

This recent search must reflect your attempt to achieve the 3 R's:

Refinement – alternative techniques or procedures to minimize potential pain, distress, or discomfort to those animals which must be used,

Reduction – alternatives or methods which allow you to minimize the number of animals used to obtain significant results,

Replacement – alternatives to the use of live animals for this research

Provide in the fields below the 2 databases searched, keywords and date of search, 1-5 references and a brief paragraph explaining the relevance to the proposed project. If listing consultation with experts, list names and qualifications in the Relevance field.

Database 1:

Name / Link:

Keywords:

References

Relevance

Database 2:

Name / Link:

Keywords:

References

Relevance

12. Will this study involve **surgery** on live animals? Yes No

If NO, go to Section 13

If YES, complete the following:

Briefly describe the surgical procedure, including method for analgesia/ anesthesia:

Personnel performing surgery:

Qualifications of person performing surgery:

Number of animals treated:

Where will surgery be performed?

Will sterile equipment be required? Yes No

Will animals survive surgery? Yes No

If YES,

Describe post-op care / post-op pain relief:

Describe criteria for assessing recovery:

Describe criteria for determining whether analgesics or euthanasia is indicated:

Person responsible for making above decisions:

13. SPECIAL REVIEW ITEMS: Indicate which of the following review considerations apply to the proposed project. For each question, indicate a YES answer by marking the appropriate space for each species.

- | | Species # (from above) | | |
|--|------------------------|----|----|
| Do the proposed experiments require: | 1. | 2. | 3. |
| A. Prolonged restraint of awake animals (> 3 hours)? | | | |
| B. Prolonged food or water deprivation (other than overnight preoperative fast [>12 hours])? | | | |
| C. Potentially painful procedure performed without anesthetic? | | | |
| D. More than one major surgical procedure on the same animal? | | | |
| E. Administration of paralytic agents or muscle relaxants? | | | |
| F. Unrelieved postprocedural pain, distress or functional deficit? | | | |
| G. Procedures requiring death other than euthanasia as an endpoint (e.g. LD-50 testing)? | | | |
| H. Method of euthanasia not approved by the AVMA Panel on Euthanasia? | | | |
| I. Administration of complete Freund's adjuvant? | | | |
| J. Antibody production using Pristane? | | | |

For every item checked above, follow instructions below.

Federal laws and regulations require that special attention be paid to some animal care and use procedures. Please provide clear justification, on scientific grounds, in the space below for any of the items that are checked above. Label each response appropriately (e.g. If D is checked for Species #2, preface the response as 13.D.2.). Use extra space on Appendix: Additional Information if needed.

14. NON-STANDARD ANIMAL CARE. Indicate below for which animal species non-standard housing conditions or care are required. Check the appropriate boxes for the animal species listed in item 9a, (Page 4) to which non-standard conditions apply.

	Species 1	Species 2	Species 3
A. Non-standard animal room conditions (e.g. temperature, humidity, lighting).			
B. Non-standard animal cages or pens.			
C. Non-standard animal care routines. Examples: methods or schedules of feeding, watering, cage cleaning, bedding type or changing schedule.			
D. Disease barrier housing or procedures required to protect animals from naturally occurring animal infections.			
E. Hazard containment housing or procedures. Special measures to reduce exposure of personnel or other animals to hazardous substances. This includes, but is not limited to radioactive materials, infectious agents, carcinogenic or toxic chemicals, biologically active steroids.			

Explain below the details of the non-standard housing conditions required for each item marked above. Include a separate description for each species for which such conditions is required. Continue on Appendix: Additional Information page if necessary.

15. What will be the **final disposition** of the animals used in this study?

Returned to the wild at place of capture

Returned to the wild at a different location
Give location

Be aware of translocation issues when releasing wild harvested species.

Experimental outcome is death

Animals must be euthanized [Complete method(s) of euthanasia below]

Species

Method and Route

Dose AVMA
(mg/kg) Approved

Method of Assurance

Section E: Drugs and Substances

16. Will you use **Anesthetics, Analgesics or Tranquilizers?**

Yes

No

If "No", go to Section 12.

If "Yes", complete the following:

Drug 1: Name

Dose (concentration and quantity):

Route of Administration (method and location for injections):

Criteria for assessing level of Anesthesia attained:

Person(s) administering drug:

Qualifications of administrator:

Drug 2: Name

Dose (concentration and quantity):

Route of Administration (method and location for injections):

Criteria for assessing level of Anesthesia attained:

Person(s) administering drug:

Qualifications of administrator:

Check here if there are additional drugs that will be utilized. Please complete and attach APPENDIX: Additional Anesthetics, Analgesics or Tranquilizers Form

Section F: Personnel

1. List all personnel who will perform or supervise any animal-related procedures for this project

Name	Degree	Role in the Project	Relevant Training (CITI Courses)	Completion Date
1.				
2.				
3.				
4.				
5.				

Check here if there are additional researchers. Please complete and attach APPENDIX: Additional Personnel form

Section G: Assurances and Signature

19. PROJECT DIRECTOR/PRINCIPAL INVESTIGATOR ASSURANCES:

A. I acknowledge responsibility for this project.

B. I agree not to undertake any aspect of this project until I have received written approval from the IACUC.

C. I agree to comply with all Federal, State and University animal welfare laws and policies in the performance of this project. Specifically, but not exclusively, applicable provisions of the Animal Welfare Act, the U.S. Public Health Service "Guide for the Care and Use of Laboratory Animals", applicable USDA regulations and Roger Williams University policies governing use of vertebrate animals for research or teaching purposes.

D. I assume the responsibility for ensuring that all persons working in my laboratory and/or on this project will be trained in accordance with University policy and will comply with all applicable laws and policies.

E. I agree to report any proposed significant changes in the protocol (e.g., change of numbers of animals, change of species, change in investigators etc.).

F. I certify that the activities described in this proposal, to the best of my knowledge, do not unnecessarily duplicate previous experiments.

G. I certify that the statements made in this form are true and complete to the best of my knowledge.

Principal Investigator Name

Date

Signature

Appendix: Additional Information

Use the space below to provide further details or information for responses above. Please preface your input by citing the appropriate question number.