

Pacific University

Application for Individual PI Animal Care and Use Approval

I. PROJECT INFORMATION

Project title: (Use the same title as the grant application, if applicable.)

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Date:

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	Initial Application	
	Renewal	Previous Application Number: Previous Title:

PRINCIPAL INVESTIGATOR

Name	
Department	
Campus Address	
Telephone #	
E-mail address	

Co-Investigator(s) using same protocol to be included in approval

Name	
Department	
Campus Address	
Telephone #:	
E-mail address	

Please copy and paste this table to add additional personnel.

	Yes		No	External funding?		
External funding agency					Grant #	
Status of grant					Deadline for application letter	
Project Start Date					Project End Date	

	Yes		No	State or Federal Permits Required?		
Permit type?					Status (include permit number if obtained)	

SPECIAL CONCERNS

	Yes		No	Survival surgery (if yes, fill out Appendix A)
	Yes		No	Hazardous chemicals, Biological agents, Recombinant DNA (including production of transgenic animals), other biohazardous agents (if yes, fill out Appendix B)
	Yes		No	Death as an endpoint (<i>i.e.</i> , LD50, tumor growth) or analgesics or anesthesia withheld.

II. PROJECT DESCRIPTION

- 1. Aims and objectives:** Summarize the aims and objectives of this proposed study. Briefly explain the relevance of this work for the advancement of knowledge or the good of society. **The grant abstract may not be used.**

Aims and objectives:

If this is a **renewal application**, summarize what was learned during the initial approval and explain how the results influence the continuation of the project. Briefly explain the relevance this work will have to human or animal health, the advancement of knowledge or the good of society. **The grant abstract may not be used.**

Renewal summary:

How many animals were actually used during previous approval period?	
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2. **Alternate methods and appropriate animal use:** You must perform a database search to demonstrate that this project is not unnecessarily duplicative and animal use follows appropriate, valid and current methods. An academic sciences search engine such as **Medline, Web of Science, or PubMed must be used** and searched at least **3 years** back. Include the following information in the table below:

Database searched		Keywords		Pub dates searched	
A. Provide a written narrative of the results of your search in a way that the IACUC can easily assess whether the search topics were appropriate and sufficiently thorough. Address the three R's (replacement, refinement, and reduction) and explain how you have considered the alternatives or how they are not applicable.					
B. Replacement of animals (replacing animals with computer models, cell culture, or other non-animal models; or utilizing animals lower on the phylogenetic tree):					
C. Refinement of experimental procedures to minimize pain or distress:					
D. Reduction in the number of animals:					

3. **Personnel:** Provide the following information for **all** personnel involved in this project who will handle animals, including investigators, technicians, and students. Describe the relevant training and experience of each person. If personnel do not have experience, describe how they will be trained. List all individuals having contact with animals, the species involved and a brief description of the degree of contact (*e.g.*, rodents, less than 2 hours/week).

Principal Investigator/Co-investigators: Please complete for **each investigator** listed.

Name	
Describe Training.	
Describe related experience with techniques proposed.	
Describe how individual will be trained if no prior relevant training or experience.	

Is this person performing surgery?	<input type="checkbox"/>	Survival Surgery	
	<input type="checkbox"/>	Non-survival surgery	
	<input type="checkbox"/>	Not Applicable	
Describe the species with which this person will have contact and the degree of contact, and the specific procedures this individual will perform.			

Students/Technical Personnel: complete for each individual having contact with animals.

Name			
Describe prior training.			
Describe how individual will be trained if no prior relevant training or experience.			
Is this person performing surgery?	<input type="checkbox"/>	Survival Surgery	
	<input type="checkbox"/>	Nonsurvival surgery	
	<input type="checkbox"/>	Not Applicable	
Describe the species with which this person will have contact and the degree of contact, and the specific procedures this individual will perform.			

Please copy and paste this table to add additional personnel.

III. ANIMAL INFORMATION

1.

Common name	
Scientific name	
Strain (if applicable)	

What is the source of the animal?

<input type="checkbox"/>	Purchased from established animal vendor	Name and address	
<input type="checkbox"/>	Wild Caught	Location	
<input type="checkbox"/>	Breeding colony in house	Specify	
<input type="checkbox"/>	From other institutions	Name and address	
<input type="checkbox"/>	Other source	Specify	

*Please copy and paste these tables to add additional species/strains.

2. Approximately how many individuals of each species will be used? You must include the total number of each species to be used over the duration of this proposal. This approval is for a maximum of three years. Do not count rodents that are not weaned. [NOTE: U.S. Government Principles for the Utilization and Care of Vertebrate Animals used in Testing, Research, and Training: III. The animals selected for a procedure should be of an appropriate species and quality and the minimum number required to obtain valid results.]

Species/ Strain				
Total				

Please copy and paste this table to add additional species/strains.

3. Describe how the number of animals needed for the study was determined. When appropriate, provide the number and type of experimental and control groups in each experiment, number of experiments planned, and number of animals in each group. The *Guide* states that whenever possible, the number of animals requested should be justified statistically. **A power analysis is strongly encouraged to justify group sizes when appropriate.**

Justification:

4. Will any animal used in this study be transfer from a different protocol, have already been used in a previous study or potentially be used in a future study?

	Yes		No	If yes, please explain.
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5. Animal Housing and Experimentation Location(s): Location must be approved by IACUC **before** animals are housed. If animals will be housed at another institution attach agreement and approved IACUC forms from other institution.

Specify Laboratory space where animals will be housed:

Institution:
Campus:
Building:
Room number:

Specify Laboratory space where experiments will be conducted if different from above:

Institution:
Campus:
Building:
Room number:

6. Describe animal housing and husbandry including feeding, cleaning, and health check schedules as appropriate. Attach appropriate checklists and standard operating procedures as necessary.

IV. HAZARDOUS SUBSTANCES

Are any of the following substances used in this project? If you answer Yes to any items, fill out **Appendix B**.

Substance Used				
<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	Human blood, blood products or tissues
<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	Animal cells or extracts
<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	Non-sterile biological fluids
<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	Infectious agents
<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	rDNA
<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	Carcinogens
<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	Hazardous chemicals
<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	Radioactive Materials

V. EXPERIMENTATION

- For each distinct procedure/handling operation, describe the manipulations that will be performed and the order in which they will be performed. Include time frames and intervals for the sequence of procedures. Unless listed elsewhere in this document, describe all drugs (including test substances) administered during the study as well as the dosage, route, and frequency. Procedures that will be performed after the animal has been euthanized do not need to be described. Describe the procedures in enough detail so that reviewers will be able to determine what is actually being done to each animal. Use as much space as necessary to succinctly yet thoroughly describe procedures.

Research Methods (please expand text box as necessary):

- Fully describe what indicators will be used to monitor animal health and to determine if humane endpoint is appropriate. Describe what will happen to animals that get sick, injured, or otherwise unable to complete the project.

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- Describe the final disposition of animals for this project and the expected completion date.

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If euthanasia is the final endpoint, describe below for each species.

Species:				
<input type="checkbox"/> Chemical Agent	Agent:			
	Dose:		Route:	
<input type="checkbox"/> Physical Method	Method:			

- Will any procedures (surgical or non-surgical) require anesthesia?

<input type="checkbox"/>	No
<input type="checkbox"/>	Yes: Anesthesia should be described in Appendix C.

5. Will blood samples be taken?

<input type="checkbox"/>	No	<input type="checkbox"/>	Yes; Specify below.
Species			
Route			
Amount AND % of blood volume			
# of collections			
Interval between collections			
Will blood collection be performed under anesthesia?			
<input type="checkbox"/>	No	<input type="checkbox"/>	Yes; Anesthesia should be described in Appendix C.

6. Is any procedure (including survival surgery) likely to cause pain or distress (e.g., any procedures that would reasonably be expected to cause pain or distress in a human)?

<input type="checkbox"/>	No	<input type="checkbox"/>	Yes; Specify below.
Species			
Identify Painful Procedure			
Methods to alleviate post-procedural pain/distress			
Justification for not providing relief from pain/distress			

Please copy and paste additional tables if needed.

7. Will agents be administered other than for analgesia, anesthesia, or euthanasia?

<input type="checkbox"/>	No	<input type="checkbox"/>	Yes; Specify below.
Agent Name	Route	Dosages	Side Effects

8. Are there predictable adverse pre- or post-procedural events that may occur?

<input type="checkbox"/>	No
<input type="checkbox"/>	Yes; Please describe each event below and indicate how it will be humanely managed to minimize discomfort to the animal
Adverse events (please expand text box as necessary):	

9. Will food and/or water be restricted?

<input type="checkbox"/>	No					
<input type="checkbox"/>	Yes	What is restricted?	<input type="checkbox"/>	Food	<input type="checkbox"/>	Water
Species						
Length of restriction						
Interval between restrictions						
Monitoring during restriction						
Justify restricting food and/or water						

10. Will animals be restrained by tethers, stanchions, metabolism cages, etc.?

<input type="checkbox"/>	No	<input type="checkbox"/>	Yes; Specify below.
Method of restraint			
Duration of restraint			
Frequency of restraint			
Monitoring during restraint			
Acclimation of animal to restraint			
Justify restraint			

11. Will survival surgical procedures be employed? (Disruption of any integumentary surface of a living animal by any means other than a hypodermic needle, biopsy needle, ear punch, or tail snip is considered surgery. All surgical procedures must be described.)

NOTE: If survival surgery is performed, it must be done using aseptic technique.

- No.**
- Yes; Complete Appendix A.**

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Assurances by Principle Investigator

The policies and procedures of Pacific University, apply to all activities involving live vertebrate animals performed at or by the personnel of this Institution. Therefore, no activities involving the use of these animals are to be initiated without prior written approval by the University Animal Care and Use Committee (IACUC).

- I assure that all investigators are familiar with the PHS Policy on Humane Care and Use of Laboratory Animals by Awardee Institutions, the NIH Guide for the Care and Use of Laboratory Animals and the University Guidelines, and agrees to abide by the Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training.
- I assure that students, staff, and faculty on the project are qualified or will be trained to conduct the project in a humane and scientific manner.
- I assure that I will notify the IACUC of any proposed change in the care and use of animals involved in this protocol, and will wait for approval from the IACUC before any changes are implemented.
- I assure that animals will not be transferred between investigators without prior approval.
- I assume responsibility for the ethical conduct of this project and for protecting the welfare of the animal subjects and human participants.
- I am aware that deviations from an approved protocol, or violations of pertinent policies, guidelines, or laws could result in immediate suspension of the project.

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(Signature of Principal Investigator)

(Date)

Application for Animal Care and Use Approval

APPENDIX A: SURGICAL PROCEDURES

- a. Will multiple major survival surgeries be performed on the same animal? A major surgery is one that opens a body cavity (abdomen, thorax, or CNS) or causes serious physiological impairment.

<input type="checkbox"/>	No;
<input type="checkbox"/>	Yes; You must provide a detailed scientific justification .
Justification (please expand text box as necessary):	

- b. Where will the survival surgery be performed?

Bldg:		Room:	
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- c. Describe the postoperative care, fluids, physical support methods **and postoperative monitoring** given to the animals.

Species		Monitoring provided	
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Please copy and paste additional tables if needed.

- d. How are the instruments sterilized?

<input type="checkbox"/>	Steam Sterilization		
<input type="checkbox"/>	Ethylene oxide		
<input type="checkbox"/>	Glass Bead sterilizer		
<input type="checkbox"/>	Chemical sterilization	Name of sterilant	

- e. Does the surgeon utilize the following during surgery?

<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	Sterile gloves
<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	Sterile gown
<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	Sterile drape
<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	Face mask
<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	Aseptic prep of area
If yes describe how area is prepared				

- f. For each surgical procedure describe the manipulations that will be performed. Unless listed elsewhere in this document, describe all drugs (including test substances) administered during the study as well as the dosage, route, and frequency. Procedures that will be performed after the animal has been euthanized need not be described. (Describe the procedures in enough detail so that reviewers will be able to determine what is actually being done to the animal. You DO NOT need to re-describe in detail procedures addressed in previous questions (e.g., anesthesia, euthanasia))

Surgical Procedures (please expand text box as necessary):
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APPENDIX B: HAZARD USE

Please describe any hazardous substances used in this protocol. Be sure to include precautions taken to reduce exposure risk to personnel, and contingency plans for cleanup and/or medical care if an exposure or spill occurs. Note: Use of hazardous chemicals must be approved by the Campus Health and Safety officer before work can begin.

Hazardous Substance	Exposure side effects	Precautions to limit exposure	Plan for cleanup or medical care if exposure or spill occurs

Note: Use of hazardous chemicals must be approved by the Campus Health and Safety officer before work can begin. Have a copy of Appendix B signed and return to the chair of IACUC before work begins.

<input type="checkbox"/> Approved Signature of Campus Occupational Health and Safety Officer	<input type="checkbox"/> Refer to Committee Date:
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APPENDIX C: ANESTHESIA

a. Preanesthetic agent(s), dosage and route

Species	
Drug (e.g. Atropine)	
Dosage (mg/kg)	
Route (IV, IM, SQ, IP)	

Please copy and paste additional tables if needed.

b. Anesthetic agent(s), dosage and route

Species	
Drug (e.g. Pentobarbital)	
Dosage (mg/kg)	
Route (IV, IM, SQ, IP)	

c. For prolonged procedures how will anesthesia be maintained?

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d. How many times will anesthesia be required for each animal during the study?

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e. Describe the methods used to monitor the state of anesthesia and general well being:

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f. Will paralytic agents be employed?

<input type="checkbox"/>	No; Proceed to question 15	
<input type="checkbox"/>	Yes; Name of agent	
	Explain why it is necessary to use this agent	
	Explain how the animals will be monitored to insure adequate anesthesia	

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APPENDIX D: SIGNATURE PAGE

Pacific University IACUC Application Approvals

<input type="checkbox"/> Approved	<input type="checkbox"/> Refer to Committee
Signature of Primary Reviewer	Date:

<input type="checkbox"/> Approved	<input type="checkbox"/> Refer to Committee
Signature of University Veterinarian	Date:

<input type="checkbox"/> Approved	<input type="checkbox"/> Refer to Committee
Signature of IACUC Chairman	Date: