

CALIFORNIA STATE UNIVERSITY, DOMINGUEZ HILLS
INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE

FORM A

IACUC NO.

For IACUC Use Only

CURRENT APPROVAL PERIOD:

From:

Until:

Project Title:

Funding Source:

Principal Investigator (Last, First, Position/Title):

Department:

Phone:

Email:

Co-Investigator (Last, First, Position/Title):

Department:

Phone:

Email:

^a If new, attach copy of grant proposal; project titles and procedures must be consistent.

1. NATURE OF THE PROTOCOL/STUDY Indicate (x) all applicable items.

- | | | |
|--|--|---|
| <input type="checkbox"/> Research Project | <input type="checkbox"/> Blood/Tissue/Embryo Collection | <input type="checkbox"/> Survival Surgery |
| <input type="checkbox"/> Teaching | <input type="checkbox"/> Breeding Program | <input type="checkbox"/> Multiple Survival Surgery ^a |
| <input type="checkbox"/> Behavioral Studies | <input type="checkbox"/> Neuromuscular Blocking Agents | <input type="checkbox"/> Terminal Surgery |
| <input type="checkbox"/> Antibody Production ^a | <input type="checkbox"/> Radioactive Materials ^b | <input type="checkbox"/> Prolonged Restraint (> 1 h) ^a |
| <input type="checkbox"/> Mouse Ascites Production ^a | <input type="checkbox"/> Biohazardous Materials ^b | <input type="checkbox"/> Food or Fluid restriction ^a |
| <input type="checkbox"/> Tumor Inducement ^a | <input type="checkbox"/> Other Hazardous Agents ^b | <input type="checkbox"/> Transgenic animal use |

^a For special procedures, please ensure that you have consulted with CSUDH regulations regarding these procedures and incorporated them into the body of this protocol.

^b Requires pre-approval by Environmental Health and Safety Office.

2. TYPE OF PROTOCOL STATUS

- New
 Renewal of previously approved 3-year protocol

3. EXPERTISE OF PRINCIPAL INVESTIGATOR Describe briefly your qualification to perform the proposed experiments.

4. PROJECT PERSONNEL Provide the names, titles, and relevant training of all participants who will handle the animals for the duration of the project. Include dates of completion of required CSUDH Animal Use Training Program.

(Name)	(Title)	(Prior Training) (Completion of Training Program)
(Name)	(Title)	(Prior Training) (Completion of Training Program)
(Name)	(Title)	(Prior Training) (Completion of Training Program)
(Name)	(Title)	(Prior Training) (Completion of Training Program)

5. ANIMALS REQUESTED

Species (including sex, age, & any other desired traits)	Strain	Animal source (Commercial/n on-Commercial or field location)	Number of animals requested for entire project			Locations where animals will be housed (vivarium and individual faculty labs)	Approval of Animal Care Department Director
			C	D	E		
			Pain/Distress Type*				
			C	D	E		

* List each pain/distress type separately. Count each animal only once for the highest category.

Type C: Those in which pain or distress will not be induced. Animals will be utilized for collections, injection, or similar procedures causing minor discomfort and no drugs will be used.

Type D: Those that induce pain or distress that will be relieved by the use of appropriate drugs. Indicate the analgesics and/or anesthetics to be used. Also, indicate whether and how you will monitor the animal for signs of pain or discomfort.

Type E: Those that involve pain or distress not relieved by drug intervention. These procedures are permitted only where drug intervention would interfere with the results of the experiment.

Field Collections:

For each species to be collected from the field, describe the method of collection. Include copy of Dept. of Fish & Game Collection Permit, if required, and procedures used to ensure that field studies do not compromise the health and safety of animals or persons working in the field.

6. PROCEDURES AND METHODS OF THE STUDY

Justification for animal study:

In clear, concise, non-technical language, summarize the background and specific aims of your STUDY and the relevance of the proposed research to human or animal health and/or to the advancement of scientific knowledge.

Description of animal procedures:

Describe each procedure that directly involves animals (including, but not limited to: surgery, blood sampling, pain control, injections, and restraint of animals for handling). List procedures in the order in which they will occur; note where procedures will be repeated (and indicate number of repetitions); and, where appropriate, indicate the duration of procedures (e.g., exposure to chemical agents, restraint), pre- and post-procedural monitoring, and the final disposition of all animals included on each project.

Describe anticipated effects of these procedures on animal health, including potential adverse effects on health/behavior.

Describe how these effects will be monitored for and under what conditions animals will be prematurely removed from the study and euthanized (due to injury, illness, or other unexpected adverse effects).

Include a timeline for the experiment, accounting for all procedures and animals.

Additional information:

For animals exposed to **radiation and/or biohazards and/or other hazards**, please list hazardous agent, animal dosage or exposure, and any precautions that will be taken (including proper training of all participants who will handle radioactive and/or biohazardous material). Note: Animal Protocol approval will not be granted for studies involving radiation, biohazards or other hazards until the use of such agents is approved by the Environmental Health and Safety Office.

For animals that will undergo survival **surgical procedures**, please complete the following items:

Location (building/room number, or off campus site) at which surgery will be performed:	
Preoperative medications and anesthesia (<i>include agent, dose, route and frequency of administration</i>):	
Paralyzing drugs used, if any (<i>include agent, dose, route and frequency of administration</i>):	
Criteria used to assess the level of anesthesia:	<input type="checkbox"/> Respiration rate <input type="checkbox"/> Heart rate <input type="checkbox"/> Corneal reflex <input type="checkbox"/> Positive toe reflex <input type="checkbox"/> Other, explain:
Typical duration of survival surgery:	
Postoperative analgesia (<i>include agent, dose, route and frequency of administration</i>).	
Describe postoperative observation (include frequency of monitoring and any medications [<i>include agent, dose, route and frequency of administration</i>]):	

7. PROCEDURES EMPLOYED You must categorize each procedure as Type C, D, or E.

Type C: Those in which pain or distress will not be induced. Animals will be utilized for collections, injection, or similar procedures causing minor discomfort and no drugs will be used.

Type D: Those that induce pain or distress that will be relieved by the use of appropriate drugs. Indicate the analgesics and/or anesthetics to be used. Also, indicate whether and how you will monitor the animal for signs of pain or discomfort.

Type E: Those that involve pain or distress not relieved by drug intervention. These procedures are permitted only where drug intervention would interfere with the results of the experiment.

Procedure	Description	Number of animals requested for entire period	Type C	Type D ¹	Type E ²
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

¹ For each procedure listed above classified as Type D, the analgesics and/or anesthetics to be used should be indicated in the surgical procedures section in question 7.

² For each procedure listed above classified as Type E, provide evidence for the claim that drug intervention would interfere with the results of the experiment. (For example, indicate the relevant literature that you consulted, showing that the Type E procedure is justified).

For all procedures described above, indicate what criteria will be used to assess pain/discomfort of animals:

- Loss of appetite Loss of mobility Weight loss Vocalizing
 Failure to groom Licking Scratching Biting

8. RATIONALE AND ALTERNATIVES TO THE USE OF ANIMALS

Federal regulations require that all investigators provide a short narrative describing the rationale for using animals, the appropriateness of the proposed species, and the methods and specific sources used to determine that the alternatives are not available. Your narrative must address the following:

For classroom instruction, state the desirable skills or information being taught to students through the use of animals.

Explain why animals are required for your studies. If there is an alternative non-animal model such as mathematical model, cell line, or computer simulation, explain why you are not using it.

Explain why the proposed species is/are the most appropriate.

Explain how you derived the number of animals requested based on the number of experimental groups, animals per group and data points required to allow statistical evaluation of your results.

Describe the steps you have taken to reduce the number of animals in your study (e.g., by refining experimental design or replacing use of animals with *in vitro* procedures).

Using the table below document your literature search which you have performed to determine all of the following: (a) your proposed research is not unnecessarily duplicative, (b) alternatives to animal research are not appropriate, and (c) for all category D and E studies, alternatives to the use of procedures that may cause more than momentary or slight pain or distress are not appropriate or available. You must have consulted at least 2 databases. Some recommended sources are: National Library of Medicine's databases and electronic information sources

http://wwwcf2.nlm.nih.gov/nlm_eresources/eresources/search_database.cfm), which include Medline, Animal Welfare Information Center (AWIC) (<http://awic.nal.usda.gov/>), National Agricultural Library's AGRICOLA (<http://agricola.nal.usda.gov/>), University of California Center for Animal Alternatives (<http://www.lib.ucdavis.edu/dept/animalalternatives/>), Current Research Information System (cristel.nal.usda.gov8080/), Toxline (available through <http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?TOXLIN>), and National Association For Biomedical Research (www.nabr.org).

Search site	Date of search	Years covered	Keywords	Number of hits*

*If your search returns hits comment here on possible duplication, overlap, and alternatives (see a, b, and c above):

9. ANIMAL DISPOSAL Indicate the method of disposal of the animals used.

Please describe the intended final disposition of the animals in your study.

Euthanasia

Species	Method of Euthanasia (Acceptable Methods by Species per 2000 AVMA Panel on Euthanasia)	Dosage, Route of Administration and Method to Ensure Death ³
<input type="checkbox"/> Mice <input type="checkbox"/> Rats <input type="checkbox"/> Other small rodent: _____ <input type="checkbox"/> Rabbits	<input type="checkbox"/> Barbiturates <input type="checkbox"/> Inhalant Anesthetics <input type="checkbox"/> CO ₂ <input type="checkbox"/> KCl with general anesthesia <input type="checkbox"/> other : _____ ¹	
<input type="checkbox"/> Birds	<input type="checkbox"/> Barbiturates <input type="checkbox"/> Inhalant Anesthetics <input type="checkbox"/> CO ₂ <input type="checkbox"/> other : _____ ¹	
Free ranging wild life <input type="checkbox"/> : _____	<input type="checkbox"/> Barbiturates IV or IP <input type="checkbox"/> Inhalant Anesthetics <input type="checkbox"/> KCl with general anesthesia <input type="checkbox"/> other : _____ ¹	
Amphibians <input type="checkbox"/> Frogs <input type="checkbox"/> Toads <input type="checkbox"/> Other: _____	<input type="checkbox"/> Barbiturates <input type="checkbox"/> Inhalant Anesthetics ² <input type="checkbox"/> CO ₂ <input type="checkbox"/> Double pithing <input type="checkbox"/> Tricaine methane sulfonate <input type="checkbox"/> Benzocaine hydrochloride <input type="checkbox"/> other : _____ ¹	
<input type="checkbox"/> Fish	<input type="checkbox"/> Barbiturates <input type="checkbox"/> Inhalant Anesthetics ² <input type="checkbox"/> CO ₂ <input type="checkbox"/> Tricaine methane sulfonate <input type="checkbox"/> Benzocaine hydrochloride <input type="checkbox"/> other : _____ ¹	
<input type="checkbox"/> Reptiles	<input type="checkbox"/> Barbiturates <input type="checkbox"/> Inhalant Anesthetics ² <input type="checkbox"/> CO ₂ ²	

¹: Other methods of anesthesia must be justified.

²: In appropriate species.

³: For inhalant anesthetics and CO₂, cervical dislocation is recommended for small rodents and birds.

Other, explain:

REMINDER: If a protocol has been terminated, please notify the IACUC Coordinator via email.

