I. ADMINISTRATIVE DATA: Please check the appropriate category for your work.

Animal Project Category: RESEARCH [ ] TEACHING/TRAINING [ ] HERD/FLOCK/BREEDING [ ]

Principle Investigator/Instructor: Position Title:

Contact Person (and phone no.) if not PI:

Institutional Affiliation: Department:

Building: Room Number:

Phone Number: E-mail: FAX Number:

Project Title:

Project Type:

[ ] New [ ] Pilot Study [ ] Revision (Major) [ ] Renewal (Full Project Review at 3 Year Intervals)

Project Starting Date: Total Project Period: from to

Project Funding Information:

Project funded: [ ] No [ ] Private Sector [ ] Dept/College [ ] UH Research Council [ ] Extramural

Name of source or funding agency:

Peer Reviewed: [ ] No [ ] Yes

Proposal submitted to Office of Research Services (ORS): [ ] No [ ] Yes, date submitted?:

The applicant may be required to submit a copy of the grant application to the compliance office when the protocol is submitted to the IACUC for review.
II. PERSONNEL QUALIFICATIONS: List each person and answer the questions for each individual. The PI should be listed as one of the project personnel.

- (1) Personnel Name: Position Title:

  - Describe the animals handling skills required for this study:

  - Will surgery be performed by the person? [ ] No [ ] Yes

  - Will physical methods of euthanasia be performed by this person? [ ] No [ ] Yes

  - List the qualifications and experience of the person for the preceding procedures listed. If the person is not yet qualified, describe how you will provide training. The applicant is responsible for providing written documentation to the IACUC when personnel are qualified to perform the procedures listed.

  - Has this person completed the *Review of the Regulations for Care and Use of Vertebrate Animals in Research, Training, and Testing*? [ ] No [ ] Yes If yes, when:

- (2) Personnel Name: Position Title:

  - Describe the animals handling skills required for this study:

  - Will surgery be performed by the person? [ ] No [ ] Yes

  - Will physical methods of euthanasia be performed by this person? [ ] No [ ] Yes

  - List the qualifications and experience of the person for the preceding procedures listed. If the person is not yet qualified, describe how you will provide training. The applicant is responsible for providing written documentation to the IACUC when personnel are qualified to perform the procedures listed.

  - Has this person completed the *Review of the Regulations for Care and Use of Vertebrate Animals in Research, Training, and Testing*? [ ] No [ ] Yes If yes, when:

- (3) Personnel Name: Position Title:

  - Describe the animals handling skills required for this study:

  - Will surgery be performed by the person? [ ] No [ ] Yes

  - Will physical methods of euthanasia be performed by this person? [ ] No [ ] Yes

  - List the qualifications and experience of the person for the preceding procedures listed. If the person is not yet qualified, describe how you will provide training. The applicant is responsible for providing written documentation to the IACUC when personnel are qualified to perform the procedures listed.

  - Has this person completed the *Review of the Regulations for Care and Use of Vertebrate Animals in Research, Training, and Testing*? [ ] No [ ] Yes If yes, when:
III. PROJECT OBJECTIVES:

- Provide a **non-technical explanation** of the purpose of animal use in layman language.

- [ ] Full renewals (every 3 year intervals) only. Progress report. Include the number of animal subjects used and whether the previous years of work have met the project objectives as stated in the original submission.

IV. ANIMAL REQUIREMENTS AND NUMBER OF ANIMALS REQUIRED:
Complete the table.

<table>
<thead>
<tr>
<th>Animal Information</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Species:</td>
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</tr>
<tr>
<td>Stock/Strain:</td>
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<tr>
<td>Sex/Age/Weight:</td>
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<tr>
<td>Source(s):</td>
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<tr>
<td>Animal Holding Location:</td>
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<tr>
<td>Transgenic – Yes or No:</td>
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<tr>
<td>Special Husbandry Needs – Yes or No:</td>
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<tr>
<td>Animal Procedure Site:</td>
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<tr>
<td>Pain or Distress Category: # of Animals</td>
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<tr>
<td>#Herd/Flock/Breeding</td>
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<tr>
<td>#USDA Category C</td>
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<td>#USDA Category D</td>
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<td>#USDA Category E</td>
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<td>Total Number of Animals:</td>
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<td>Animal Procedure Site:</td>
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<td>#USDA Category C</td>
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<td>#USDA Category D</td>
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<td>#USDA Category E</td>
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<tr>
<td>Total Number of Animals:</td>
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</table>
V. ELECTRONIC DATABASE SEARCHES (FEDERAL ASSURANCES – USDA POLICIES #11 & #12):

A. Certification that the Project is NOT Unnecessarily Duplicated

All USDA Pain or Distress Category applications C, D, and/or E are required to address this section. Herd/Flock/Breeding applications are exempt.

- Do you certify that the activities involving animals described in this protocol do not unnecessarily duplicate previous work? [ ] Yes [ ] No If no, provide explanation.

- Indicate the referenced literature you reviewed to determine that this work is not unnecessarily duplicated. [ ] Review Articles [ ] Meetings/Conferences Attended [ ] Colleague Consultations [ ] Electronic Database (List names of the databases searched):

B. Certification for Alternatives to Painful and Distressful Procedures.

Only USDA Pain or Distress Categories D and/or E protocols are required to address this section.

- Names of databases searched or other sources consulted:
- Date (m/d/y) the search was done:
- Years (Date Range) the search covered:
- Key words or search strategy used:
- Please provide a statement that non-animal and/or animal alternatives were evaluated during the electronic search. Attach additional sheets to this application if necessary.

VI. RATIONALE FOR USE OF ANIMALS (Justification of the 3 R’s):

A. Replacement:

B. Refinement:

C. Reduction:

VII. DESCRIPTION OF EXPERIMENTAL DESIGN AND ANIMAL PROCEDURES:

A. Research and Teaching/Training Projects [ ] No [ ] Yes If yes, complete the following:

- Describe the experiment design, the methods and procedures used on the animals.

- Injections or inoculations: [ ] No [ ] Yes If yes, complete table below:
<table>
<thead>
<tr>
<th>Injections or Inoculations</th>
<th>Dosage/Volume</th>
<th>Injection Site</th>
<th>Route of Administration</th>
<th>Administration Schedule</th>
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</thead>
<tbody>
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</table>

- Blood withdrawals: [ ] No [ ] Yes  If yes, complete table below:

<table>
<thead>
<tr>
<th>Sampling Methodology</th>
<th>Volume</th>
<th>Withdrawal Sites</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

- Radiation administration: [ ] No [ ] Yes  If yes, complete the table below:

<table>
<thead>
<tr>
<th>Isotope</th>
<th>Dosage/Volume</th>
<th>Anatomical Site</th>
<th>Route of Administration</th>
<th>Administration Schedule</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

- Use of Restraint: [ ] No [ ] Yes  If yes, describe the following.
  - Method:
  - Restraint Device:
  - Duration of restraint

- Describe Animal Identification Methods:

- Non-survival Surgery Procedures: [ ] No [ ] Yes  If yes, describe the procedures.

- Other Procedures: [ ] No [ ] Yes  If yes, describe the procedures.

B. Herd/Flock/Breeding Projects [ ] No [ ] Yes  If yes, provide the following.

- Describe the procedures performed on the animals. Attach copies of the relevant portions of your Standard Operating Procedures (SOPs) for the committee to review.

- Will there be procedures that involve more than slight or momentary pain. [ ] No [ ] Yes  If yes, describe.

VIII. SURVIVAL SURGERY:

Survival surgery procedures. [ ] No [ ] Yes  If yes, complete this section.
• Describe the surgical procedures:
  - Pre-
  - Intra-operative
  - Post-
• How will asepsis be maintained?

• Where will the surgery be performed? Building: Room:

• Is this a dedicated surgical facility? [ ] No [ ] Yes

• Will anesthesia monitoring and other surgical records be kept? [ ] No [ ] Yes

• Who is responsible for monitoring anesthesia?

• Who is responsible for the care of the animal post-operative?

• Will analgesics be administered? [ ] Yes [ ] No If no, explain:

• Has major survival surgery been performed on any animal prior to being placed on this protocol? [ ] No [ ] Yes If yes, explain:

• Will more than one major survival surgery be performed on an animal? [ ] No [ ] Yes If yes, justify:

• If you are planning on performing surgery on animals, have you provided written documentation that all personnel involved with the surgical procedures are qualified to perform their responsibilities? [ ] Yes [ ] No If no, explain:

IX. ANESTHESIA, ANALGESIA, TRANQUILIZATION AND SEDATIVES:

• Anesthesia, Analgesia, Tranquilizers, Sedatives [ ] No [ ] Yes If yes, complete table:

<table>
<thead>
<tr>
<th>Name of Agent</th>
<th>Dosage</th>
<th>Route of Administration</th>
<th>Administration Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

• Monitoring methods(s):

• Person(s) Responsible for monitoring:

X. METHOD OF EUTHANASIA OR DISPOSITION OF ANIMALS AT END OF STUDY:

• Euthanasia – Describe method. You are required to provide a method even though you do not intend to euthanize any animals after the study or activity.
- Chemical Agent   [ ] No   [ ] Yes   If yes, complete the table below:

<table>
<thead>
<tr>
<th>Name of Agent or Drug</th>
<th>Dosage/Volume</th>
<th>Route of Administration</th>
</tr>
</thead>
<tbody>
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</table>

- Physical Method   [ ] No   [ ] Yes   If yes, what is the method and justify the use:
- Carbon Dioxide   [ ] No   [ ] Yes   If yes, you must work with LAS personnel unless justified and approved by the IACUC to work independently.

- Adoption: [ ]
- Return to natural habitat: [ ]
- Other [ ] Describe:

- What is the method of carcass disposal if animals are euthanized?:

X. HAZARDOUS AGENTS:

- Hazardous agents used?   [ ] No   [ ] Yes   If yes, complete the table below:
- Be advised that if any of the categories are filled, a copy of this protocol will be forwarded to the UH Environmental Health and Safety Office for an independent review.

<table>
<thead>
<tr>
<th>Hazardous Agents Categories</th>
<th>List Agents and Registration Document (If Applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radioisotopes</td>
<td></td>
</tr>
<tr>
<td>Biological Hazards and Pathogens</td>
<td></td>
</tr>
<tr>
<td>Hazardous Chemicals and Drugs</td>
<td></td>
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<tr>
<td>Recombinant DNA</td>
<td></td>
</tr>
<tr>
<td>Additional Safety Concerns</td>
<td></td>
</tr>
</tbody>
</table>

XI. VETERINARY CARE:

- Who have you made arrangements with to provide veterinary care?
  [ ] UH Veterinarian(s)   Provide date contacted and response:
  [ ] Local or Contract Veterinarian(s)   Provide (attach written documentation from the contract veterinarian(s) of the terms of acceptance of responsibilities for this project:
  [ ] Veterinary care is not required/inaccessible.   Provide written justification:

XIII. OTHER IACUCs:

- Other IACUCs reviewing this application?   [ ] No   [ ] Yes   If yes, provide the following:
XIV. ENDANGERED SPECIES AND SPECIAL PERMITS:

- Are the animals being used in this activity endangered species? Yes [ ] No [ ]
- Special domestic or foreign government permits required? Yes [ ] No [ ]
- If yes, to any of the above, provide a copy of the permits for this activity.

XV. ASSURANCE STATEMENTS:

A. Acknowledgment of Compliance with Federal, State, Local Rules and Regulations; Ethical Conduct with Professional Society Guidelines; and UH Institutional Policies

- I have read the pertinent sections, understand, and will conduct research or teaching activities in accordance to the rules, regulations, and guidelines of the following that apply to my work.
  [ ] Yes [ ] No
- Check all the boxes that apply.
  [ ] US Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training
  [ ] Public Health Service Policy
  [ ] USDA APHIS Animal Welfare Act
  [ ] Marine Mammal Protection Act
  [ ] Endangered Species Act
  [ ] Guide for the Care and Use of Laboratory Animals
  [ ] Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching
  [ ] Guidelines for the Use of Wild Birds in Research
  [ ] Guidelines for the Use of Fishes in Field Research
  [ ] Acceptable Field Methods of Mammalogy
  [ ] Other federal, state, local rules and regulations and guidelines that apply to the species and funding
  Provide listing:


- I have read and understand, and will abide by the UH Vertebrate Animal Facility Occupational Health and Safety Program Manual
  [ ] Yes [ ] No

[ ] (1) RESEARCH and/or HERD/FLOCK BREEDING activities that support research:
I certify that there is demonstrable evidence that this research will contribute to the future well being of humans and animals, that any discomfort or injury will be limited to that which is unavoidable, and that anesthetics, analgesics and tranquilizing drugs will be used whenever indicated and appropriate to minimize discomfort to the animals. I am aware of current research in my field. The proposed experiments do not unnecessarily duplicate earlier efforts. Painless alternatives to this work either do not exist or would not accomplish my research goals. I further certify that these statements are true and the protocol stands as the original OR is essentially the same as found in the grant application or program/project. The IACUC will be notified in writing immediately of any changes in the proposed project, or personnel, relative to this application prior to proceeding with any animal experimentation. I will not proceed with animal experimentation until approval by the IACUC is granted.

[ ] (2) TEACHING/TRAINING and/or HERD/FLOCK/BREEDING activities that support teaching/ training:
I certify that the animal demonstrations and labs are an essential part of a well balanced curriculum. The use of animals has been carefully considered. I have considered the use of alternatives to the proposed procedures which cause more than momentary pain or distress to the animals. The minimum number of animals required to provide the quality of instruction necessary will be used in this course. I certify that the information in this application is essentially the same as contained in the course outline and a copy of the laboratory exercises using animals is on file at the Compliance Office.

______________________________  ______________________________
Signature: Principle Investigator/Instructor Date

As a reminder, have you...
- checked that all sections that pertain to your work have been completed, checked-off appropriate boxes, justified and provided detailed answers, and
- signed and dated the form.

Don’t forget...
- to renew your protocol on a yearly basis, if your work takes longer than 1 year to complete.
- to inform the IACUC in writing and get approval when you make changes or revisions to the application.

Thank you for your time and cooperation in completing this form.

INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE
FUNDING AGENCY INFORMATION

PLEASE COMPLETE THIS PAGE ONLY IF YOUR PROJECT IS BEING FUNDED.

PRINCIPAL INVESTIGATOR:
SPONSOR OR FUNDING AGENCY:

AGENCY CONTACT PERSON:

AGENCY MAILING ADDRESS:

AGENCY TELEPHONE NUMBER:

AGENCY FAX NUMBER:

---

IS THE TITLE OF THE GRANT APPLICATION PROPOSAL THE SAME AS YOUR UH IACUC PROTOCOL TITLE?: ( ) YES ( ) NO

IF NO, WHAT IS THE TITLE OF YOUR GRANT APPLICATION?:

GRANT PROPOSAL # IDENTIFIER:

---

YOUR SIGNATURE _______________________________ DATE ____________________________

Compliance Office Use Only
Project Protocol Number