

WICHITA STATE UNIVERSITY INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE (IACUC) ANIMAL PROTOCOL FORM

| Date: | | |
|-------------------------|-----------------|-----------------------|
| Principal Investigator: | | |
| Title of Project: | | |
| Protocol #: | Animal Species: | |
| Anticipated Start Date: | | Anticipated End Date: |
| Funding source: | | RTT grant/proposal #: |
| | | |

You must submit a copy of the project summary and the animal section submitted with your proposal.

OVERVIEW

1. Briefly describe the purpose of the study, experimental procedures and manipulations of the animals, and the expected outcome in lay terms. Include a justification of what you want to do and how it contributes to your work. If this is a de novo submission, provide a justification or rationale for continuing this protocol and explain any changes from the previous iteration of the study.

| SURG | GICAL PROCEDURES HERE. Step | -by-step bullet point | s are helpful. | | | |
|------|---|---|--------------------------------------|---|--------------------------------------|----------|
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| 3. | PROPOSED ANIMAL USAGE: | T-4-01-# | | | | í |
| | SPECIES | Total # Requested For Protocol | Total # Anticipated For Year 1 | Total # Anticipated For Year 2 | Total # Anticipated For Year 3 | |
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| | | | | | | <u> </u> |
| 4. | NATURE OF THE PROTOCOL/S | STUDY: | | | | |
| | Terminal (Acute) Study Nei Multiple Surgeries Ant | longed Restraint uromuscular Blocker ibody Production od/Tissue Collectior | rs Induceme Administra | ent of a Disease Sent of Behavioral ation of Test Sub ic Breeding | Stress | |
| 5. | (USDA) PROJECT (Pain) CATE | GORY: C | D E | | | |
| | Category C: Involves procedure pain-relieving drugs are used. | es that cause no p | oain or no more th | nan momentary | ∕ or slight pain a | nd no |
| | Category D: Involves <i>procedures that may cause more than momentary or slight pain or distress</i> for which appropriate sedatives, analgesics, or anesthetics will be administered. | | | | | |
| | Category E: Involves <i>procedures that may cause more than momentary or slight pain or distress for</i> which sedatives, analgesics, or anesthetics cannot/will not be administered due to scientific considerations/ requirements. | | | | | |

2. Describe the sequence and rationale of the manipulations and procedures. DO NOT DESCRIBE DETAILS OF

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| 6. Describe the characteristics of the animal selected that justify its use in the proposed study. [Consider such characteristics as body size, species, strain, breed, data from previous studies or unique anatomic or physiologic features.] | | | | | |
|---|-------------------|--------------------------|-----------------|-----------------------------|------------------------|
| 7. Give the names of all | individuals who | will work with the | e animals in th | nis study. All perso | nnel are required to |
| Name and highest degree | | | | | |
| uegree | Department | Elliali Address | Student, etc | Experience | Tor this project |
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| 7a. If personnel do not ha | ave experience, I | now will they be t | rained? | | |
| | | | | | |
| 7b. Have all Wichita Stat conflict of interest and tin | | | | | pleted a disclosure of |
| Yes | No - contac | t Compliance at <u>c</u> | compliance@v | vichita.edu. | N/A |
| | | | | | |

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7c. Do any of the personnel (including students or their immediate family members and those unaffiliated with WSU) on the project have financial arrangements with the sponsoring company or the products or services being evaluated which may include consulting agreements, management responsibilities or equity holdings in the sponsoring company?

Yes - contact Compliance at compliance@wichita.edu No N/A

ANIMAL SUBJECT DESCRIPTION

8. Strain/Stock/Mutant/Breed: Sex: Age/Size:

9. Source:

Microbial Status (Check one): SPF Conventional Axenic Feral

Other:

10. Describe how the number of animals needed for the study was determined. [The specific statistical methods or a clear rationale used to determine the numbers of animals needed MUST be provided.]

ANIMAL HUSBANDRY AND CARE

11. Are animal husbandry and routine handling practices and procedures for this study, including animal health monitoring, diet, cage, environmental control, exercise (where required), environmental enrichment (where required), and means of identification, described in the Wichita State University (WSU) standard operating procedures manual?

YES - PROCEED TO ITEM 12.

NO - ATTACH APPENDIX 1, SPECIAL HUSBANDRY PRACTICES. [All husbandry and care practices must meet standards described in the Animal Welfare Regulations and the <u>Guide for the Care and Use of Laboratory Animals</u> unless they have been specifically excepted in Appendix 1 by the WSU IACUC for scientific reasons.

12. Animal housing location:

Room Number:

Name of institution, if not WSU:

13. The current AAALAC accreditation status of the facility where animals will be housed:

ACCREDITED

NON-ACCREDITED - If Non-Accredited, attach a copy of the OLAW Assurance Statement, and a copy of the latest USDA site visit report for the Non-Accredited facility.

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14. Give the name of the veterinarian, or the institutional resource, that is responsible for providing adequate veterinary care to the animals:

EXPERIMENTAL PROCEDURES

- 15. Location where experimental procedures will be performed including building name and room number:
- 16. Will test substances be administered? [Radioisotopes, toxic, antigenic, pharmacologic, infectious, carcinogenic, or other types of substances, biomaterials or cells administered to live animals are considered to be test substances.]
 - NO, PROCEED TO ITEM 17. YES, ATTACH APPENDIX 2 TEST SUBSTANCES.
- 17. Will specimens be collected prior to euthanasia? [All body fluids and tissues are considered specimens.]
 - NO, PROCEED TO ITEM 18. YES, ATTACH APPENDIX 3 SPECIMEN COLLECTION.
- 18. Will <u>SURGERY</u> be performed as part of the experimental protocol?
 - NO, PROCEED TO ITEM 19. YES, ATTACH APPENDIX 4 SURGERY
- 19. Is death an endpoint in this study?
 - NO, PROCEED TO ITEM 20. YES, Explain why an earlier endpoint is not acceptable:
- 20. Will animals be subject to experimental procedures that are not noted elsewhere in ITEMS 16-19?
 - NO PROCEED TO ITEM 28.
 - YES Check the following applicable procedures and answer questions 21-27.

Physical restraint Noxious stimuli Forced exercise Behavioral manipulations Other:

21. Describe each procedure and the expected outcome. Include the chemical, physical, or behavior modifying characteristics of the stimulus or material administered or withdrawn.

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| 22. Who will perform the procedure? |
|---|
| 23. Describe the length of time each procedure will last. |
| 24. Will the procedure cause more than momentary pain or discomfort? |
| NO - PROCEED TO ITEM 25. |
| YES - Describe the procedures or methods that will be used to minimize pain and discomfort: |
| 25. Describe the methods for monitoring the condition of the animal during the length of the procedure and during the post-procedure period: |
| 26. Provide the name(s) of the person(s) responsible for monitoring the condition of the animals: |
| 27. You must provide to the WSU Staff the phone numbers where they can be reached during and after work hours. Check here to indicate this has been done. |
| EUTHANASIA OR OTHER DISPOSITION OF ANIMALS |
| 28. Are animals euthanized for tissue collection or at the completion of this study? |
| NO - PROCEED TO ITEM 34. |
| YES - ANSWER QUESTIONS 29-33. [For guidance on acceptable methods of euthanasia, reference should be made to the 2013 AVMA Guidelines on Euthanasia located at: https://www.avma.org/KB/Policies/Documents/euthanasia.pdf |
| 29. Two methods of euthanasia must be used - a chemical method and a physical method are recommended. |
| A. Name of the chemical agent(s) that will be used: |
| Dose: Route: |
| B. Name the physical method that will be used: |

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- 30. Justify any method of euthanasia that is NOT recommended by the AVMA Guidelines on Euthanasia or state N/A.
- 31. Give the name(s) of the person(s) who will perform the euthanasia:
- 32. Are these persons experienced with this method of euthanasia?
 - NO Name the experienced person who will train them:
 - YES PROCEED TO ITEM 33.
- 33. Describe the fate of experimental animals, other than euthanasia, after completion of the study:

MANDATORY CONSIDERATIONS

- 34. Do the procedures to be employed have the potential to cause more than momentary or slight pain or distress (Category D or E)? [The United States Department of Agriculture has determined that surgery conducted under anesthesia is a potentially painful procedure.]
 - NO PROCEED DIRECTLY TO ITEM 36.
 - YES ANSWER QUESTIONS 35.
- 35. Provide a narrative description of the methods and sources used to determine that suitable alternatives were not available or applicable to this study such as less sentient animal models, computer models, and tissue culture. The following are examples of relevant methods that may be supportive of your effort: AGRICOLA database, MEDLINE database, CAB Abstracts database, AWIC TOXLINE database, BIOSIS database, scientific journals, scientific meetings, and/or scientific discussions.

When a database search is the primary means of meeting this requirement, the narrative must, at a minimum, include:

- a. the name of the database(s) searched:
- b. the date the search was performed:
- c. the period covered by the search:
- d. the key word and/or the search strategy used:
- 36. Provide the name of the veterinarian who has been involved in planning this experiment:

MISCELLANEOUS FEDERAL REQUIREMENTS

All drugs classified by the DEA as controlled substances that will be used in this study must be stored in a locked cabinet and accessible only to authorized persons in accordance with DEA regulations.

37. Will a flammable anesthetic agent be used in ANY PORTION OF these animal studies?

NO - PROCEED TO ITEM 38.

YES - A COPY OF AN APPROVED "REQUEST TO USE EXPLOSIVE ANESTHETICS" must be on file with the Environmental Health and Safety Fire Safety Chief.

SIGNATURES

38. Certification by Principal Investigator.

I certify that these studies do not unnecessarily duplicate previous experiments. I further affirm that, to the best of my knowledge, information provided in this Animal Component of Research Protocol is complete and accurate and that no significant changes will be made without advance approval of the IACUC. I agree to provide records of personnel training when requested by USDA inspectors.

| | Principal Inve | estigator Signature | Date |
|--------------|----------------|----------------------------------|---|
| 39. <i>A</i> | Approval Sign | natures | |
| provis | sions of the A | | als described in this protocol in accordance with Care and Use of Laboratory Animals, and find that |
| | Attending V | /eterinarian Signature | Date |
| | IACUC Cha | air Signature | Date |
| 40. A | PPENDICES | S ATTACHED: | |
| | None | Special Husbandry (Appendix 1) | Test Substances (Appendix 2) |
| | | Specimen Collection (Appendix 3) | Live Surgery (Appendix 4) |

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SPECIAL HUSBANDRY PRACTICES

(Complete only if applicable or mark N/A here)

| Describe non-standard practices or procedures: [Examples include: close confinement, temperature extremes, food or water deprivation, dietary manipulations, special housing, modified light cycle, restricted observation, restricted enrichment, etc.] |
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| |
| 2. Justification: |
| |
| 3. Who will perform the procedure? |
| 4. Describe the length of time each procedure will last: |
| 5. Will the procedure cause more than momentary pain or discomfort? |
| NO - PROCEED TO ITEM 6. |
| YES - Describe the procedures or methods that will be used to minimize pain and discomfort. |
| |
| 6. Describe the methods for monitoring the condition of the animal during the length of the procedure and during the post-procedure period: |
| |
| 7. Provide the name(s) of the person(s) responsible for monitoring the condition of the animals: |
| You must provide to the WSU Staff the phone numbers where they can be reached during and after work hours. Check here to indicate this has been done. |

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1. Class of the test substances or other material:

TEST SUBSTANCES

(Complete only if applicable or mark N/A here)

| A. RadioisotopeB. Infectious AgentC. CarcinogenD. Toxic Chemical | E. Tissues/CellsF. Pharmacological AgentG. AdjuvantsH. Antigenic substance | | I. Biomaterial J. Excreta or Body Fluids K. Other: | | |
|---|---|--------------------|--|-------------|----------|
| 2. Identify the test substances or other | er material that v | vill be administe | ered to the animals | 3 : | |
| SUBSTANCE NAME | CLASS | DOSE | FREQUENCY | ROUTE | DURATION |
| | | | | | |
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| 3. Will the test substance(s) cause pa | ain or distress to | the animal? | | | |
| NO - PROCEED TO ITEM 4. | | | | | |
| YES - Describe the measures | that will he take | n to alleviate or | minimize these et | ffects | |
| TEO Describe the measures | triat will be take | ir to dileviate of | minimize trese e | 10010. | |
| | | | | | |
| 4. Is the test substance considered to | be a hazardous | material? | | | |
| | o a mazaraoao | matorial. | | | |
| NO - STOP HERE. | | | | | |
| YES - Give names of personn | el who will work | with hazardous | material then pro | ceed to ITE | EM 5: |
| | | | | | |
| | | | | | |
| 5. If you are using any radio-isotope, these materials by the Director of Env | | | | | |

consulted with the Attending Veterinarian, and that adequate precautions, containment facilities, protective devices, carcass and waste disposal, cleanup procedures, and other necessary safety procedures are in place to protect personnel and prevent accidental animal exposure to the hazardous material. Please provide a letter

Director, Environmental Health & Safety

documenting the safety precautions that will be used.

Date

APPENDIX 3

SPECIMEN COLLECTION PRIOR TO EUTHANASIA

(Complete only if applicable or mark N/A here

1. Will invasive procedures be employed to collect tissue or body fluids from live animals during this experimentation?

NO - PROCEED TO ITEM 2.

YES - Characterize the procedure in the box below. [Any procedure that penetrates a body orifice, the integument, or a hollow visceral organ is invasive.]

| Tissue Or Fluid Collected | Method Of Collection | Amount | Frequency |
|---------------------------|----------------------|--------|-----------|
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2. Will the procedure cause more than momentary pain or distress?

NO - PROCEED TO ITEMS 4 & 5.

YES - Give the anesthetic agent, sedative, or tranquilizing agent that will be used. *IF NONE IS TO BE USED, PROCEED TO ITEM 3.*

| Agent | Dose | Frequency | Route |
|-------|------|-----------|-------|
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| APPENDIX 3 (continued) |
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| 3. Justification for omission of pain relieving agents: |
| 4. Describe the method of restraint used to execute this task for all procedures where surgical plans of general anesthesia are not detailed in number 2 above: |
| 5. Briefly describe the non-invasive procedure and how the specimens will be collected: |
| |

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LIVE SURGERY

(Complete only if applicable or mark N/A here

| Other: | | |
|---|----------------------------------|---------------------------|
| Withhold Water - Length: | Scrub Site | e Place Catheter |
| Fasting - Length: | Clip Hair | Disinfect Site |
| 3. Pre-operative procedures: | | |
| 2. Who will do the surgery? | | |
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| Describe the surgical procedures in enough detail s being done to the animal. | o that reviewers will be able to | determine what is actuall |

4. Preoperative medications: Include sedatives/tranquilizers/other pre-anesthetic medications here.

| Drug | Dose | Route | |
|------|------|-------|--|
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APPENDIX 4 (continued)

5. Intraoperative medications and support: *Include anesthetic agents/paralyzing agents/fluids/ pharmaceuticals essential to support the surgical procedure.*

| Drug | Dose | Route | |
|------|------|-------|--|
| | | | |
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| 6. | Federal | regulations | prohibit the | e use of | paralyzing | agents | without | general | anesthesia. | Will y | ou use | paraly | zing |
|----|---------|-------------|--------------|----------|------------|--------|---------|---------|-------------|--------|--------|--------|------|
| | agents? | • | | | | | | | | | | | |

NO - PROCEED TO ITEM 7

YES - Why is it necessary to use these agents?

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

8. Will the animal subjects regain consciousness following surgery?

NO - STOP HERE

YES - ANSWER ITEM 9-15

- 9. How long will the animal survive?
- 10. Will the surgery be performed in a room or area suitable for aseptic surgery?

YES - Identify the location where surgery will be performed:

NO - Explain:

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APPENDIX 4 (continued)

11. Which of the following aseptic techniques will be used?

| | Sterile Instruments None: | Gloves | Gown | Surgeon Scrub | Face Mask | | |
|--|---|------------------|----------------|---------------------|---------------------|-----------------------|--|
| | Other: | | | | | | |
| 12. | Will multiple survival sur | gical procedure | s be perform | ed on a single anin | nal? | | |
| | YES - PROCEED TO | O 13. | | | | | |
| | NO - PROCEED TO | 14. | | | | | |
| 13. Will the multiple survival surgeries be MAJOR? (As a general guideline, major survival surger laparotomy, thoracotomy, joint replacement, and limb amputation] penetrates and exposes a body produces substantial impairment of physical or physiologic functions, or involves extensive tissue dis or transection (Brown et al. 1993). Minor survival surgery does not expose a body cavity and causes no physical impairment; this category includes wound suturing, peripheral vessel cannulation, percurbiopsy, etc. | | | | | | | |
| | YES - Explain: | | | | | | |
| | NO - PROCEED TO Describe the post-opera animals: | | ding drugs, fl | luids, and physical | support methods, | that will be given to | |
| | Drug or fluid | Dose | Freque | ncy Roi | ute | Duration | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 14a | a. Physical support metho | ods: | | | | | |
| 15. | Who will be responsible | for post operati | ve care? | | | | |
| An | after work contact phone vided. | | | to the WSU staff.(| Check here to indic | cate that it has been | |

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