Animal Use Protocol

Use of Live Vertebrates for Research, Teaching or Demonstration

Approved: November 30, 2023

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| Protocol Information – Please Leave Blank |
| Protocol # |  |
| Approval Date: |  |
| Expiration Date: |  |

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| --- | --- |
| **Date Submitted to IACUC** | MM/DD/YEAR |
|  |  |
| **Project Title:** | PROJECT TITLE: **(If project relates to a grant or contract application, give that title; if multiple protocols relate to one grant, give unique titles for each protocol; if the project is related to a class, give the course name and number)** |

**Estimated Protocol Effective Dates:**  MM/DD/YEAR to MM/DD/YEAR

(Not to exceed 3 years including two yearly renewals)

**Is this protocol related to an external grant or contract application?** [ ] Yes [ ] No

# If yes, complete the following:

Agency: (AGENCY) Date Submitted: (DATE)

Grant #: (GRANT #)

University account for Animal Care Facility per diem charge: (ACCOUNT #)

# If the protocol is not related to an external grant or contract application, complete the following:

University account for Animal Care Facility per diem charge: (ACCOUNT #)

**Personnel**

1. Primary Investigator/ Instructor Information

|  |  |  |
| --- | --- | --- |
| Name: |  | (NAME) |
| Academic Rank: |  | (ACADEMIC RANK) |
| Campus Phone: |  | (CAMPUS PHONE) |
| Emergency Phone: |  | (EMERGENCY PHONE) |

1. Attending Veterinarian

|  |  |  |
| --- | --- | --- |
| Name: |  | (NAME) |
| Campus Phone: |  | (CAMPUS PHONE) |
| Emergency Phone: |  | (EMERGENCY PHONE) |

1. List of all individuals that will handle animals using this protocol, including their email address, phone number, affiliation, and level of expertise (e.g., relevant qualifications). If the protocol applies to a class, then specify.

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| Detail: |

**If additional personnel become involved in handling animals, used in this protocol, it is the responsibility of the Primary Investigator to notify the IACUC and Animal Care facility in writing prior to start.**

1. Has the investigator/instructor and all listed personnel above received the appropriate vaccinations?

☐Yes ☐No ☐Not Applicable

1. Is it necessary for personnel listed on this protocol to be tested for TB?

☐Yes ☐No ☐Not Applicable

1. If you have questions about the kind of vaccination or TB, call the Animal Care Facility at 678 2359.
2. All U of M personnel involved in this protocol must complete the animal care and use training program and be enrolled in the occupational health and safety program before animals can be procured or before experiments/teaching or demonstration. In submitting this protocol, I, as Principal Investigator/Instructor accept the responsibility for compliance with this requirement. (NOTE FOR IACUC: highlight indicates revision to text)
3. In addition, the Principal Investigator/Instructor must be willing to provide appropriate supervision for all persons working on this protocol. In the case of a class, the Instructor must be responsible for training any students in classes involved before using animals.

**Project Description**

1. Summary (In the textbox below, enter a brief description of your project using lay terms)

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1. Describe IN DETAIL the procedures you will follow. Include accompanying documentation and reference to previously published work in the box below. Provide a complete bibliographic citation and describe any variations from the published technique. The bibliography may be included in the box below or appended to this protocol. Describe experimental endpoints and humane endpoints. Experimental endpoints occur when scientific aims and objectives have been reached. Humane endpoints are points at which pain or distress in experimental animals are prevented, terminated, or relieved.

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| Procedures: |
| Experimental Endpoints: |
| Humane Endpoints: |

1. Rationale for Involving Animals and Appropriateness of Species and Number Used.

Indicate (here) briefly the short and/or long-term benefits (to humans and/or other animals) of this use of animals for research, teaching or demonstration. Provide a rationale for and the number of animals to be used. In addition, state briefly why living animals are required for this study, rather than some alternative model

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1. Do the procedures described in B above, have the potential to inflict more than momentary pain or distress (this does not include pain caused by injection or other minor procedures)?

[ ] YES

[ ] NO

I have considered alternatives to procedures that might cause more than momentary or slight pain/distress, and I have not found such alternatives. As such, I have used one or more of the following methods and sources to search for such alternatives

|  |  |  |
| --- | --- | --- |
| [ ] Agricola Data Base |  | [ ] PubMed.gov |
| [ ] TOXLINE |  | [ ] BIOSIS |
| [ ] Lab. Animals Journal |  | [ ] Lab Animal |
| [ ] ATLA (Alternatives to Laboratory Animal Journal) |  | [ ] CAB Abstracts |
| [ ] Google Scholar |  | [ ] Lab. Animal Sci. Journal |
| [ ] Alternatives to Animal Use in Research, Testing and Education |  | [ ] Animal Welfare Info Center |
| [ ] CARL |  | [ ] Quick Biblio. Series |
| [ ] Other, list here:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  | [ ] "Benchmarks" |
| [ ] Direct contact with colleagues **(if selected, you MUST document this below)** |
|  |

1. List keywords used for literature search and date(s) of search(es):

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1. What time period does the literature search cover?

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**Animal Use**

1. List all animal species to be used. See example below

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| --- | --- | --- | --- | --- | --- |
| **Species** | **Number1** | **Age2** | **Sex2** | **Weight2** | **Housing Location (Bldg./Rm#** |
| Hooded Wistar Rats | 45 | 2 Months | M | 250-350 mg | PSY Bld./ 422I |
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**1Individuals using ectotherms need to only approximate numbers**

**2Individuals using fish or other ectotherms need not answer**

Are any species threatened or endangered? [ ] Yes [ ] No

1. Source of animals

[ ] Commercial Vendor: (SOURCE)

[ ] Bred at the University of Memphis

[ ] Captured from wild. Identify the method of capture: (METHOD)

[ ] Transferred from another study: (IACUC PROTOCOL #)

[ ] Donated: (SOURCE)

[ ] Tennessee Wildlife Resources Agency

 Is the Supplier USDA approved? [ ] Yes [ ] NO

 **If not, explain why:**

 [ ] Animals already resided at UM

 [ ] Other: (REASON)

1. Will surgery be conducted on animals? [ ] Yes [ ] NO

**If yes, complete this section:**

[ ] Non-Recovery Surgery [ ] Recovery Surgery

[ ] Multiple Survival Surgery **(if the latter is checked, complete section F)**

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| --- | --- |
| **Surgeon(s)****(Name/Job/Title/Academic Rank)** | **Location of Surgery****(Bldg./Room #)** |
| **1.** |  |
| **2.** |  |

1. Will anesthetic(s), analgesic(s) or tranquilizing agents be administered?  [ ] Yes [ ] NO

**If yes, complete this section:**

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| --- | --- | --- | --- | --- |
| **Species & Sex** | **Agent** | **Dose** | **Route** | **Preformed By:****(Name/Title/ Academic Rank** |
| M Hooded Wistar rats | sodium pentobarbital | 50 mg/kg | i.p. | Mr. Smith/Research Technician/B.S. |
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1. Will euthanasia be carried out? [ ] Yes [ ] NO

 **If yes, complete this section:**

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| --- | --- | --- | --- | --- |
| **Species & Sex** | **Agent** | **Dose** | **Route** | **Preformed By:****(Name/Title/ Academic Rank** |
| M Hooded Wistar rats | sodium pentobarbital | 50 mg/kg | i.p. | Mr. Smith/Research Technician/B.S. |
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**If no, describe the disposition of animals(s) at study conclusion**

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| Description: |

1. Will special housing, conditioning, diets or other conditions be required?  [ ] Yes [ ] NO

**If yes, please explain.**

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| Description: |

1. Will animals be removed from the UM campuses at any time? [ ] Yes [ ] NO

 **If yes, please indicate where (Bldg./Room #) and for how long.**

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| Description: |

1. If they are to be housed for more than 24 hours outside approved facilities at UM, provide scientific justification in the box below.

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| Justification: |

**Toxic and Hazardous Substances**

1. Check off any of the following below that will be used in your experiments

[ ]  Infectious agents (Fill out a, b)

[ ]  Radioisotopes (Fill out a, b, e)

[ ]  Toxic chemicals or carcinogens (Fill out a, b) Recombinant DNA (Fill out a)

[ ]  Experimental drugs (Fill out a)

[ ]  Malignant cells or hybridomas (Fill out a, c) Adjuvants (Fill out a)

[ ]  Controlled substances (Fill out a, d, e)

**For each checked off category, answer the questions indicated below**

* 1. Identify the substance(s) and completely describe their use, including the route of administration to the animal(s)

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* 1. Describe all procedure necessary for personnel and animal safety including biohazardous waste, carcass disposal and cage decontamination

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* 1. If transplantable tumors or hybridoma cells are to be injected into the animal(s), have the tissues/cells been tested for inadvertent contamination?

 [ ] YES [ ] NO

 **If yes what was the result? (Indicate in the box below)**

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* 1. In the box below, provide a complete list of these substances, and if their use is not explicitly explained in the materials already provided, explain their use and role in the research.

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* 1. DEA license Information:

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| To Whom the License is Issued:  |  |  |
| DEA License Number:  |  |  |

* 1. Radioisotope License Information

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| To Whom the License is Issued: |  |  |
| Radioisotope License Number: |  |  |

**Pain and Distress Classification**

**Check off each category that applies to this application and provide the estimated number of animals to be used in each category:**

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| **Category** | **Animal #** | **Description of Pain Category** |
| [ ]  B | 0 | Animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery, but not yet used for such purposes. E.g.: Animals on breeding protocols with no research or experimental component, Euthanizing animals on a holding protocol following current professional standards, observing animal behavior in their home enclosures without manipulation. |
| [ ]  C | 0 | Animals upon which teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used |
| [ ]  D | 0 | Animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used |
| [ ]  E | 0 | Animals upon which teaching, experiments, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests |

**Justification for category E studies and deviations from standard techniques**

Describe in the box below steps to be taken to monitor potential or overt pain and/or distress during this study and how such pain or distress will be limited. Be as detailed as necessary to justify your procedure. For USDA covered species: Provide a brief explanation, in plain terms, of the procedures causing more than slight or momentary pain or distress. Focus on what the animal experienced (e.g., seizures, neurologic signs, inappetence, lethargy, gastrointestinal distress, etc.). The reasons pain and distress cannot be relieved should be science-based and described clearly in plain terms.

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| Description: |

**Certifications**

By submitting this protocol, I am acknowledging that I comply with the certifications included in this section (Check One)

[ ]  Animal Use for Research. I certify that the above 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 of any changes in the proposed project, or personnel, relative to this application, prior to proceeding with any animal experimentation. I will not purchase animals nor proceed with animal experimentation until approval by the IACUC is granted.

[ ]  Animal Use for Teaching/Demonstration. 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 in the IACUC office. The IACUC will be notified 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.

Estimate the cost of maintaining animals used in this protocol based on current per diem charge at University of Memphis.

Please specify cost per unit of time: $

Specify anticipated total costs for project duration: $

# As supervisor of this project, it is required that you inform your department chair concerning any animal per diem costs related to this project that are to be paid by the department.

**By submitting this protocol, the Principal Investigator/Course Director indicates that the following have been considered**:

1. Alternatives to use of animals.
2. Reduction of pain and stress in animals to the lowest level possible.
3. The proper needs of the animals with respect to housing and care.
4. The lowest number of animals used that will give the appropriate experimental results.
5. Use of the most primitive species that will give the appropriate experimental results.
6. Provide appropriate training to all personnel regarding the care and handling of the species used, as well as the procedures outlined in this protocol, before commencing the experiment, teaching, or demonstration.
7. That this protocol is not an unnecessary repeat of results already in the literature or in the case of teaching/demonstrations, results that can be demonstrated using models or video material.

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| Principal Investigator: |  |  |
| Email Address: |  |  |
| Date: |  |  |

New protocols or modifications or renewals to protocols must be submitted to the IACUC Chair by the 1st business day of the month to be considered for review during that month. Incomplete protocols will be returned to the principal investigator.

Federal Law requires that members of the IACUC be given adequate time to read and review protocols including any changes or revisions in them

IACUC Animal Use Form must be completed and submitted to iacuc@memphis.edu.