**APPLICATION FOR THE USE OF ANIMALS IN RESEARCH**

**IACUC Protocol #:**       *(To be assigned by the IACUC)*

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| **1. INSTRUCTIONS** |
| a. Complete each section of this application. b. Submit completed applications and all necessary appendices *(as Word documents)* to iacuc@liberty.edu. |

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| **2. PROTOCOL TITLE** |
| **Title:**  |
| ***Note:*** *The title of this IACUC application must match the title of the grant that supports this research. If the described research activity involving animals is supported by multiple grants with different titles, or a grant that supports this research is awarded later during the 3-year approval period of this protocol, inform the IACUC by completing and submitting a Protocol Amendment Form.* |

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| **3. PERSONNEL** |
| **Principal Investigator (PI):**  |
| Title/Position:  | School/Department:  |
| Campus Address:  |
| Phone:  | LU Email:  |
| **Co-Researcher(s):**  |
| School/Department: |
| Phone:  | LU/Other Email:  |
| ***Note:*** *PI must meet IACUC eligibility requirements. Additional co-researchers may be added on the same line. If you include student researchers, review the applicable* [*IACUC policy*](http://www.liberty.edu/media/9995/policies/instructionalprotocolspecific/Policy_ANIMAL_USE_IN_LEARNING_OR_TEACHING.pdf) *for instructions.* |

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| **4. QUALIFICATIONS** |
| **Name & Degree(s)** | **Role** | **Years of Experience w/ Species** | **Completed Training?****(Yes/No)** |
|   |   |   |  Yes No |
| ***Note:*** *Indicate the role of involved personnel as either* ***Principal Investigator (PI), Co-Researcher (CR),*** *or* ***Technicians/Assistants (T)****. Indicate each individuals years of experience with the species described in this application (ex: 6yrs/Mice, 4yrs/Rabbits). Completion of CITI Training and experience regarding the regulatory, occupational health & safety and care & use aspects of the species requested is required prior to IACUC approval of this protocol. Information about required IACUC training is available on the* [*IACUC website*](http://www.liberty.edu/iacuc)*.* |

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| **5. FUNDING SOURCE & TIMELINE** |
| **Please enter the expected duration of your study** *(up to 3 years)***:**  |
| **Is your study funded** *(departmental funds, grants, or otherwise)***?** No *(Proceed to #6)* Yes *(complete the below information)*: Pending *(complete the below information)*: |
| **Agency/Department/Organization:**  |
| **Grant/Account #** *(if applicable)***:**  |

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| **6. LOCATION** |
| **Location(s) where animals will be housed** *(include specific room numbers):* |
| **Location(s) where protocol will be conducted** *(list all study locations and specific room numbers)*:  |
| **Has housing space/availability been verified with the appropriate facility personnel?** No Yes |
| **Will appropriate social housing and/or enrichment be provided for each species used?** No *(justify)*:  Yes N/A |
| **Indicate personnel responsible for overseeing the housing, feeding, and non-medical care of the animals** *(these individuals must be experienced in the proper care, handling, and use of the species)*:  |
| **Will any animal research/procedural/testing areas outside of the designated animal housing facility be used for this protocol?** No *(Proceed to #7)* Yes *(Complete the below questions)* |
| **OFF-SITE/ANIMAL REMOVAL QUESTIONS** |
| **Provide a scientific or logistical justification for why animals must be removed from the facility:**  |
| **Indicate the location and approximate number of hours the animals will be held at this site:**  |
| **Indicate whether animals will need to be returned to housing after the procedure, or if the procedure will be terminal:**  |
| ***Note:*** *Please list all study locations. Animal removal/re-location from a facility requires prior IACUC approval.* |

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| **7. LITERATURE SEARCH** |
| **Perform a literature search** to demonstrate that suitable alternatives/refinements to these procedures and aspects of these procedures, which may cause pain or discomfort to animals or to this animal use, are not available or applicable. The database(s), years (within the last 10 years), and search term(s) used must be included below: |
| **Databases Used** *(List at least 2)*:  |
| **Years Queried** *(Must be within the last 10 years, justify if otherwise)*:  |
| **Search Terms** *(Include all terms used)*:  |
| **Based on the information obtained from the literature search, please address how the three R’s are incorporated into the study design:*** **Replacement** *(the use of proven methods which avoid or replace the use of animals in research)*:
* **Reduction** *(the use of methods that enable researchers to obtain comparable levels of information from fewer animals)*:
* **Refinement** *(the use of methods that alleviate or minimize potential pain/suffering/distress, and enhance animal welfare)*:
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| **As appropriate, please provide citations for this protocol/literature search:**  |
| ***Note:*** *Additional pages of response are permissible if the item and page number(s) are identified.* |

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| **8. PROTOCOL CLASSIFICATION** |
| **Please select the appropriate option:** New Project *(Proceed to #9)* Three-Year Renewal *(Complete the below question)* |
| **Provide a brief summary (a few sentences) describing the work accomplished during the last approval period.** Explain how the work proposed in the renewal extends the previous studies:  |

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| **9. PURPOSE AND PROCEDURES** |
| **State (in lay terms) the purpose and scope of work for this request.** This may include your research hypothesis or teaching objectives:  |
| **As necessary, please define any technical terms or abbreviations used in this project description:**   |
| **Outline or describe (in chronological order) the procedures in which animals will be used.** Include the general sequence and schedule of what will be done to the animals. Section 9 or 11 should include an explanation for assigning the specific number of animals to the different pain categories in Section 10:  |
| **Briefly provide a harm/benefit analysis justifying the use of these animals:**  |
| ***Note:*** *For complicated experimental designs, it may be appropriate to include a chart, diagram, or table which depicts the experiments or sequence of events.* |

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| **10. ANIMAL CHARACTERISTICS AND PAIN CATEGORIES** |
| **List and describe the animals to be studied.** Indicate strain or line designations if rodents are requested. Indicate any special characteristics that will be used for the purposes of the study. Include the anticipated number of animals to be used in each [USDA pain category](http://www.liberty.edu/media/9995/policies/animalcareanduse/Guidelines_USDA_PAIN_AND_DISTRESS_CATEGORIES_IN_IACUC_PROTOCOLS.pdf), and the total number of animals to be involved during the three-year approval period.  |
| **Group Name/Designation:**  |
| Species, Strain, or Line Used:  |
| Characteristics (Age, Sex, Weight):  |
| Cat. B:  | Cat. C:  | Cat. D:  | Cat. E:  | Total:  |
| **Group Name/Designation:**  |
| Species, Strain, or Line Used:  |
| Characteristics (Age, Sex, Weight):  |
| Cat. B:  | Cat. C:  | Cat. D:  | Cat. E:  | Total:  |
| **Group Name/Designation:**  |
| Species, Strain, or Line Used:  |
| Characteristics (Age, Sex, Weight):  |
| Cat. B:  | Cat. C:  | Cat. D:  | Cat. E:  | Total:  |
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| Species, Strain, or Line Used:  |
| Characteristics (Age, Sex, Weight):  |
| Cat. B:  | Cat. C:  | Cat. D:  | Cat. E:  | Total:  |
| **Group Name/Designation:**  |
| Species, Strain, or Line Used:  |
| Characteristics (Age, Sex, Weight):  |
| Cat. B:  | Cat. C:  | Cat. D:  | Cat. E:  | Total:  |
| **Group Name/Designation:**  |
| Species, Strain, or Line Used:  |
| Characteristics (Age, Sex, Weight):  |
| Cat. B:  | Cat. C:  | Cat. D:  | Cat. E:  | Total:  |

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| **11. STATISTICAL ANALYSIS** |
| **PART A:** Briefly describe the rationale (using statistical analysis whenever possible) to determine the total number of each species of animals declared above in response to Section 10 that will be needed for use during the three-year approval period:  |
| **PART B:** Include a power analysis justifying the sample size required to detect experimental changes. [Additional resources](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3826013/) are available for performing this analysis from NCBI. If you believe that no power analysis is necessary, justify below:  |
| ***Note:*** *For complicated experimental designs, it may be appropriate to indicate the # of animals needed for each experimental group, the # of groups required, and the analyses conducted using each group. Alternatively, you may include a flow chart depicting the sequence of events and the number of animals required for each step.* |

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| **12. JUSTIFICATION OF ANIMAL USE & ACQUISITION** |
| **Describe the characteristics of the animals** **requested** that justify their use in this protocol:  |
| **How will you obtain the animals requested above** (please provide the vendor, if applicable)**?** |
| ***Note:*** *If animals are not obtained from an IACUC-approved vendor, provide justification above.* |

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| **13. IACUC PRINCIPLES AND PROCEDURES CONSIDERATIONS** |
| **Will animals be involved in procedures that are anticipated to have the potential to produce more than momentary or slight pain, discomfort, or distress?** (Which cannot or will not be alleviated by the use of appropriate anesthetics, analgesics, or tranquilizers) No *(Proceed to # 14)* Yes *(Complete the below questions)* |
| **Within the space below, define the clinical criteria that will be used to ensure timely intervention and treatment, or removal of animals from the study either in advance of, or immediately after recognition of the discomfort.** The earliest possible clinical endpoint, which will contribute to the resolution of the hypothesis, must be identified and used. If avoidance or alleviation of animal pain or discomfort adversely affects the protocol, provide a detailed justification of why treatments cannot be initiated:  |
| **Describe any alternatives to procedures that may cause more than momentary or slight pain or distress. If none exist, provide the sources used to determine that alternatives are not available:**  |

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| **14. ANIMAL DEATH** |
| **Is animal death (excluding death from euthanasia) an intentional endpoint in this protocol?** (e.g., survival analysis, radiation, toxicity, carcinogenesis testing) No *(Proceed to # 15)* Yes *(Complete the below question)* |
| **Explain why an earlier endpoint is not possible:**  |

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| **15. GOOD LABORATORY PRACTICE STUDY** |
| **Will this study be performed in accordance with** [**21 CFR 58**](https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm?CFRPart=58) **as a good laboratory practice (**[**GLP**](http://www.fda.gov/downloads/ICECI/EnforcementActions/BioresearchMonitoring/UCM133748.pdf)**) study?** No *(Proceed to # 16)* Yes *(Attach a copy of the GLP study protocol)* |

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| **16. CONTROLLED/SCHEDULED SUBSTANCES** |
| **Will controlled/scheduled substances (per the Drug Enforcement Administration) be used in the protocol?** No *(Proceed to # 17)* Yes *(Complete the following questions)* |
| **DEA Registrant Information** |
| Registrant Name:  |
| Title/Position:  | School/Department:  |
| Campus Address:  |
| Phone:  | LU Email:  |
| **Does the registrant have a DEA registration for the study location?** No Yes |
| **List how and where the controlled/schedule substances will be stored:**   |
| **List the controlled substance(s) to be used:**   |
| **List all authorized users for this protocol:**   |

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| **17. EXPERIMENTAL PROCEDURES** |
| **A. SPECIAL HUSBANDRY: Will other than standard routine husbandry and handling practices be required for this protocol** (e.g., food, fluid, or caloric restriction, unique diets/nutritional supplements, specialized caging/environments, or non-standard health monitoring)? No *(Proceed to #17b)* Yes *(Complete and Attach Appendix A)* |
| **B. TEST SUBSTANCES: Will test substances be administered to animals as part of this protocol** (e.g., radioisotopes, toxic, immunogenic, pharmacologic, infectious, carcinogenic agents, biomaterials, or cells)? No *(Proceed to #17c)* Yes *(Complete and Attach Appendix B)* |
| **C. SPECIMEN COLLECTION ANTE-MORTEM: Will specimens be collected from animals prior to euthanasia as part of this protocol** (e.g., tissues, blood, lymph, or other bodily fluids)? No *(Proceed to #17d)* Yes *(Complete and Attach Appendix C)* |
| **D. SURGERY: Will surgery be performed on animals as part of this protocol?** No *(Proceed to #17e)* Yes *(Complete and Attach Appendix D)* |
| **E. OTHER EXPERIMENTAL PROCEDURES: Will animals be subject to experimental procedures other than those described above** (e.g., behavioral manipulations, noxious stimuli, forced exercise, or physical restraint)? No *(Proceed to #17f)* Yes *(Complete and Attach Appendix E)* |
| **F. FIELD STUDY—WILD CATCH: Will wild animals be captured and studied as part of this protocol?** No *(Proceed to #17g)* Yes *(Complete and Attach Appendix F)* |
| **G. BREEDING: Will rodents be bred as part of this protocol?** No *(Proceed to #18)* Yes *(Complete an Application for a Breeding Protocol)* |

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| **18. EUTHANASIA** |
| **Will animals be euthanized for post-mortem tissue collection, or will animals be euthanized at the completion of this study?** No *(Indicate final disposition of the involved animals*):  Yes *(Complete the below question)* |
| **Does the method of euthanasia and means of assuring death following euthanasia comply with IACUC principles and policy, which describe the appropriate use of euthanasia, including adherence to AVMA approved methods?** No *(Describe method(s) used, and why a deviation is necessary)*:  Yes *(Complete the chart below)* |
| **Species Used** | **Method(s) of Euthanasia** | **Dose/Route** | **Years of Experience w/ Method** |
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| **\*\*Be sure to submit all required appendices and study materials with this application. Once this application is processed by the IACUC office, a request for a signed investigator agreement will be sent via email.\*\*** |