**IACUC Protocol Application for Field Research**

**IACUC Use Only**

**Protocol ID Number:**

**Submission Date/Version:**

**Review Type/Date/Determination:**

**Expiration Date:**

1. **Project Identification**
   1. **Project Title:**
   2. **Type of Application:**

**New Protocol**

**Revision to Approved Protocol ID #:**

**Indicate Version #:**      

**3-Year Renewal of Protocol #:**

* 1. **Source of Funding:**

**Provide Grant Identification Number and Title (Federal Funds Only):**

*Note: A Financial Conflict of Interest (FCOI) Disclosure and FCOI training through CITI Program (*[*www.citiprogram.org*](http://www.citiprogram.org)*) must be current and filed with OSP for all federally-funded projects. Date FCOI disclosure was filed:*

* 1. **Principal Investigator (PI)/Co-Principal Investigator:** (Note: PI Eligibility is in Investigator’s Handbook)

**Name (Last, First MI):**       **Department:**

**Office Phone #:**       **Home Phone #:**       **Email:**

**Co-PI Name (Last, First MI):**       **Co-PI** **Department:**

**Co-PI Office Phone #:**       **Co-PI Home Phone #:**       **Co-PI** **Email:**

**Field Site Contact Name:**       **Site Contact Phone #:**       **Site Contact** **Email:**

* 1. **PI Certification:**

If the IACUC approves my application, I agree to execute this work as described; request approval from the IACUC for changes; comply with the guidelines set forth by the IACUC. I will be responsible for the training, supervision and work of any staff or students working on the project. I realize that failure to adhere to policies related to animal care and use may result in suspension or revocation of permission to perform animal research. The activities described in this study do not unnecessarily duplicate a previous experiment. My Department Chair has been informed of the proposed research.

Note: This form may be signed electronically or by typing your name if it is submitted from the PI’s UWO email address.

**PI Signature:**       **Date:** Click or tap to enter a date.

**Co-PI Signature:**       **Date:** Click or tap to enter a date.

**Instructions for Completing this Form:**

***New Project:*** *This field wildlife research protocol form was adapted from the sample wildlife protocol form endorsed by the American Society of Mammalogists in March 2016. This form was designed specifically for research with vertebrate animals in the field. If animals will be brought into captivity for the study, please complete the IACUC Protocol Application for Laboratory Research. If your field research will involve observation only, that does not alter or influence the activity or behavior of the animal under study, please complete the IACUC Field Study Exemption Application Form: Observational Study. All individuals listed on the protocol must complete animal care certification requirements. Training requirements and instructions for animal care and use are located on the* [*IACUC Training Page*](https://uwosh.edu/sponsoredprograms/iacuc/training/)*, or you may contact the Laboratory Animal Manager. Please submit form to* [*IACUC@uwosh.edu*](mailto:iacuc@uwosh.edu)*.*

***For Revisions to an Existing Protocol:*** *1) Please complete and submit the appropriate modification request form located on the* [*IACUC Forms Page*](https://uwosh.edu/sponsoredprograms/iacuc/forms/)*, and 2) revise and submit your existing IACUC Protocol Application Form (select Revision to Approved Protocol under Part I.B.), and update the application form using track changes. Please submit to* [*IACUC@uwosh.edu*](mailto:iacuc@uwosh.edu)*.*

**Wildlife Research Reference Standards and Publications:**

1. [ILAR Guide for the Care and Use of Laboratory Animals](https://grants.nih.gov/grants/olaw/Guide-for-the-Care-and-use-of-laboratory-animals.pdf)
2. [American Society of Mammalogists Animal Care and Use Guidelines](http://www.mammalogy.org/committees/animal-care-and-use#tab3)
3. [Ornithological Council Guidelines to the Use of Wild Birds in Research](http://www.nmnh.si.edu/BIRDNET/guide/index.html)
4. [American Fisheries Society, American Institute of Fishery Research Biologists, and American Society of Ichthyologists and Herpetologists Guidelines to the Use of Fishes in Research](http://fisheries.org/docs/wp/Guidelines-for-Use-of-Fishes.pdf)
5. [American Society of Ichthyologists and Herpetologists Guidelines to the Use of Amphibians and Reptiles in Research](http://www.asih.org/sites/default/files/documents/Resources/guidelinesherpsresearch2004.pdf)
6. [American Society of Primatologists Ethics Guidelines](https://www.asp.org/society/resolutions/bestpractices.cfm)
7. [Sikes, R.S., E. Paul, and S. Beaupre. 2012. Standards for Wildlife Research: Taxon-Specific Guidelines Versus US Public Health Services Policy. BioScience 62:830–834.](http://www.mammalsociety.org/uploads/committee_files/Sikes%20et%20al%202012%20(BioScience).pdf)
8. [Sikes, R.S. and E. Paul. 2013.Fundamental differences between wildlife and biomedical research. ILAR Journal 54:5–13](http://ilarjournal.oxfordjournals.org/content/54/1/5.full.pdf?keytype=ref&ijkey=guzYSLDWu18yUM0).
9. [Sikes, R. S. and J. A. Bryan. 2015. IACUC considerations for the use of wildlife in research and education. ILAR Journal 56:335–341.](http://ilarjournal.oxfordjournals.org/cgi/reprint/ilv071?ijkey=EE4G4cmstl0zZkD&keytype=ref)
10. [Paul, E. and R.S. Sikes. 2013. Wildlife researchers running the permit maze. ILAR Journal 54:14–23](http://ilarjournal.oxfordjournals.org/content/54/1/14.full.pdf+html).
11. [Paul, E. R. S. Sikes, S. J. Beaupre, and J. C. Wingfield. 2015. Animal Welfare Policy: Implementation in the context of wildlife research. ILAR Journal 56:312–334.](http://ilarjournal.oxfordjournals.org/cgi/reprint/ilv073?ijkey=gQTYaNUu3fPWxYf&keytype=ref)
12. [Nisbet, I.C.T. and E. Paul. 2000. Ethical issues concerning animal research outside the laboratory. ILAR Journal 45:375–377](http://ilarjournal.oxfordjournals.org/content/45/3/375.full).
13. **Research Personnel and Training**
    1. **Research Personnel: List all individuals who will have animal contact for this study:**

*(Include PI, Co-PI(s), collaborators, staff, or students as applicable; if additional space is needed, please add/insert rows)*

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Role/Procedures to be Conducted** | **Phone Number** | **Email** |
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* 1. **Research Personnel Training and Experience:**

**Please provide training information for animal care and use for all individuals listed in section F above. Training information for UW Oshkosh individuals may be located here if you wish to copy and paste the information:**  [**Animal Care Google Training Spreadsheet**](https://docs.google.com/spreadsheets/d/1eURw_wQVYFU6DGV4q8rNPR_AwYG3S_eJTYJ5au44Aps/edit?usp=sharing)

**Please provide details for any training received outside of UW Oshkosh or any additional information regarding experience or qualifications you would like the IACUC to consider:**

* 1. **Collaborative Research**

**Will this research involve collaboration with individuals from another institution or non-UW Oshkosh entity?**

**Yes**  **No**

If YES, please explain:

Note: If you are working with collaborators and the protocol has already been reviewed by an IACUC at another institution, please provide a copy of that protocol and an approval letter from the IACUC as an appendix.

1. **Animal Species, Numbers, and USDA Pain Level Category**

**USDA Pain Level Categories:** Definition of Painful Procedures (Animal Welfare Act): “As applied to any animal, pain means any procedure that would be expected to cause more than slight or momentary pain or distress in a human being to which that procedure was applied, that is, pain in excess of that caused by injections or other minor procedures.

**Note:** There is no USDA Category A.

1. **Please highlight procedures that will be conducted under the protocol in the table below:**

|  |  |  |  |
| --- | --- | --- | --- |
| **USDA Category B** | **USDA Category C** | **USDA Category D** | **USDA Category E** |
| Animals being held, bred, or conditioned for use in teaching, testing, experiments, research, or surgery, but not yet used for that purpose | No more than momentary or slight pain or distress and no use of pain-relieving drugs, or no pain or distress. | Pain or distress appropriately relieved with anesthetics, analgesics, and/or tranquilizer drugs or other methods for relieving pain or distress | Pain or distress, or potential pain or distress, that is NOT relieved with anesthetics, analgesics, and/or tranquilizer drugs or other methods for relieving pain or distress |
| **Examples:** | **Examples:** | **Examples:** | **Examples:** |
| * Animal breeding, pregnancy, parturition, and lactation * Preventative health veterinary procedures * Routine husbandry procedures | * Animals upon which teaching or research will be conducted involving no pain, distress, or use of pain-relieving drugs * Animals observed under normal conditions * Live trapping * Holding or weighing animals in teaching or research activities * Routine procedures such as injections, blood collection, or catheter implantation via superficial vessels done per standard veterinary practice by trained personnel * Oral gavage when performed by trained personnel proficient in procedure * Tattooing or microchipping animals * Ear punching of rodents * Routine physical examinations * Feeding studies that do not result in clinical health problems * Positive reward projects * AVMA approved humane euthanasia procedures * Animals sacrificed for tissues * Management procedures in agriculture species as listed in the Ag Guide * Animal transportation | * Diagnostic procedures such as laparoscopy or needle biopsies * Non-survival surgery * Survival surgical procedures * Post-operative pain or distress * Periorbital blood collection in rodents * Terminal cardiac blood collection * Any post-procedural outcome resulting in evident pain, discomfort, or distress, such as that associated with decreased appetite or activity level, adverse reactions such as open skin lesions, abscesses, lameness, conjunctivitis, corneal edema, and photophobia * Exposure of blood vessels for catheter implantation * Exsanguinations under anesthesia * Induced infections or antibody production with appropriate anesthesia and post-op/post-procedure analgesia when necessary * Administration of drugs, chemicals, toxins or organisms that would be expected to produce pain or distress but which will be alleviated by analgesics | * Toxicological or microbial virulence testing, cancer research or infections disease research that requires continuation until clinical symptoms are evident or death occurs * Ocular or skin irritancy testing * Food or water deprivation beyond that necessary for ordinary per-surgical preparation * Application of noxious stimuli, such as electrical shock, if the animal cannot avoid/escape the stimuli and/or it is severe enough to cause injury or more than momentary pain or distress * Infliction of burns or trauma * Prolonged restraint * Any procedures for which needed analgesics, tranquilizers, sedatives, or anesthetics must be withheld for justifiable study purposes * Use of paralyzing or immobilizing drugs for restraint * Exposure to abnormal or extreme environmental conditions * Euthanasia by procedures not approved by the AVMA * Induction of self-mutilation |

* 1. **Please provide an approximate number of animals to be studied over the next 3-year period and indicate the USDA Pain Level Category for the protocol procedures referencing the chart in Section II. A.** A range may be given when exact numbers are not known. The IACUC recognizes the difficulty in predicting the exact number of animals and the variety of species which may be encountered. If over the course of the study the range of animals listed in the chart is exceeded or you wish to add additional species, please submit an IACUC Modification Form to increase the range of animals or to account for additional species. Note: Receipt of permits from applicable oversight agencies will assure that the impacts on local population of animals are minimal or justified. Researchers must stay within animal take limit of permit.

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Species**  **(Scientific and**  **Common Names)** | **Procedure** | **Number of Animals/**  **USDA Category** | | | | **Source** | **Housing Location** |
| **B** | **C** | **\*D** | **\*E** |
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*If additional space is needed, please add/insert rows*

**\*Note: Procedures which fall under USDA pain category D or E require consultation with the veterinarian regarding protocol design prior to protocol submission and completion of Appendix** **B:** **Alternatives to Animal Use.**

1. **Scientific Justification for Species and Number Requested**
   1. **Describe the features of each species (e.g. anatomic, physiologic, genetic, etc.) that make it desirable as the model organism used in this project. Provide *rationale for the study of live animals (rather than computer models, habitat studies, etc.*) and contrast with other available animal models, if any. If you are conducting a community level study where you will survey multiple species, please explain.**

* 1. **Please explain how this work will benefit this particular species or community level. If you are studying this species as a surrogate, how will this species serve as a model for the other species of interest?**

* 1. **How are the number of animal(s) requested scientifically justified? (Select and answer all that apply):**

**Pilot study or preliminary project, group variances unknown at present.**

Minimal number of animals should be requested. Explain justification for each species:

**Group sizes determined statistically.**

What statistical analysis was performed including the analysis employed and the power function? For complex studies, providing a flow chart or table showing group size, time frame, study locations, and other information may be helpful in explaining how the total number of animals was determined.

**Group sizes based on quantity of harvested cells or amount of tissue required.**

Explain how much tissue is needed based on the number of experiments you will conduct and how much tissue you expect to obtain from each animal.

1. **Study Objectives and Benefits**
   1. **What is the goal/specific aim(s) of this project? What is the research or development question?**

In layman’s terms, describe the research or development question. Please define all acronyms.

* 1. **Explain how the study will benefit wildlife, humans, or society.** (For example, benefits may include basic scientific knowledge, conservation and/or management applications for wildlife, wildlife habitat, animal or human health.) Provide sufficient information to indicate that the potential new knowledge from the project justifies the use of animals.

1. **Study Procedures**
   1. **Provide a complete and accurate description of what procedures will be performed on/with the animal. Answer in language understood by a person unfamiliar with your area of research.**

1. **Please indicate if any of the following procedures will be conducted by selecting Yes or No:**
2. **Noxious Stimuli: Will your study involve noxious stimuli?**

**Yes, complete 1(a) below  No, move to question 2**

* 1. **Describe type of noxious stimulus, methods used to monitor animals for pain or distress (if any), and scientific justification for noxious stimulus.**

1. **Wildlife Capture  Yes, complete 2 (a-d)  No, move to question 3**
   1. **Describe the method and equipment used, planned duration of trapping, and monitoring schedule for checking traps of capture. Please cite a literature reference if the capture method is standard procedure or provide a detailed description if it is a non-standard method:**
   2. **Describe potential for trapping non-target species and what procedure will be followed if an unintended/accidental capture occurs:**
   3. **Describe the potential for animal injury that could occur as a result of your research, how frequent an injury is expected to occur, and planned procedures to treat injuries. Even if you do not intend or expect any animal injuries, please describe how potential injuries or conditions resulting from pursuit, capture, or manipulation will be treated:**
2. **Animal Transportation  Yes, complete 3 (a)  No, move to question 4**
   1. **Explain the method of animal transportation that will be used if applicable and what measures will be taken to avoid potential disease transmission:**

**Note: If a university vehicle is not available or practical to carry out your research, the IACUC may approve the use of personal vehicles. An ad hoc subcommittee of the IACUC inspects vehicles to transport animals. See SOP #30-#31 for Transportation of Animals.**

1. **Physical Restraint Following Capture  Yes, complete 4 (a-b)  No, move to question 5**

**See SOP #47: Physical Restraint**

* 1. **Please describe method, equipment, and duration of restraint:**
  2. **If animals will be physically restrained for longer than 1 hour at a time, please provide justification and observation schedule:**

1. **Marking or Tagging  Yes, complete 5 (a)  No, move to question 6**
   1. **Describe marker or tag type, technique used, and mass of device proportionate to animal body mass:**
2. **Blood Sampling  Yes, complete 6 (a-b)  No, move to question 7**

**See SOP #44: Guidelines for Rodent Blood Collection**

* 1. **Describe location of blood collection site, needle gauge and length, sample volume, frequency of sampling and total samples/animal:**
  2. **Indicate the percent blood loss per sample based on the animal’s anticipated body mass and how fluid volume will be restored (if appropriate):**

1. **Urine/Feces Sampling  Yes, complete 7(a)  No, move to 8**

**See SOP #46: Guidelines for Collecting Fecal Samples from Rodents**

* 1. **Please describe how urine or fecal samples will be obtained:**

1. **Other Body Fluids and Tissue Sampling  Yes, complete 8(a)  No, move to question 9**
   1. **Please indicate sample type, method of collection, volume, and frequency, and total samples/animal:**
2. **Diet Supplementation or Alteration  Yes, complete 9 (a)  No, move to question 10**
   1. **If food items or quantities other than the animal’s natural diets will be used, describe: diet items/quantities, purpose for dietary change, planned duration, and weight monitoring schedule:**
3. **Indwelling Catheters or Implants  Yes, complete 10 (a)  No, move to question 11**
   1. **Please describe the type, size, duration of use, maintenance, and monitoring schedule (Note: If the implantation requires a surgical procedure, please place the surgical procedure detail in Appendix B: Surgery):**
4. **Administration of Anesthetics  Yes, complete 11 (a-c)  No, move to question 12**

**Complete 12 a-c for non-surgical procedures. (Complete** [**Appendix C for use in surgery**](#Appendix_C)**)**

**See SOP #11: Anesthesia Monitoring for Small Animals**

* 1. **Please describe the agent, dose (mg/kg), and route of administration:**
  2. **What is the anticipated duration of anesthesia, method of monitoring anesthesia and animal body temperature:**
  3. **What monitoring schedule will be followed to ensure animal’s complete recovery from anesthesia:**

1. **Administration of Analgesics  Yes, complete 12 (a-b)  No, move to question 13**

**Complete 13 a-b for administration of analgesics (Complete** [**Appendix C for use in surgery**](#Appendix_C)**)**

**See SOP #5: Analgesia**

* 1. **Please describe the agent, dose (mg/kg), route, and frequency of administration:**
  2. **What is the anticipated duration of analgesic use?**

1. **Use of Controlled and/or Prescription Substances**

**Yes, complete 13 (a-c)  No, move to** **question 14**

**See SOP #16: Policy for Use of Controlled Substances**

* 1. **Describe source of substance and storage of controlled substance:**
  2. **How will records be maintained and stored?**
  3. **What precautions will be taken to avoid unauthorized access?**

1. **Administration of Drugs, Toxins, Reagents, Cells, etc. (other than analgesics, anesthetics, or paralytics)**

**Yes (please complete** [**Appendix E: Toxicology/ Microbial Virulence**](#Appendix_E)**)**

**No, move to question 15**

1. **Pharmaceutical Grade Substances: All medications, compounds and drugs to be used in vertebrate animals must be of pharmaceutical grade (Human or Veterinary Grade) unless approved by the IACUC. See SOP #29: Policy on the Use of Non-Pharmaceutical Grade Compounds.**

**Will non-pharmaceutical grade substances be used in vertebrate animals?**

**Yes, complete 15 (a)  No, move to question 16**

* 1. **If a non-pharmaceutical grade medication, compound, or drug is requested, please provide scientific justification.**

1. **Surgical Procedures  Yes (please complete** [**Appendix C: Surgery**](#Appendix_C)**)  No, move to question 17**

**17) Procedures involving USDA Pain Category D & E**

**Yes, (complete** [**Appendix B: Alternatives**](#Appendix_B)**)  No, move to next section**

1. **Research Hazards and Safety Precautions**
   1. **Research Hazards: Describe the likelihood of exposure of the researcher to potential hazards** (for example: pathogens- including mode of transmission, bites, scratches, and stings)**:**
2. **Personal Protective Equipment: Select the personal protective equipment to be worn for procedures described in protocol:**

Waterproof boots Respiratory mask, specify:

Dedicated shoes Surgical mask

Examination gloves Surgical gloves

Protective eyewear Leather gloves

Face shield Other:

**VIII. Location of Study Areas and Permits/Authorization**

**A. Location of Study Area(s):**

* 1. **Please describe the location of your study area(s):**
  2. **If location is public land, state the name of the government agency that owns the land. Ascertain if a permit or other form of authorization is required, and if so, note that information in Section B: Permits/Authorization:**
  3. **If the study will take place on private land (not owned by researcher), please indicate and provide a letter/email of permission:**

**B. Permits/Authorization:** Identify all required permits or other forms of written authorization including protected species permits at the national and state or provincial levels (in the U.S.: Migratory Bird Treaty Act, Endangered Species Act, CITES, Marine Mammal Protection Act, and Wild Bird Conservation Act; Lacey Act; state permits for state-listed species); national and state/provincial protected areas permits (in the U.S., National Wildlife Refuge System, National Parks, National Forest System, Bureau of Land Management; state permits for wildlife management areas, parks, or other protected areas). **Note: If you wish to import or export animals or biological material, additional permits are required, and shipping regulations apply.**

|  |  |  |
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| **Permit type or other form or written authorization** | **Permit number, if applicable** | **Expiration date (or if application or renewal application is pending, date submitted)** |
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***Note:*** *If your research requires federal or state permits, it is unlawful to begin work until all permits have been obtained. The PI is responsible for obtaining all required permits. In most cases, receipts of permits from applicable oversight agencies will assure that the impacts on local populations are minimal or are justified. You may not start the work for which permits are required until the permits are issued, even if your protocol has been approved by the IACUC. Please provide a copy of any permits for the administrative record.*

1. **Potential Animal Pain and Distress**
   1. **Explain any potential adverse effects that may occur as a result of the study.** Adverse effects may have an impact on animal population or welfare.

1. **How will pain and/or distress be monitored? Provide specific clinical signs that could indicate pain and/or distress and what steps will be taken to alleviate any pain, distress or discomfort the animals may experience.**

1. **Study Endpoint/Euthanasia**
   1. ***Study Endpoint:***

*What will happen to the animals at the end of the research? Please select and complete applicable question(s) below. Note: In some instances, the landowner or federal agency (such as National Park Service) may retain ownership of animals, specimens, or samples. In such cases, please consult with the landowner or agency as to disposition.*

|  |  |
| --- | --- |
| **If captured, what is the endpoint of the study:**  **Released**  If you plan to release animals, describe the pre-release conditioning, site, time of release, and any permits required for such release. (Note: the release of captive animals that is not a planned part of the manipulative study requires justification. PIs are directed to consult the taxon-specific guidelines regarding precautions for the release of captive individuals. Permits should be checked to verify if return to wild is allowed.) | |
| **Retained**  If you plan to retain the animals for future research, briefly describe that planned activity: | |
| **Donated for continued captivity (e.g., Zoo, captive-breeding program)**  If you plan to donate the animals to a zoo, captive-breeding program, or other arrangement entailing continued captivity, please list the place where the animals will be donated and inform the Laboratory Animal Manager.  **Humanely Euthanized**  **Other, describe**:  **Note:** In some instances, the landowner or federal agency (such as National Park Service) may retain ownership of animals, specimens, or samples. In such cases, please consult with the landowner or agency as to disposition. | |

* 1. ***Euthanasia:***

*Even if you do not intend to end animals’ lives at any point in your project, a method of euthanasia or humane killing must be listed in cases of emergency, except in instances where permits or statutes prohibit killing of individuals of the species involved. If euthanasia or humane killing is prohibited by law or by permit conditions, please provide supporting documentation.*Please review the [**AVMA Guidelines for the Euthanasia of Animals: 2020 Edition**](https://www.avma.org/sites/default/files/2020-01/2020-Euthanasia-Final-1-17-20.pdf) for the animals with which you will be working. Euthanasia must be in accordance with the methods approved in the 2020 Edition, unless scientific justification is provided and approved by the IACUC. Taxon specific guidelines (see pg. 2) may be used as a means of justification for a deviation from the AVMA guidelines. As an additional reference, IACUC **SOP #13: Guidelines for Euthanasia of Laboratory and Wild Animals**, outlines the current AVMA guidelines for “Acceptable” and “Acceptable with Conditions” euthanasia methods for the species commonly used at UWO.

1. **Please specify the method of euthanasia to be used for each species.** (Include dose and route for injectable euthanasia methods. If collecting the animal by shooting, lethal trapping or other means, describe the method of euthanasia or humane killing to be used).
2. **Does this method of euthanasia fall under 2020 AVMA Guidelines?**

|  |
| --- |
| ☐ Acceptable Methods ☐ Acceptable with Conditions Methods ☐ No  If no, please provide scientific and/or medical justification for deviation from the AVMA guidelines and select taxon guidelines from the list below: |

**If you would like to request IACUC approval to follow alternate euthanasia guidelines, such as taxon-specific guidelines involving euthanasia, please indicate guidelines, standards, or literature referenced for deviation from AVMA guidelines:**

[American Society of Mammalogists Animal Care and Use Guidelines](http://www.mammalogy.org/articles/guidelines-american-society-mammalogists-use-wild-mammals-research-0)

[Ornithological Council Guidelines to the Use of Wild Birds in Research](http://www.nmnh.si.edu/BIRDNET/guide/index.html)

[American Fisheries Society, American Institute of Fishery Research Biologists, and American Society of Ichthyologists and Herpetologists Guidelines to the Use of Fishes in Research](http://fisheries.org/docs/wp/Guidelines-for-Use-of-Fishes.pdf)

[American Society of Ichthyologists and Herpetologists: Guidelines to the Use of Amphibians and Reptiles in Research](http://www.asih.org/publications)

**Other:**      

1. **If an injury occurs due to animal capture or study, what criteria will be used to determine whether or not euthanasia will occur?**
2. **How will carcasses be disposed?**

**You have reached the end of this form. Please make sure that you have responded to every question on this application, and that you have completed ALL of the applicable appendices.**

**Appendices Checklist:**

Check all that pertain to your project, complete the appropriate appendices, and include as part of your application. Appendices that do not pertain to your project may be omitted when submitting your application.

|  |
| --- |
| **IACUC Safety Information Sheet for Field Research– *Appendix A (Required)*** |
| **Alternatives to Animals Classified in USDA Category D or E– *Appendix B*** |
| **Surgery – *Appendix C***  **Antibody Production – *Appendix D*** |
| **Toxicology Studies/Microbial Virulence Testing – *Appendix E***  **Dietary Manipulation or Fluid Restriction- *Appendix* F** |
| **Use of Hazardous Agents – *Appendix G*** |

**IACUC Appendix A: IACUC Safety Information Sheet for Field Research**

**IACUC- Safety Information Sheet for Field Research in Wisconsin**

The IACUC commends you for identifying potential risks for you and any students working in the field in Wisconsin on your approved IACUC protocol. Since PIs are the individuals with the most familiarity with the field site conditions, the PIs should relay any potential risks to all research personnel working on the project.  The IACUC is requesting that you provide all research personnel (and the IACUC) with a completed version of this Safety Information Sheet.  If the research will be conducted at a location outside of Wisconsin, please provide an appropriate safety sheet for the location and field conditions.

**Field Site Location:**

1. **Potential Risks:** 
   1. **Exposure to infectious disease transmitting vectors (ticks, mosquitoes):**
2. See attached pdf, “[NIOSH Fast Facts: Protecting Yourself from Ticks and Mosquitoes](https://www.cdc.gov/niosh/docs/2010-119/pdfs/2010-119.pdf)”.
3. See attached table, “[Characteristics of Tickborne Diseases in Wisconsin](https://www.dhs.wisconsin.gov/tickborne/tickborne-diseases-chart.pdf)”, provided by WI Division of Public Health.
4. Mosquitoes can transmit several viruses that can cause human disease.  In Wisconsin, these include West Nile virus, La Crosse virus, and Jamestown Canyon virus. Symptoms of illness are usually mild and nonspecific, and can include headache, fever, fatigue, muscle aches, and swollen lymph nodes. Some people may experience severe neuroinvasive illness, including flaccid paralysis, encephalitis (swelling of the brain) and meningitis (WI Division of Public Health:  <https://www.dhs.wisconsin.gov/arboviral/index.htm>)
   1. **Other potential hazards:**

1. **Likelihood of Encountering the Hazards:**
2. **Protective Measures (may include awareness of potential risks, immunizations, Personal Protective Equipment):**
3. **Personnel should inform health care provider of contact with wild animals and field conditions should they become injured or ill.**

**IACUC Appendix B: Alternatives to Animal Use for USDA Reporting Category D or E**

1. **Briefly describe how you have considered each of the following alternatives, or how they are not applicable:**

**Replacement** of vertebrate animals(i.e. with in-vitro models, computer models, or less sentient animals):

**Refinement** of experimental procedures to minimize pain or distress (i.e. early endpoints; use of analgesics, anesthetics, or sedatives; techniques that reduce stress in animals):

**Reduction** in the number of animals (i.e. using appropriate statistical methods in the design and analysis of the study, sharing tissue among investigators):

1. **Methods used to search for alternatives (indicate all that apply):**

**Literature search conducted**

See <http://www.nal.usda.gov/awic> for resources to assist in the search. The Norwegian 3Rs Center and the Animal Welfare Information Center (AWIC) have launched a new database called 3R Guide (<http://www.3rguide.info/>). The aim is to offer investigators a “one-stop shop” for locating key resources. All entries in the 3R Guide are categorized by Type (e.g. guidelines), Category (e.g. species), and 3R-relevance (Replacement, Refinement, Reduction).

**List names of databases** (more than one required):



**Keywords used in database search** (specific to animal use):

**Brief summary of what information was found during the literature search:**

**Date search was completed:** Click or tap to enter a date.

**Years searched** (should go back several years)**:**

**Other information/service utilized.**  Elaborate, providing specific information.

**IACUC Appendix C: Surgery**

Complete this appendix for each surgical procedure and/or species, even if the same information exists elsewhere in the application. USDA Animal Welfare Act regulations ***require* veterinary consultation for any Category D or E** animal use.

Reference **SOP #11: Anesthesia Monitoring for Small Animals**, **SOP #32: Equipment Sterilization Procedures and Monitoring Expiration Dates**, and **SOP #34: Surgery Requirements** when planning a surgical procedure. Please consult with the lab animal manager/training coordinator regarding surgical training requirements.

**Definition:** Major survival surgery is defined as penetrating a body cavity or having the potential for producing a permanent handicap for an animal expected to recover from a surgery.

1. **Species:**
2. **Surgical procedure is:** Non-Survival Survival
3. **Will individual animals undergo more than one major survival surgery?**

Yes No

**If YES, please provide justification for conducting multiple survival surgeries on a single animal:**

1. **Name of surgeon(s):**

1. **Relevant experience with the animal model and surgical procedure being used for each individual performing the surgical procedure:**

1. **Location of surgery:**

1. **Describe pre-operative procedures (fasting, analgesic loading, etc.) and surgical procedures:**

*Include monitoring and supportive care.*

1. **Anesthetic(s):**

*Include dose, route, frequency, AND criteria for judging depth of anesthesia.*

1. **Describe how aseptic methods will be maintained throughout the procedure:**

*Include use of gloves, surgical masks, sterile instruments, and aseptic technique.*

**For Survival Surgery:**

**How long will the animals be maintained after surgery?**

**Describe post-operative care to be given:**

*Include analgesics, antibiotics, and monitoring of fluids and body temperature. Please include time intervals for post-operative monitoring.*

**Describe the procedure that will be followed for the detection and management of post-operative complications during normal work hours, weekends, and holidays:**

**IACUC Appendix D: Antibody Production**

**List species:**

**List antigen(s):**

**List or describe adjuvant(s):**

**Initial Immunization:**

**Subsequent Immunizations:**

**List or describe injection:**

List anatomic site, volume administered per injection site, total volume administered at one time, injection frequency, and total number of administrations.

**List or describe procedure for collecting blood or other bodily fluids:**

List site, volume, frequency, and method used. Indicate anesthetics, analgesics, or tranquilizers to be used, if any, and duration of use.

**IACUC Appendix E: Toxicology Studies/Microbial Virulence Testing**

**Describe materials to be evaluated:**

*If hazardous materials are used, complete Appendix G.*

**Describe the route and duration of administration:**

**Describe the testing method employed (LD50, etc.):**

**Describe the criteria that will be used to ensure that the animal does not experience pain or distress, and methods to monitor animals:**

**If pain or distress is anticipated, how will they be minimized? Describe methods, including dose and route of administration, if appropriate:**

**What is the endpoint of these studies (i.e. time points)?**

**IACUC Appendix F: Dietary Manipulations or Fluid Restriction**

**Describe any dietary manipulations or special feeding requirements:**

**Describe length of time animals will be on experimental diet:**

**Describe what criteria will be used to determine continued health of animals while on food regulation.**

Example: regular monitoring for body weight loss and body condition, etc. Please reference **SOP #33: Guidelines for Rodent Food and Fluid Regulation**.

**Will animals be provided less than ad lib fluids or drinking water for experimental reasons?**

**Yes**

**No**

**If Yes, provide details including amount/day, monitoring of animals, criteria used to determine well-being of animals, and scientific justification:**

**IACUC Appendix G: Hazardous Agents**

(**Note:** Please consult with UW Oshkosh Hazardous Waste Officer for questions regarding carcass and bedding disposal)

**Hazardous Chemicals (Note: Requires consultation with Chemical Hygiene and Hazardous Waste Officer):**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Chemical Name** | **Nature of Chemical** (carcinogen, toxin, teratogen…) | **Route of Administration** | **Dosage** | **Route of Excretion** | **Is the Carcass Hazardous?** | **Is the Bedding or Caging Hazardous?** |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

**Radiation:**

**Where will the radiation be used (building and room):**

**Name of approved radioisotope permit holder:**        **Duration of permit:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Radioisotope or Radiation Source** | **Route of Administration** | **Dosage (Activity)** | **Route of Excretion** | **Is the Carcass Radioactive?** | **Is the Bedding or Caging Radioactive?** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

**Infectious Agents (Note: \*Requires IBC review in addition to IACUC review):**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name of Agent** | **Biosafety Level** | **Route of Administration** |  | **Dosage** | **Is the Agent Infectious to Humans or Animals?** | **Route of Excretion** | **Is the Carcass Hazardous?** | **Is the Bedding or Caging Hazardous?** |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

**Recombinant DNA/Synthetic Nucleic Acid Molecules**

**(Note: \*Requires IBC review in addition to IACUC review):**

**Describe the host/vector system:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **What gene is/will be modified?** | **Route of Administration (for purchase of transgenic animals, indicate N/A)** | **Dosage**  **(for purchase of transgenic animals, indicate N/A)** | **Is the Agent Infectious to Humans or Animals?** | **Route of Excretion** | **Is the Carcass Hazardous?** | **Is the Bedding or Caging Hazardous?** |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

**\*Indicate status of IBC Review for Infectious Agents and Recombinant DNA work:**