

Institutional Animal Care and Use Committee ANIMAL PROTOCOL APPLICATION (Rev. 09/20/2022)

- 1. Title of Project:
- 2. Project Director:
- 3. Name of Faculty Sponsor for a student project:
- 4. Names of any other students, faculty members, or staff who will be responsible for animal care and use:
- 5. External funding source, if applicable (provide agency name and grant award number):
- 6. Identify the species/strain and the approximate number of animals to be used. Note whether genetically-modified animals will be used. Justify the number of animals to be used, including statistical justification as appropriate, and provide a description of the experimental structure (e.g. pilot study, within-group design, between-groups design, longitudinal study, etc.).
- 7. Identify the vendor or source from which you will procure your animals. If animals are to be removed from the wild, indicate their final disposition.
- 8. Describe the proposed use of the animals. If animals will be bred, provide details on breeding colony development, sustainment, and management to minimize numbers. If surgical procedures are required please indicate whether the proposed surgery is: 1) categorized as major or minor surgery; and 2) whether it is survival or nonsurvival surgery. Also provide details of: your training in the procedure(s); pre-surgical procedures; aseptic techniques and surgical facilities; details on anesthetic and analgesic doses and delivery; procedures for monitoring surgical anesthesia and analgesia; post-operative care; and on-going assessment of surgical outcomes.
- 9. Give a rationale for using animals. For research projects indicate how the planned activities do not unnecessarily duplicate previous work. For laboratory course exercises or demonstrations, justify the use of live animals instead of models or visuals.
- 10. If restraint devices are to be utilized, provide a description of the device and its use, justification for the use of restraint, duration of restraint, positive reinforcement methods used to adapt animals to the restraint device, details on how animals will be monitored while restrained, and provisions for removal of animals from the study that fail to adapt to restraint.
- 11. Describe the procedures designed to assure that discomfort and pain to animals will be limited to that which is unavoidable for the conduct of scientifically valuable research, indicating provision for the use of analgesic, anesthetic, and tranquilizing drugs and dosages where indicated and appropriate to minimize discomfort and pain to animals.
- 12. Describe the method(s) of euthanasia and procedures for confirmation of death. If the euthanasia method(s) do not comply with the AVMA Guidelines for the Euthanasia of Animals (2020 edition; https://www.avma.org/sites/default/files/2020-02/Guidelines-on-Euthanasia-2020.pdf) provide details and a rationale. Describe humane endpoints for the study, if applicable (i.e. points at which pain or distress in an experimental animal is prevented, terminated, or relieved). If humane endpoints have not been established (i.e. pilot study) the investigator must submit a modified protocol to the IACUC as the humane endpoints are identified.
- 13. What procedure is to be used for disposal of carcasses?

- 14. Pharmaceutical grade (veterinary or human) chemicals must be used for animal procedures when available. Identify all chemical and doses to be administered and justify the use of any non-pharmaceutical grade chemicals.
- 15. Care and maintenance: Describe how the animals will be housed and cared for. Please include how often food, water, and cages/tanks will be changed or cleaned and note who will be responsible for care and maintenance. If food and water restrictions are part of your protocol, provide details on monitoring of animals to ensure that nutritional needs are met and that body weights are recorded at least weekly. Note the procedure for seeking veterinary care, if necessary. If genetically-modified animals will be used, describe procedures for enhanced monitoring and reporting of unexpected outcomes to the IACUC.

IMPORTANT REQUIREMENTS REGARDING CARE AND MAINTENANCE:

- 1. All animals must be checked daily for food and water availability and signs of disease or distress.
- 2. A protocol for the care and maintenance of the animals must be typed up and kept in a binder the housing room.
- 3. A daily log must be posted on the door of the room to record the date/time and initials of the person checking the animals.
- 4. Daily temperature and humidity readings for the housing room must also be recorded on these log sheets.
- 16. Please indicate who will be responsible for performing each procedure described, including any experimental procedures, surgery, euthanasia, and care and maintenance of animals. Provide a description of training needs for each person.
- 17. Please provide a description of the Project Director's / Faculty Sponsor's training and experience in the procedures to be performed.
- 18. Verify here that all students working on this project have a) read the full protocol, b) completed the required Collaborative Institutional Training Initiative (CITI; https://www.citiprogram.org/) Working with the IACUC course, plus those appropriate to the species to be used, as assigned, and c) have completed Occupational Safety and Health Training offered by Mr. Ed Beary (please see the IACUC training information page: https://www.geneseo.edu/sponsored_research/animal-care-and-use-training-and-other-resources)
- 19. Verify here that the research or educational use of living animals will be under the immediate supervision of persons qualified by training and experience to conduct scientific work. NY State regulations require that individuals performing animal experiments, tests, investigations, and educational demonstrations involving more than slight or momentary pain (whether relieved by analgesia or not) are either themselves "qualified by training and experience" or are under the immediate personal supervision of persons so qualified.
- 20. Verify here that in addition to the required CITI course(s) (see 15, above), the project director or faculty sponsor will provide all students responsible for animal care and use with hands-on training appropriate to the procedures proposed, and that they and their students will keep a written log of all hands-on training provided and received.

Note the following NY State Department of Health information for survival surgery or experiments, tests, investigations, or educational demonstrations involving more than slight or momentary pain (whether relieved by analgesia or not):

"Institutions must provide, and be able to demonstrate to the Department upon request, high levels of training and experience among individuals authorized to perform survival surgery and/or conduct experiments, tests, investigations, or educational demonstrations involving more than slight or momentary pain (whether relieved by analgesia or not)."

"With reference to survival surgery, the Department requires regulated entities to meet the thresholds for training and assessment; presurgical planning; surgical facilities; surgical procedures; aseptic technique; intraoperative monitoring; and postoperative care as well as anesthesia and analgesia outlined on pages 115 through 123 (inclusive) of the 8th Edition of the *Guide for the Care and Use of Laboratory Animals* ("The Guide"). This includes, but is not limited to, the fact that surgeons must be adequately trained to ensure "asepsis, gentle tissue handling, minimal dissection of

tissues, appropriate use of instruments, effective hemostasis, and correct use of suture materials and patterns." Evidently more than a handful of training sessions will be required to achieve this standard, even for the most minor of surgical procedures such a small skin incision and subsequent closure."

"Ensuring rigorous training and experience will reduce adverse outcomes such as death, wound dehiscence, and clinical or subclinical infection. Pursuant to 10 NYCRR §§ 55-1.1(a) & 55-1.6, with reference to the aforementioned section of *The Guide*, all "must" statements shall be adhered to, without exception, by regulated entities. Additionally, all "should" statements in *The Guide* are considered mandatory by the Department unless a written exception, with concomitant scientific justification, has been reviewed and approved by the institution's Attending Veterinarian and IACUC. Such a statement must meet the standards laid out for performance standards on pages 6 and 7 of *The Guide* as well as those specified by the National Institutes of Health Office of Laboratory Animal Welfare (OLAW) (see Section G. Institutional Responsibilities. FAQ 10 – What is OLAW's position on performance standards? https://olaw.nih.gov/faqs#/guidance/faqs?anchor=question3284). Such exceptions must exist in writing for each individual protocol in which deviations from "should" statements occur and must be renewed no less frequently than once every 3 years or when surgical techniques or procedures are added or changed via major amendment."

21. Additional information or special requests:

22. Emergency Contact Information. Provide the name(s), phone numbers(s) and email address(es) of individuals that should be contacted in the event of an emergency. For a student proposal, please make sure that contact information for the faculty sponsor is also provided. Emergency contact information must also be posted in the housing room.

The project director and faculty sponsor, if applicable, agree to: comply with the Guide for the Care and Use of Laboratory Animals, 8th Edition; provide an updated protocol to the IACUC if significant changes are made to this protocol; ensure that students will not conduct research involving animals until they have received appropriate training and have completed the IACUC Student Training Certification form, which is available on the IACUC training page: https://www.geneseo.edu/sponsored_research/animal-care-and-use-training-and-other-resources. The project director and faculty sponsor also certify that they will keep a written log of all hands-on training provided to students.

(Signature of Project Director)	(Date)	(Signature of Faculty Sponsor)	(Date)

Please insert text as necessary and submit the completed form to the attention of Anne Baldwin in the Office of Sponsored Research, Erwin 221