



**SUNY Oswego
Institutional Animal Care and Use
Committee (IACUC)
Policies and Procedures Manual**

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Introduction

SUNY Oswego is committed to the humane care and use of animals in all activities related to research and teaching. Thus, the University has established and provides resources for an Animal Care and Use Program that is managed in accordance with the [Guide for the Care and Use of Laboratory Animals](#) (the *Guide*), the [Animal Welfare Act](#), the [Public Health Service Policy on Humane Care and Use of Laboratory Animals](#) (PHS Policy), the [Best Practices: Animal Care and Use](#) of The State University of New York and The Research Foundation for The State University of New York, and the SUNY Oswego *Institutional Animal Care and Use Committee's Policies of Animal Care and Use* (IACUC Policies). These written IACUC Policies are reviewed and updated semi-annually by a quorum of the members of the Institutional Animal Care and Use Committee (IACUC).

In order to accomplish the objectives inherent in these regulations and principles, SUNY Oswego established an Institutional Animal Care and Use Committee (IACUC). The use of live vertebrate animals in all research, teaching, or other activities (with or without internal or external funding) must undergo IACUC review and receive written approval prior to implementation. The IACUC is authorized to approve, reject, or suspend previously approved animal research or teaching protocols. In addition to reviewing specific research protocols, the IACUC carries out other federally-mandated functions such as reviewing and reporting on the overall animal program; inspecting and evaluating all animal facilities (at least semi-annually); reviewing and investigating concerns involving the care and use of animals at the institution; and making recommendations to the institutional official regarding any aspect of the use and care of animals in teaching and research.

Position Statement

Researchers at SUNY Oswego share the public's concern about the responsible use of animals. IACUC policy and stringent federal guidelines (the *PHS Policy* and the USDA Animal Welfare Act) require scientists to consider the "three R's" of replacement, reduction, and refinement when designing research and teaching projects. All research, whether or not supported through funds granted by the National Institutes of Health (NIH), United States Department of Agriculture (USDA) or National Science Foundation (NSF) that is conducted at SUNY Oswego, or at another institution as a result of a subgrant or subcontract, must be reviewed by SUNY Oswego's Institutional Animal Care and Use Committee to ensure that animal use is necessary and that high standards of humane care are observed.

In addition to ensuring the judicious use of animals, all university personnel share the responsibility to safeguard the welfare of all animals utilized in teaching and research at SUNY Oswego. The university must ensure SUNY Oswego's animal facilities are in full compliance with the applicable laws and regulations.

The use of animals in teaching and research sometimes results in vocal criticism from animal rights groups. While SUNY Oswego defends the right of free speech, our responsibilities of providing education and advancing research to benefit society demand that the university does not capitulate to tactics of intimidation and violence which undermine our democratic traditions and threaten the principle of free scientific inquiry. Therefore, SUNY Oswego cannot tolerate such acts on university property and will not allow such acts to influence university policy. To the extent necessary, the university will prosecute or discipline those who break the law or SUNY Oswego regulations. It is essential that the university continue to preserve and protect the right to pursue knowledge.

This manual outlines Animal Care and Use Program regulations as implemented by SUNY Oswego. The purpose of this manual is to provide the operational details of SUNY Oswego IACUC process and outline its major functions. Questions, concerns, and suggestions, are to be directed to the IACUC, by email at iacuc-admin@oswego.edu.

The SUNY Oswego Institutional Official (IO) and signing authority is the Associate Provost for Research Development and Administration. SUNY Oswego's compliance officer for IACUC is the Research Committee Coordinator. Both can be contacted at iacuc-admin@oswego.edu.

Part I

THE INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE at SUNY Oswego

Federal law, regulation, and policy require the Institutional Animal Care and Use Committee (IACUC) to report to the institution's designated Institutional Official (IO). At SUNY Oswego, the Associate Provost for Research and Development and Administration serves as the IO for the Animal Care and Use Committee. The IO appoints the Chair and members of the IACUC, which is responsible for oversight and evaluation of the animal care and use program, its procedures and facilities and to ensure that they are consistent with the recommendations of the Guide, AWA, PHS Policy, and IACUC Policies.

Committee Membership

The IACUC shall consist of at least five members.

Membership shall include:

- at least one faculty member who is involved with animal research;
- at least one licensed veterinarian;
- at least one non-science faculty member;
- at least one member of the community who has no affiliation with SUNY Oswego; and
- a chairperson ('IACUC Chair') appointed by the Institutional Official (IO).

Members are appointed by the IO initially for a one-year term and may be reappointed at the discretion of the IO for three-year terms.

Charge of the Committee

The IACUC shall serve as the advocate for the welfare of the animal subjects under study at SUNY Oswego while representing and protecting the interests of the respective investigators and educators who use animals at the university. Specifically, the IACUC is responsible for:

- advising investigators on the humane treatment and proper care of animals;
- reviewing and approving of the use of animals in scientific and educational activities;
- posting approval monitoring of active animal protocols;
- ensuring compliance with established policies, procedures and regulations;
- reviewing the qualifications of all personnel involved in the use and care of animals and the provision of educational and training programs;
- reviewing the availability and conditions of physical facilities and the implementation of a program of semi-annual facilities inspections;
- promulgating current rules and regulations and changes thereof;
- responding to allegations of misuse, mistreatment, or noncompliance regarding animals under the care or control of university personnel;

- consulting and advising on animal care and use in the laboratory as requested by investigators;
- maintaining required records as established by NIH/OLAW Policy (V.E.), and the Animal Welfare Act (sections 2.35 & 2.31); and
- submitting required reports as established by NIH/OLAW Policy (V.F.) and the Animal Welfare Act (section 2.31).

Meetings

The IACUC will meet once per month, specifically to review and vote on protocols that have been submitted, to review and revise the policies and procedures, to inspect campus animal housing and research facilities and prepare the semi-annual report on the university's animal care and use program. A simple majority of the membership shall constitute a quorum, however all IACUC members are expected to attend each meeting.

Public Records

The IACUC will conserve paper whenever possible and will rely instead on electronic communications. The University well understands the federal requirement for record keeping and will maintain paper records whenever it is necessary. Meeting minutes will serve as the official source of protocol votes and of other IACUC activities. University research records are subject to both federal and state laws. Requests for information under the federal Freedom of Information Act (FOIA) should be made to the Office of Research and Sponsored Programs.

Inspection of Animal Facilities and Semi-Annual Program Report

The IACUC reviews the animal care and use program and inspects animal facilities where animals are housed at least every six (6) months. During these reviews and inspections a Semi-Annual Program and Facility Review Report is completed. Deficiencies identified are classified as either "major" (i.e., those which affect animal welfare), or "minor", and a deadline by which corrections will be accomplished are assigned to the researcher in charge of each room that is inspected. Each semi-annual report is reviewed and signed by IACUC members present for the review. A quorum including at least the chair and a vet must be present to approve each semi-annual report and inspection. The final report is submitted to the Institutional Official for review and signature. Each report submitted to the Institutional Official will follow the template created by PHS.

Part II

Protocol Submission and Review

Protocol Submission Process

All SUNY Oswego faculty, staff, and students are required to have research and teaching activities involving all vertebrates reviewed by the IACUC **prior** to the beginning of the activity. The "[PROTOCOL APPLICATION FORM FOR RESEARCH EMPLOYING NONHUMAN VERTEBRATE ANIMALS](#)" should be submitted directly to iacuc-admin@oswego.edu. The PI must complete all sections of the Protocol Application Form pertinent to the research being proposed.

Protocol Review

Research projects are reviewed at one of two levels, depending upon the investigator(s) and IACUC's understanding of the research activities proposed and the federal guidelines that define the categories of IACUC review: "Designated Member Review (DMR)" and Full Committee Review (FCR)." SUNY Oswego's protocol review process is outlined below, but if more information is required, please consult the [NIH website](#). To begin the review process, Principal Investigators (PI) must provide assurances that all investigators and research staff have read and agreed to abide by these policies and successfully completed [Collaborative Institutional Training Initiative \(CITI Program\)](#) IACUC training modules **prior** to beginning work on the project.

The protocol review process comprises the following steps:

1. **Pre-Submission.** While preparing the protocol, the PI should consult with the IACUC veterinarian. The IACUC veterinarian will provide applicants, by return email within 7 days, comments and suggestions that may help the IACUC better understand the proposed research involving animals. Investigators may choose to revise their IACUC protocol applications by incorporating changes suggested by the veterinarian, although doing so does not in any way guarantee or constitute an approval by the IACUC, but may help to better clarify the research plan that involves animals. The IACUC Chair may also be consulted at this stage.
2. **Protocol Submission.** Investigators will submit a completed and signed application form to iacuc-admin@oswego.edu. The protocol application form must be delivered in electronic format.
3. **Pre-Review.** Upon receipt of a protocol application form by the IACUC Chair, the form will be reviewed for completeness and then forwarded in electronic form to the IACUC members. If the IACUC Chair concludes the protocol qualifies for a Designated Member Review, they will inform the IACUC members and instruct them to contact the IACUC Chair within 72 hours if they desire a Full Committee Review. A Designated Member Review will not be assigned until all committee members have responded.
- 4A. **Designated Member Review.** Designated Member Reviews (DMR) may be recommended by the IACUC chair when, in the IACUC Chair's opinion, the main activity of the protocol is non-invasive and may cause the animal(s) in question no or slight discomfort. A DMR allows the IACUC to review and approve protocols more expeditiously than a Full Committee Review while still maintaining rigorous guidelines. With a DMR, a protocol will be assigned to at least two committee members only after all IACUC members have received the protocol and have had the opportunity to call for a full IACUC review. These selected committee members will be responsible for approving, requiring revision of, or rejecting the protocol.
- 4B. **Full Committee Review.** For a Full Committee Review (FCR), the IACUC Chair will assign the protocol to an IACUC member to serve as the primary reviewer. The PI may be invited to attend the FCR meeting to field questions from IACUC. After questioning, the PI will be asked to leave the

meeting. After verbally presenting the findings regarding the application to a quorum of the IACUC members, the primary reviewer proposes a motion to either approve the protocol application, require revision to secure approval of the application, or reject the application. After discussion, the motion is seconded, and at least a quorum of the IACUC committee will vote on final approval. Possible outcomes of IACUC review include: approval, clarifications requested, tabling (deferral), or rejection. For revised protocol applications submitted in response to a “clarifications requested” decision, the chair or designated member will review the response letter and revised protocol and render a final decision, unless otherwise directed by the IACUC membership.

5. **Investigator Notification.** In cases where the IACUC requires clarifications or modifications to a given protocol, the PI will send their detailed responses in the form of a Response Letter and an amended protocol to iacuc-admin@oswego.edu. In cases when a protocol application is tabled or rejected, the PI is notified by the IACUC Chair and advised as to available options.

Criteria for Review

All proposed activities are reviewed by the IACUC to ensure that the following federal requirements (USDA and PHS) for granting protocol approval are met.

1. **Activities.** All research and teaching activities involving animals at SUNY Oswego must be in accordance with USDA regulations and PHS policy.
2. **Pain/Distress.** Projects should be designed to avoid/minimize discomfort/distress/pain. If pain/distress is caused, appropriate sedation, analgesia, or anesthesia will be used. The attending veterinarian must be involved in planning procedures. The use of paralytics is prohibited. Animals with chronic/severe unrelievable pain will be humanely euthanized.

According to regulatory agencies, all vertebrate animals used in research, teaching or testing must be assigned to an appropriate pain category. If a PI is in doubt as to which category their animals may fall under, they should contact the IACUC Chair and/or attending veterinarian.

USDA Pain/Distress Categories

- **Category B** animals are those that are being “bred”, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.” These animals have not been used for any research procedure, however minor. Category B is the place to put breeders and other animals that are not undergoing any experimental procedures.
- **Category C** animals are not subjected to procedures that involve pain or distress or would require the use of pain-relieving drugs. Routine procedures such as injections and blood sampling from veins that produce only mild, transient pain or discomfort are reported in this category. Another example of Category C procedures is an observational study of animal behavior. Animals that are euthanized before tissue collection or other manipulations are also commonly placed in this category, if no other procedures are performed that put them in a higher pain/distress category.
- **Category D** animals are those subjected to potentially painful procedures for which anesthetics, analgesics, or tranquilizers will be used. The important concept is that animals are given appropriate anesthesia and/or pain relief to limit their pain and distress as much as possible.

Examples of category D procedures are

- Surgery conducted with appropriate anesthesia and postoperative analgesia;
- Rodent retro-orbital eye bleeding performed under anesthesia;
- Non-human primate tattooing performed for identification under anesthesia;
- Removal of small tumors under local or general anesthesia, and use of analgesia after an animal’s skin is exposed to ultraviolet light to cause a “sunburn”; and

- Terminal exsanguinations (euthanasia by removal of blood) under anesthesia.
 - **Category E** animals are those that are subjected to painful or stressful procedures without the use of anesthetics, analgesics, or tranquilizers. Withholding of anesthetics, analgesics, or tranquilizers can only be allowed if it is scientifically justified in writing and approved by the IACUC. Examples of category E procedures are lethal dose studies (e.g. LD50 studies) that allow animals to die without intervention, pain studies that would not be possible if pain-relieving agents were administered, and psychological conditioning experiments that involve painful stimuli such as noxious electrical shock that cannot immediately be avoided by an animal. By law, the institution must annually report all category E procedures to the USDA and include a scientific justification supporting the IACUC's decision to approve them. It is important for the information on category E procedures to be complete and accurate
3. **Consideration of Alternatives.** A good faith effort must be made on the part of the researcher to consider the use of alternatives to any procedure likely to produce pain or distress in an experimental animal. This is an AWA requirement and is specified in the government principles for use and care of animals in the *PHS Policy*. Alternatives can include procedures that cause less pain or distress, non-mammalian models, or non-animal models. Methods such as mathematical models, computer simulation, and in vitro biological systems should be considered. The protocol narrative must include a summary of the databases searched including the key words used, the years covered by the search, and the date of the search and any consultation with experts used to determine that alternatives were not available or feasible. Resources can be found on the [SUNY Oswego IACUC](#) webpage.
 4. **Number of Animals.** Justification must be provided for the proposed number of animals to be used in the research or teaching activity, with a focus on minimizing total numbers while maintaining statistical integrity. The animals selected for a procedure should be of an appropriate species and quality.
 5. **Animal Husbandry.** For animals housed in university facilities: handling, housing, and procedures must be appropriate for the species and minimize undue stress in the animals. The *Guide for the Care and Use of Laboratory Animals* states "Proper management of animal facilities is essential to the welfare of animals, validity of research data, and health and safety of the animal care staff." A good husbandry program provides a system of housing and care that permits animals to grow, mature, reproduce, and maintain good health and minimizes variations that can modify an animal's response to experimentation. Temperature, humidity, air pressure and rate of turnover, and noise levels all may affect animal well-being and research results. All facilities housing animals will be reviewed using the [PHS Facility Inspection Checklist](#).

Part III

General Policies for Animal Care and Use

Animal Health

Animal living conditions must be consistent with standards of housing, feeding, and care directed by a veterinarian or scientist with appropriate expertise. A qualified veterinarian must provide medical care. Every housed animal found to be ill, behaving abnormally, or that is suspected of being ill, should be reported to the veterinarian immediately. The veterinarian will determine whether care is necessary and, if so, what level of care is to be provided.

For any animals undergoing surgery, requirements for sterility and pre- and post-operative care must be met. Protocols that require multiple survival surgeries experienced by individual animals must include ample justification for doing so. The reduction in the number of animals needed as a result of performing multiple surgeries on individual animals must be weighed against the possible increase of each animal's experience of pain, distress, or discomfort. Note that cost savings is *not* a scientific justification. Surgical procedures are categorized as major when a body cavity is exposed; minor surgical procedures do not expose a body cavity and cause little physical impairment (e.g., blood sampling). Humane endpoints should be identified.

For wild animals in natural settings, capture, handling, and restraint must be designed to minimize negative impacts on the health of the animal. Protocols must include measures to address injured animals.

Euthanasia

Methods of killing animals must conform to recommendations in [AVMA Guidelines for the Euthanasia of Animals: 2020 Edition](#) unless a scientifically necessary alternative is approved by IACUC. Options for euthanasia may include inhaled agents from an appropriate source (e.g., CO₂ from a cylinder using an appropriate displacement rate), non-inhaled agents [e.g., Tricaine mesylate (MS222)], cervical dislocation, exsanguination, or decapitation. The euthanasia method must be appropriate for the species to ensure a humane death. Species- and age-appropriate methods are detailed in the *AVMA Guidelines*. Trained personnel should only perform euthanasia. Death **must** be confirmed prior to final disposition of the animal's remains. From the 2020 AVMA Euthanasia Guidelines: "A combination of criteria is most reliable in confirming death, including lack of pulse, breathing, corneal reflex, and response to toe pinch; inability to hear respiratory sounds and heart-beat by use of a stethoscope; graying of the mucous membranes; and rigor mortis. None of these signs alone, except rigor mortis, confirms death. In small animals, particularly in animal shelter settings, verification of death may be supplemented by percutaneous cardiac puncture after the animal is unconscious. Failure of the needle and attached syringe to move after insertion into the heart (aspiration of blood provides evidence of correct location) indicates lack of cardiac muscle movement and death."

For wild animals in the field, methods of euthanasia must be consistent with the methods recommended by the American Society of Mammalogists, American Society of Ichthyologists and Herpetologists, American Fisheries Society, American Institute of Fisheries Research Biologists, Herpetologists' League, Society for the Study of Amphibians and Reptiles, or Ornithological Council and the *AVMA Guidelines*.

Hazardous Substances

Approval of the IACUC application involving hazardous materials is contingent on a pre-performance meeting involving the PI and relevant staff that represents the applicant's laboratory, the IACUC, and the SUNY Oswego Environmental Health & Safety (EH&S) Officer (phone: 315.312.3156). This pre-performance meeting is required in order to ensure that all involved personnel are aware of the precautions, containment practices, facilities, protective devices, disposal and decontamination procedures, and other necessary safety procedures that must be followed to protect personnel, and prevent accidental animal exposure to the hazardous material. The IACUC may also require a pre-performance meeting whenever an applicant PI proposes infrequently used species or techniques, or proposes surgical or teaching procedures involving anesthetized mammals. This pre-performance meeting must take place after IACUC approval of the protocol at the discretion of the IACUC, and occur before initiation of the IACUC-approved activity, to ensure that appropriate personnel, equipment, supplies, recordkeeping, and practices of animal care and use have been identified and will be employed. Material Safety Data Sheets, available through the Health and Safety Officer, must be reviewed by the user and filed in their departmental file.

Transportation, Relocation, or Reassignment of Animals

All transportation of animals, including intra-institutional transportation, should occur only when essential since any type of transport introduces risks of exposure to environmental extremes, crowding, infectious agents, and possible zoonoses, which can affect animal and public welfare, and the consistency of results. If transport of animals is necessary, a PI must provide a detailed description and schedule of animal transportation to IACUC and receive IACUC approval prior to animals being transported.

Procedures for Communicating Actions Taken by the IACUC

Communication with Investigators

Investigators are primarily and ultimately responsible for complying with federal, state, and local animal research rules and regulations. Investigators are responsible for responding to communications from the IACUC and are responsible for providing information/documents when they are requested. All documents and information are to be sent via email, as email is the preferred method of communication.

ADDRESS: Research Committee Coordinator
Office of Research and Sponsored Programs
223 Hewitt Union
Oswego NY, 13126

EMAIL: iacuc-admin@oswego.edu

Communication with Campus Administration

The IACUC Chair incorporates an overall review of IACUC activity within their Annual Report at the end of each academic year. This report is submitted to the IO. Included is summary information about IACUC activities.

When there is a report of an unanticipated problem or of harm to any animals, or when there is a report of a circumstance that raises risk to unacceptable levels (those exceeding the tolerance of the local research context), the issue is discussed by the IACUC at their next regularly scheduled meeting. If the circumstance is time urgent, the IACUC Chair will call an emergency meeting of the full IACUC. In all cases, regardless of the findings, the IACUC Chair will prepare an incident report that is submitted as soon as possible to the Office of Research and Sponsored Programs. This report includes a summary of the circumstance, the IACUC's discussion and findings, and the IACUC's

suggested actions to remedy. In such cases, IACUC actions could range from recommendation of additional training and auditing research records on a frequent basis (appropriate to the rate of data collection) to suspending or stopping the research. The Office of Research and Sponsored Programs may take further action, consistent with union agreements, animal resource policies and procedures, and external funding agencies. In compliance with federal, state, and local animal research regulations, the Provost's Office will allocate resources appropriately to rectify and remedy the issue(s).

The Office of Research and Sponsored Programs, in consultation with the IACUC Chair and Full Committee, reports to PHS or USDA unanticipated problems, any serious or continuing noncompliance, and any suspension or termination of IACUC approval. The Office of Research and Sponsored Programs will comply with PHS or USDA timelines for reporting, upon completion of an independent investigation into the allegations.

Conflicts of Interest

IACUC personnel are trained to be sensitive to conflict of interest, as defined by federal regulations and New York State law. When the IACUC Chair, primary reviewers, or member has a protocol under consideration, that individual will not participate in any IACUC activities concerning that project whatsoever; rather, that individual will act only in the role of an investigator, providing information as requested by the IACUC.

The same policy applies when a spouse, common law partner, or romantic partner has a protocol under consideration. Conflict of interest also includes times when an IACUC Chair, primary reviewers, or member is a co-investigator or consultant on a study under consideration; when she/he are an individual or member of any group that will be advanced by or otherwise benefit financially from the study being approved; or when she/he are a member of a group funding any portion of the study. If the IACUC Chair or primary review is in direct conflict with this proposal that is being reviewed, that individual will recuse themselves from the meeting entirely. If an IACUC Chair has been recused from the meeting, an ad hoc chair will be named and will carry out the duties of the chair for that discussion of that protocol.

Part IV

Policies for Housed Animals

Animals, including those purchased, gifted, bred, wild collected, or otherwise acquired and held in captivity for 12 hours or more, are defined as “Housed Animals”.

Housing and Bedding

Animal housing must conform to [PHS Guide](#) and the Animal Welfare Act standards while meeting research needs. Environmental factors can have a profound effect on the health and well being of animals as well as the outcome of experimental manipulation. The primary enclosure provides the limits of an animal’s immediate environment.

Often contact bedding is used for animal housing. The bedding is used to provide a clean, dry and comfortable environment to the animal. It must be replaced on a regular basis to keep the animal dry and clean, and to prevent the buildup of ammonia. For some species or protocols, the bedding may be a source of hazardous biological, chemical or radioactive agents. Appropriate measures for disposal of the bedding must be employed.

Enrichment

Species-appropriate items designed for enrichment in the animals’ enclosures should be provided. These could include tunnels, chewing objects, perches, etc.

Temperature, Humidity, and Ventilation

Environmental temperature and relative humidity can depend on housing design and can differ considerably between primary and secondary enclosures. The temperature must be constant and adapted to the housed species. Abrupt change during a short period of time, can cause stress and induce health issues. Relative humidity should also be controlled, but not nearly as narrowly as temperature; the acceptable range of relative humidity is 30% to 70%.

The purposes of ventilation are to supply adequate oxygen; remove thermal loads caused by animal respiration, lights, and equipment; dilute gaseous and particulate contaminants; adjust the moisture content of room air. That is why in animal facilities the ventilation system provides 100% fresh air. While supplying oxygen to the animal, a ventilation system must also eliminate the CO₂ produced by the animals as well as the ammonia generated by the bacterial degradation of urine, other odors, and potential allergens.

Lighting

The intensity and duration of the photoperiod must be adapted to the species and to the needs of the experiment. Rodents, which are mainly nocturnal, benefit from a low level of lighting during the day. The photoperiod is usually 12 hours of light and 12 hours of darkness. The reproduction of many animals is influenced by the photoperiod.

Noise

Animals are sensitive to sudden noise. The noise level in a facility must be kept constant and as low as possible. Many animals can hear noise at frequencies inaudible to humans, such as noise from the vibration of a blower.

Quarantine and Stabilization of Animals

SUNY Oswego IACUC requires that all newly-received animals must be allowed a stabilization period of at least 48 hours prior to their use. This permits the animals to adapt to their surroundings, resulting in a more stable physiological and behavioral state. Newly received animals should be housed apart from resident animals to reduce the chances of disease transfer if the new arrivals are harboring a pathogen.

Procured Animals

All live animals used in research, teaching, or testing at SUNY Oswego, or at other college-affiliated institutions, or by university faculty at other sites other than studies of wild animals in natural settings, must be procured from reliable sources and housed and cared for within animal facilities approved by IACUC.

Animal Identification and Records

Adequate animal care includes adequate animal record keeping. All animals must be visually inspected on a daily basis. A written record must be kept of animal room activities (e.g., animal checks, feeding, watering, cage changes). Animals must be identified on cage cards that should include the date of arrival, source, species, sex, birthdate, and other appropriate details inasmuch as that information is known. Medical information must also be noted. Methods used for individual animal identification (e.g., ear tags) must be detailed in an approved animal use protocol. Non-compliance with these requirements will result in a written notification to the PI from the IACUC. Repeated violations may result in termination of the protocol approval.

Part V

Policies for Wild Animals in Natural Settings

Guiding Principles Regarding Wild Animal Studies

IACUC approval is required for all protocols that include invasive procedures, pain to the animal, capture, restraint, or otherwise alter or influence animal activity. Activities such as observation for presence/absence or sound/video recording may be exempt. Wild animals that will be held captive for longer than 12 hours additionally fall under the policies for “Housed Animals.” Regardless, any investigator proposing study of or with wild animals must submit a completed “[PROTOCOL APPLICATION FORM FOR RESEARCH EMPLOYING NONHUMAN VERTEBRATE ANIMALS](#)” to iacuc-admin@osweg.edu.

The IACUC is charged with oversight of the experimental procedures and methods of handling, care, and use of free-living wild animals. These activities must comply with the *U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training* as outlined in Appendix B of the *Guide*. Studies of wild animals in natural settings (referred to herein as “field studies”) contribute to the conservation and well-being of wild animals. Efforts to protect indigenous animal species often are dependent on knowing which species are present, the nature of their habitat, distribution, ecology, anatomy, physiology, and reproduction.

The PI must assure the IACUC that their field study and laboratory use of wild animals will be in accordance with the appropriate guidelines from the following:

[Guide for the Care and Use of Laboratory Animals](#) (the *Guide*)

[USDA Animal Welfare Act](#)

[The Ornithological Council Guidelines to the Use of Wild Birds in Research](#)

[Guidelines of the American Society of Mammalogists for the use of wild mammals in research](#)

[American Society of Ichthyologists and Herpetologists: Guidelines for Use of Live Amphibians and Reptiles in Field and Laboratory Research](#)

[American Fisheries Society, American Institute of Fishery Research Biologists, American Society of Ichthyologists and Herpetologists: Guidelines for the Use of Fishes in Research](#)

Permits

The PI must have knowledge of all state and federal regulations pertaining to the animals under study. All state and federal permits necessary for carrying out the proposed studies must be received prior to the initiation of the study. Copies of all valid permits must be submitted to the IACUC prior to protocol approval. The PI must ensure that studies conducted outside of the United States will also be in accordance with all wildlife regulations of the country in which the research will be performed. Animals of endangered or threatened taxa must not be removed from the wild, nor imported or exported except in compliance with applicable regulations.

Methods of Capture and Restraint

Capture techniques that have minimal impact on the animal and that are environmentally benevolent should be used whenever possible. Whenever feasible, the potential for return to the natural environment must be incorporated into the sampling design. Capture devices such as nets and traps must be checked daily to minimize potential for animal injury or mortality. The season and likelihood of captured animals having dependent offspring should be considered. Restraint procedures of wild animals, including confinement, physical restrictions, or drug-induced immobilization must be those that cause the least amount of restraint necessary. Other considerations must include that the restraint can be accomplished in the shortest period of time, that it reduces or eliminates contact between the handler and the animal, and that it minimizes hazards to personnel whenever possible within the constraints of study design.

Whenever practical and ecologically appropriate, as soon as possible following capture and upon completion of their involvement in the study, wild-caught animals should be released at the site of the original capture. Factors to consider include whether the animal's ability to survive has been impaired, if the animal can be expected to function normally, whether conditions (e.g., season) are conducive to the animal's survival, whether the animal's release is likely to spread pathogens, laws or regulations that may prohibit release, or whether release may be detrimental to the well-being of the existing native animals. Wild animals that are held for longer than 12 hours are subject to policies for housed animals.

Sample or Specimen Collection

When possible, non-invasive tissue/sample collection methods (e.g., eggshells, feathers, feces, hair, carcasses) should be employed. When samples must be taken from live animals, procedures implemented will need to avoid or minimize distress to the animals consistent with sound research design. Procedures that cause more than momentary or slight distress to the animals must be performed with appropriate sedation, analgesia, or anesthesia, except when scientifically justified by the PI in writing and approved by the IACUC. Aseptic sampling techniques and surgical procedures must be utilized. PIs must consider whether antimicrobial drugs should be administered following sampling or surgical procedures.

Collection of live animals and their preparation as museum specimens is sometimes necessary for research and teaching activities in systematic zoology. Each animal collected should serve as a source of information on multiple levels (e.g., behavior, morphology, genetics), to assure the maximum utility of each animal and to minimize the need for duplicate collection. Formalin fixation of dead specimens is acceptable; however killing unanaesthetized specimens by immersion in a formalin solution is unacceptable.

Marking or Tagging

The IACUC acknowledges that the marking of wild animals is a basic method of many field studies, which provides a means to determine the movements, abundance, and population dynamics of wild animals. PIs must carefully consider the nature and duration of restraint required by the marking technique, amount of tissue affected, whether distress is momentary or prolonged, whether the animal after marking will be at greater than normal risk, whether the animal's desirability as a mate is reduced, and whether the risk of infection or abscess formation is minimal. The PI must consider the potential for pain and discomfort associated with each of these techniques, and whether they should be preceded by a general or local anesthetic, and/or followed by a topical antiseptic. Whenever possible, marking that involves the removal of tissue (e.g., toe clipping), the tissue should be preserved for later use in genetic studies or other purposes.

Part VI

After Initial Approval of Protocols

Continuing Review, Renewal, Amendments and Termination of Protocols

Animal research protocols are approved for one-year or three-year terms based on if it falls primarily under USDA or PHS policy (USDA, one-year; PHS, three-years. Protocols that have been approved for three years are subject to continuing reviews at least annually.

Continuing Review

Correspondence (typically via email) will be sent to the PI two months prior to the anniversary date of the last review indicating that the continuing review is due. If the PI intends to continue their study, they must complete and return a Continuing Review Summary, which is then reviewed by at least two IACUC members including the IACUC Chair. Upon recommendation of the reviewers, the protocol is either approved outright for a period of time up to an additional year, or a protocol modification is requested and the normal review process outlined above is followed.

Renewal

At the end of the final year of a protocol, the PI must resubmit the protocol for IACUC review in order to continue such research or teaching activities. A new Application for Protocol Review must be submitted; this submission undergoes the same review process as any new protocol. The renewal should include all previous modifications or amendments made to the protocol since its original approval.

Modifications or Amendments to Approved Protocols

Modifications to approved protocols must be documented appropriately, submitted to IACUC for review and approved. The method for obtaining approval for a modification or amendment is similar to that for a complete protocol. A letter requesting the modification including an explanation of the rationale for the change and any amended "[PROTOCOL APPLICATION FORM FOR RESEARCH EMPLOYING NONHUMAN VERTEBRATE ANIMALS](#)" pages resulting from this change should be submitted to iacuc-admin@oswego.edu. The IACUC Chair, in consultation with the veterinarian, determines if the modification is "minor" or "significant." Minor modifications may entail such things as small numbers of additional animal subjects, the addition of new personnel, or perhaps changing the route of drug administration. The IACUC Chair and the consulting veterinarian without full review may approve minor modifications administratively. A major modification may entail a large change in numbers of animals being used or requested, an increase in invasiveness, a change in species, an increase in pain or discomfort, or a change in the method of euthanasia. Such major modifications require review by the full committee. A written description of the significant change(s) in the protocol should be provided to the IACUC. The veterinarian will notify the IACUC of any changes in choice of anesthetics or analgesics and any changes in their dosage.

Part VII

IACUC Administrative Procedures

Animal Research Program Leadership Responsibilities

Institutional Official (IO) Responsibilities

The Institutional Official (IO; SUNY Oswego's Associate Provost for Research Development and Administration) is the individual authorized to act for the institution. Office of Laboratory Animal Welfare ([OLAW 2017](#)) guidance states that the IO has the administrative and operational authority to commit organizational resources to ensure that the animal care and use program complies with AWR and PHS Policy requirements. USDA Animal Care Policy #15 goes on to say:

"The IO should therefore be someone with the authority to promulgate, implement, and enforce policies across departmental lines. The IO should also have the fiscal authority to provide for adequate staffing, program improvements, facility repairs, and renovations that meet the needs of the institution's program."

Note: The USDA Animal Care Policies are currently (2019-2020) under administrative review for revisions and clarifications.

OLAW (2017) guidance adds "the IO should also clearly define and assign responsibilities and reporting channels for other essential program elements such as training and occupational health." Depending on the organization, the CEO may also serve as the IO or be further removed from the animal care program and appoint someone else to be the IO. Either way, the IO is a key figure with an important job overseeing the organization's animal care and use program.

The AWR and PHS Policy provide the IACUC with authority to approve animal activities on the organization's behalf. The IO (or any other administrator) may halt any animal activity for any reason without IACUC concurrence, but these officials do not have the authority to approve an animal activity in the absence of IACUC approval. For example, a research chief or medical school dean could halt or even terminate an animal activity, but could not allow use of animals prior to approval by the IACUC or reverse an IACUC suspension of a project.

The PHS Policy and AWR spell out the responsibilities of the IO. The IO must be informed of IACUC decisions relating to deficiencies found in the animal care program (including failure to correct previously identified deficiencies in a timely manner) as well as other recommendations from the IACUC relating to any aspect of the program. The IO must also review suspensions and serious or ongoing noncompliance and report these incidents to OLAW, USDA, and AAALAC, as applicable. While the IO has authority to disapprove an activity previously approved by the IACUC, the IO may not override an IACUC decision to withhold approval of a proposed activity.

IACUC Compliance Officer Responsibilities

The IACUC Compliance Officer at SUNY Oswego is the Research Committee Coordinator, and serves as the institution's primary animal research contact. Administrative responsibilities fall into three general areas: IACUC oversight as designated by the Institutional Official, communication and supporting education, record keeping and reporting. The Research Compliance Officer may also serve as a primary or secondary reviewer, having authority to review and approve protocols.

IACUC Chair Responsibilities

The IACUC Chair, appointed by the Institutional Official, promotes the activities of the IACUC on the SUNY Oswego campus, provides training opportunities, and works to facilitate the appropriate and

timely review of research. The IACUC Chair assists in the coordination of the activities of the full committee, prepares agendas for convened meetings of the IACUC, and ensures that a quorum is present before a research protocol is reviewed. The IACUC Chair ensures that each IACUC member has received all pertinent material prior to the meeting. The IACUC Chair performs general oversight of the research protocols in collaboration with the primary reviewers.

Chair and Member Appointments to the IACUC

Authority and Responsibility of the IACUC

The Institutional Animal Care and Use Committee (IACUC) is a committee established to protect animals involved in research activities. The IACUC implements federal, state, and local laws and regulations requiring the review and monitoring of animal research in accordance with the [Guide for the Care and Use of Laboratory Animals](#) (the *Guide*), the [Animal Welfare Act](#), the [Public Health Service Policy on Humane Care and Use of Laboratory Animals](#) (PHS Policy), the [Best Practices: Animal Care and Use](#) of The State University of New York and The Research Foundation for The State University of New York, and this SUNY Oswego guidance document.

The IACUC has the authority to approve, require modifications (to secure approval), or disapprove all animal research activities at SUNY Oswego. The goal of the IACUC is not only to guarantee compliance with existing laws and regulations but also to assist campus researchers in the planning and implementation of their projects.

IACUC Chair Appointment

The appointment of the IACUC Chair is the responsibility of the SUNY Oswego Institutional Official, the Associate Provost for Research Development and Administration, who will select this individual from nominations made by the voting members of the IACUC. Nominations will be made by the standing IACUC in the spring semester prior to the start of the appointment, and the Chair's term will begin the fall semester of the appointment year. Nominations will be recruited from within the IACUC and the campus community; nominees will be put forth for consideration with a majority vote of support by the voting members of the IACUC. There is no limit to the number of nominations the IACUC may put forth for consideration to the SUNY Oswego Institutional Official.

The IACUC Chair will serve for 3 years, and may serve two consecutive terms at the request of the Institutional Official. Following the completion of the second term (6th year of service) as chair, the individual may join the IACUC at the request of the Institutional Official. There is no limit to the cumulative service of the IACUC Chair.

The IACUC Chair may resign at any time by submitting a letter of resignation to the Institutional Official. The Institutional Official may remove the IACUC Chair from the committee if they are not able to complete responsibilities of an IACUC Chair in a manner consistent with federal, state, or campus regulations regarding human subjects research.

Individuals who serve as the IACUC Chair should have no less than one academic year of experience as an IACUC member. They are expected to be compliant with all training requirements prior to the beginning of their appointment and maintain such compliance throughout their service as Chair. Individuals interested in serving as IACUC Chair will be expected to provide an updated curriculum vitae and statement of their interest in the role to the committee for review prior to a nomination. The voting committee will review all nominees, and formally vote on those to put forth to the Institutional Official for review and selection. The Institutional Official will communicate their selection of Chair to the individual selected and the IACUC.

Membership and Appointment to the IACUC

Appointments to the IACUC are made in accordance with the federal requirements. In addition to possessing the professional competence necessary to review specific research activities, the IACUC shall be able to establish the acceptability of proposed research in terms of the community at large,

the research context, institutional commitments and regulations, applicable law, and standards of professional conduct and practice. The IACUC shall, therefore, include persons knowledgeable in these areas and meet the specific criteria set forth in the guidance documentation outlined above.

The SUNY Oswego Institutional Official, the Associate Provost for Research Development and Administration, shall make appointments to the IACUC for three-year terms that begin at the start of the academic year. The Institutional Official will evaluate the need for addition or removal of committee members at the beginning of each academic year in consultation with the IACUC Chair.

Due to the extensive time commitment, training requirements, and qualifications of IACUC personnel, all IACUC appointments are renewable; it is recommended that IACUC members serve no more than two consecutive terms (6 years), though there is no limit to the number of cumulative years of service to IACUC.

IACUC membership carries significant responsibility in reviewing protocols, updating procedures, and ensuring the campus community and partners adhere to federal, state, and campus policies regarding animal research. IACUC members will be expected to attend all IACUC Review and Business Meetings; when participation is not possible, the member should communicate with the IACUC Chair prior to the meeting. Note: Meeting participation in person or via electronic means (such as videoconferencing) is acceptable.

In agreeing to serve on the IACUC, individuals members agree to adhere to all federal, state, and campus policies regarding animal research.

Individuals who serve on the IACUC should have a specific interest and commitment to best practices in animal research. They are expected to be compliant with all training requirements prior to the beginning of their appointment and maintain such compliance throughout their service on the committee. Individuals interested in serving on the IACUC will be expected to provide an updated curriculum vitae and statement of their interest in the role to the Institutional Official; self-nominations will be collected each spring semester, and appointments will begin the following fall semester.

The IACUC members may resign at any time by submitting a letter of resignation to the Institutional Official. The Institutional Official may remove any IACUC member from the committee if they are not able to complete responsibilities in a manner consistent with federal, state, or campus regulations regarding animal research. Any IACUC member who does not comply with federal, state, or university policies regarding animal research will be removed from the committee by the Institutional Official.

IACUC Meeting Minutes

Minutes of IACUC meetings are recorded in a manner consistent with the federal regulations and current guidance documents addressing IACUC Meeting Minutes. SUNY Oswego uses a regular format for meeting minute notes to document protocol discussions.

Minutes of IACUC meetings shall be in sufficient detail to show attendance at the meetings; actions taken by the IACUC; the vote on actions including the number of members voting for, against, and abstaining; the basis for requiring changes in or disapproving research; and a written summary of the discussion of controverted issues and their resolution.

1. For research approved by the convened IACUC, all required findings are fully documented in the minutes of the IACUC meeting, including *protocol-specific* information justifying each IACUC finding. Research that was reviewed under an expedited review procedure,
2. Details about IACUC recommendations and required modifications/revisions;
3. Rationale for requiring continuing review more often than annually, as appropriate. The minutes of IACUC meetings will clearly reflect these determinations and approval period.

4. The vote on all IACUC actions including the number of members voting for, against, and abstaining. For SUNY Oswego, for example, votes are recorded in the minutes using the following format: Total = 9; Vote: For - 8, Opposed - 0, Abstained - 1.

IACUC Records

The IACUC shall prepare and maintain adequate documentation of IACUC activities, including the following:

1. Copies of all research proposals reviewed, scientific evaluations, if any, that accompany the proposals, approved permits, progress reports submitted by investigators, and reports of injuries to animals.
2. Minutes of IACUC meetings that are in sufficient detail to show attendance at the meetings; actions taken by the IACUC; the vote on these actions including the number of members voting for, against, and abstaining; the basis for requiring changes in or disapproving research; and a written summary of the discussion of raised issues and their resolution.
3. Records of continuing review activities.
4. Copies of all correspondence between the IACUC and the investigators.
5. A list of IACUC members

The records required by this policy shall be retained for at least 3 years, and records relating to research that is conducted shall be retained for at least 3 years after completion of the research. All records shall be accessible for inspection and copying by authorized representatives of the department or agency at reasonable times and in a reasonable manner.

Part VIII

Resources and Acknowledgements

Resources

- [The Guide for the Care and Use of Laboratory Animals](#)
- [Office of Laboratory Animal Welfare](#)
- [Office of Laboratory Animal Welfare - Public Health Service Policy on Humane Care and Use of Laboratory Animals](#)
- [USDA Animal Care - Animal Welfare Act and Animal Welfare Regulations](#)
- [PHS Facility Checklist](#)

Acknowledgements

Substantial revisions made to our policies and procedures during Spring 2018 and Summer 2020.