

University of Illinois at Springfield

Policies and Procedures Governing Care and Use of Laboratory Animals in Research and Teaching

Federal regulations require each institution using vertebrate animals in research, teaching or testing to appoint a committee that provides oversight to its animal care and use program. Among other functions, this committee is required to review and approve, require modifications in, or withhold approval of animal use activities. The Institutional Committee for the Care and Use of Animals (ICCUA) fulfills these requirements at UIS.

The primary purpose of the Institutional Committee for the Care and Use of Animals (ICCUA) is to ensure that teaching, research and demonstration activities at UIS involving vertebrate animals are conducted in accordance with federal guidelines. These policies and procedures represent general guidelines for the care and use of animals as regulated by the Animal Welfare Act (Public Law 89-544) and the Public Health Service (PHS) Policy on the Humane Care and Use of Laboratory Animals.

The ICCUA is charged with the institutional responsibility for assuring the appropriate care and treatment of all vertebrate animals used in teaching, research and demonstration activities. Any undertaking in which UIS faculty, staff or students utilize vertebrate animals must be described in a research protocol and reviewed by the ICCUA. Upon review, the ICCUA has the authority to approve, require modifications in, or withhold approval of a protocol. These policies and procedures cover all vertebrate species (warm or cold blooded) used for research, teaching or demonstration purposes, with the following exceptions:

- Farm animals used for the teaching/study of food or fiber production.
- Collection of data through observation of wild animals. (NOTE: activities that involve handling wild animals in the field or removing them from their natural habitat for teaching or research are NOT exempt from review).

The mission of the ICCUA is to foster research and academic instruction in an atmosphere conducive to learning while adhering to federal regulations. The ICCUA examines each protocol carefully and will work closely with UIS personnel to ensure full compliance, as well as protection for all involved. Comments or questions regarding the UIS animal care policies should be submitted to the Office of Grants, Contracts and Research Administration, MS PAC 525, 217-206-7409.

U.S. Government Principles

The following principles are considered by U.S. Government agencies in developing requirements for research, teaching or testing procedures involving the use of vertebrate animals. These principles serve as guidelines for all UIS research and teaching activities involving animals.

1. The transportation, care and use of animals should be in accordance with the Animal Welfare Act (7 U.S.C 2131 et.seq.) and other applicable federal laws, guidelines and policies (see the Guide for the Care and Use of Laboratory Animals, National Academy of Sciences, 1996).
2. Procedures involving animals should be designed and performed with due consideration for their relevance to human or animal health, the advancement of knowledge, or the good of society.
3. The animals selected for a procedure should be of an appropriate species and quality and the minimum number required to obtain valid results. Methods such as mathematical models, computer simulation, and *in vitro* biological systems should be considered.
4. Proper use of animals, including the avoidance or minimization of discomfort, distress and pain when consistent with sound scientific practices, is imperative. Unless the contrary is established, investigators should consider that procedures that cause pain or distress in humans may cause pain or distress in other animals.
5. Procedures with animals that may cause more than momentary or slight pain or distress should be performed with appropriate sedation, analgesia or anesthesia.
6. Animals that would otherwise suffer severe or chronic pain or distress that cannot be relieved should be painlessly killed at the end of the procedure or, if appropriate, during the procedure.
7. The living conditions of animals should be appropriate for their species and contribute to their health and comfort. Normally, the housing, feeding and care of all animals used for biomedical purposes must be directed by a veterinarian or other scientist trained and experienced in the proper care, handling, and use of the species being maintained or studied. In any case, veterinary care shall be provided as indicated.
8. Investigators and other personnel shall be appropriately qualified and experienced for conducting procedures on living animals. Adequate arrangements shall be made for their in-service training, including the proper and humane care and use of laboratory animals.
9. Where exceptions are required in relation to the provision of the Principles, the decisions should not rest with the investigators directly concerned but should be made, with due regard to Principle 2 (above), by an appropriate review group such as an institutional animal care and use committee.

UIS Policies

The following pages summarize the policies and procedures under which the UIS ICCUA operates. In all cases, the ICCUA will observe the law as stated in the Animal Welfare Act and any other regulations or guidelines that affect the use of vertebrate animals in research and teaching at this institution. These policies apply to all research protocols involving vertebrate animals, regardless of whether or not the activity is supported by federal funds.

Animals Regulated

Animal Welfare Act -- for USDA purposes, “Animal” means any live or dead dog, cat, non-human primate, guinea pig, hamster, rabbit, or any other warm-blooded animal, which is being or is intended for use for research, teaching, testing, experimentation, or exhibition purposes, or as a pet.

This term excludes: birds, rats, mice (wild mice are covered), horses not used for research and other farm animals used or intended for use as food or fiber, or livestock or poultry used or intended for use for improving animal nutrition, breeding, management, or production efficiency, or for improving the quality of food or fiber.

National Institutes of Health -- the National Institutes of Health’s Office of Animal Care and Use defines “Animal” as any live vertebrate animal (both warm and cold blooded) used or intended for use in research, experimentation, testing, training or related purposes. This definition extends to animals that are acquired for the purpose of collecting tissues or other parts.

UIS Regulations -- the UIS ICCUA is responsible for overseeing the welfare of **all vertebrate** animals used at or by this institution for testing, demonstration, research or teaching. All such animal use must be reported to the ICCUA using the approved protocol form. These regulations extend to research involving dead animals of any warm-blooded species.

Institutional Official

The Vice Chancellor for Academic Affairs (VCAA) is the institutional official responsible for the care and use of animals at UIS.

Line of Authority

Laboratory animal care and laboratory animal facility management is overseen by the Director of the Science Division. The Director reports directly to the Dean, College of Liberal Arts and Sciences; the Dean reports directly to the Provost, who serves as the Institutional Official. The veterinarian, who is under contract with UIS, can report directly to the Director of the Science Division and to the Institutional Official.

ICCUA Membership

ICCUA membership shall consist of not less than five members (PHS requirement) and shall include at minimum:

- a) one doctor of veterinary medicine, with training or experience in laboratory animal science and medicine.
- b) one practicing scientist experienced in research involving animals.
- c) one member whose primary concerns are in a nonscientific area (for example ethicist, lawyer, clergy member).
- d) one individual who is not affiliated with the institution in any way other than as a member of the ICCUA, and is not a member of the immediate family of a person who is affiliated with the institution.

The Dean (or designate) of the College of Liberal Arts and Sciences shall serve as an ex officio member of the ICCUA. Administrative responsibilities shall reside in the office of the VCAA. The Pre-Award Grants and Contracts Coordinator shall serve as staff to the ICCUA unless otherwise designated by the VCAA. All files and records related to the ICCUA will be located in the Office of Grants, Contracts and Research Administration.

The Chancellor will appoint members to the ICCUA upon nomination by the Institutional Official. Members will be appointed for a three-year term. To provide continuity, terms will be staggered so that no more than one-third of the appointments expire in a given year. There is no limitation on the number of terms a member can serve.

A chair and vice-chair will be selected every two years at the fall meeting from among the committee members. There is no limitation on the number of terms that any member can serve as chair or vice-chair.

The ICCUA has the option of inviting individuals with competence in special areas to review protocols involving complex issues requiring expertise beyond or in addition to that already available on the committee. Such consultants shall not be considered voting members of the committee.

ICCUA members are sent various documents which the Committee uses as guides to assess animal protocols. Additionally, new members meet with the Director of the Science Division and the ICCUA chair for training and a discussion of policies and procedures. The following materials are used for training new members:

1. UIS's Assurance of Compliance with PHS Policy;
2. A copy of the UIS Animal Use Protocol form,
3. Guide for the Care and Use of Laboratory Animals,

4. A copy of the UIS Policies and Procedures Governing Care and Use of Laboratory Animals in Research and Teaching.
5. Facility inspection checklist and program review checklist

Periodically throughout the year, members receive information (articles, updated manuals, etc.) to stay current with topics related to animal research and IACUC committee function.

Duties and Responsibilities

Review of Protocols

All research, teaching and demonstration activities involving the use of vertebrate animals (and changes to ongoing activities) conducted at or sponsored by the University of Illinois at Springfield must receive ICCUA approval prior to their initiation. Approval to conduct such activities must be gained by submission of a completed animal care and use protocol for review by the ICCUA.

The protocol shall:

- be reviewed/approved by a majority of the ICCUA members
- be kept on file a minimum of three years after its completion
- be used as a reference for determining whether actual practices conform to approved practices
- be reviewed annually on the approximate anniversary of its approval
- be revised by the researcher any time substantial changes are made to previously approved practices
- identify the species and approximate number of animals to be used, with adequate justification
- require written assurance from the principal investigator or instructor any time a proposed procedure involves pain or distress to animals to include
 - * alternative procedures considered and why no other procedures are suitable
 - * assurance that the experiment does not unnecessarily duplicate previous experiments
 - * detailed procedures used to minimize pain and discomfort to the animals

In all cases, discomfort, distress and pain to animals must be minimized. Appropriate sedation, analgesia, or anesthesia must be used in procedures which may cause more than momentary or slight pain or distress to animals. Animals that would otherwise experience severe or chronic pain or distress following a procedure must be painlessly sacrificed at the end of the procedure or, if appropriate, during the procedure.

Procedures for Review of Protocols

Protocols are submitted to the Coordinator, Grants and Contracts, who resides in the office of the Provost and provides administrative support to the ICCUA. Protocols are logged and checked for completeness by support staff and the ICCUA chair. Upon the chair's approval, the protocol is distributed for review and consideration by the ICCUA.

The ICCUA procedures for protocol review are:

(1) Full Committee Review at a Convened Meeting.

Applications are normally reviewed at a regularly scheduled meeting of a quorum of ICCUA members.

(2) Designated Member Review.

Designated Member Review of applications by the full ICCUA is available, at the discretion of the chair, outside of a convened meeting in some situations when review is required before the next scheduled ICCUA meeting. The procedure for Designated Member Review involves the circulation, to all members, of a copy of the full proposal, with a review form. The review form asks each member to recommend approval as submitted, disapproval, the need for modification(s), or the need for review at a full convened meeting. If no member requests Full Committee Review within five business days, at least two members of the ICCUA, designated by the chair, shall review the proposed protocol and have the authority to approve, require modifications, or request full committee review. If Full Committee Review is requested, approval of those research projects may be granted only after review at a convened meeting of a quorum of the ICCUA and with the approval vote of a majority of the quorum present.

(3) Review of modifications to active projects.

The chair may grant executive approval of modifications to active projects that the chair deems to be non-significant. Significant modifications must be reviewed by the ICCUA at a convened meeting.

(4) Review of unchanged active projects.

Researchers or teachers with projects which they plan to continue, without changes, or projects with minor changes, should submit updated information to the ICCUA at least once per year. Continuing review of unchanged projects includes review of the complete project file, including the "Continuation Application", by at least two members designated by the chair; the remaining members receive the "Continuation Application" and a project summary. Each project receives Full Committee Review at least once every three years.

Regular Review of Programs

The ICCUA shall meet at least twice per academic year, at least once every six months, in order to review the conditions of the animal facilities and the program of the care and use animals. A subcommittee of the chair plus two members selected randomly can inspect the animal facility immediately prior to the full committee meeting and report on its condition to the full committee. Checklists are used to ensure complete and thorough reviews are conducted. In addition, each member present at the convened meeting will be asked to sign a statement indicating his/her approval of both the conditions of the facility and the program of the care and use of animals. Any member can request to view the facility by contacting the ICCUA chair.

Minutes of all meetings will be kept, with any dissenting opinions clearly noted. Within 30 days of each meeting, the Committee chair will submit a report to the Institutional Official.

Review of Active Protocols

Active protocols shall be reviewed by the ICCUA no less than once per year. Any protocol found not to be in compliance can be suspended until the cause for suspension has been remedied. All findings of non-compliance will be communicated in writing to the PI, the relevant dean and the Institutional Official. In the case of research supported by federal funds, such noncompliance shall be reported to the federal funding agency and the U.S. Public Health Service.

Special Meetings

A special meeting may be requested by any Committee member to consider a matter relevant to the Committee. Normally, both new and continuing protocols will be reviewed at the regular bi-annual meetings in the fall and spring unless circumstances warrant a special meeting. **Principal Investigators should plan to submit their protocols accordingly.**

Voting Requirements

A quorum, defined as ½ of the appointed committee plus one, shall be required for all formal actions of the ICCUA. Policies, protocols, or suspensions can be approved only with a majority vote of the quorum. Dissenting opinions will be recorded in the minutes and presented to the Institutional Official.

Conflict of Interest

No member of the Committee may participate in the review or approval of a proposed activity in which that member has a conflicting interest, except to provide such information as needed or requested by the Committee. No member of the Committee may contribute to the constitution of a quorum for the review of an activity in which he/she has a conflicting interest.

Training

The ICCUA shall provide for the training and continuing education of all faculty, technicians, and students involved with animal use, care and treatment. A training officer, designated by the Committee, will implement and oversee all training.

The ICCUA shall review at least once a year the status of training and the qualifications of PIs, instructors and technicians who handle animals. The training officer shall certify to the full Committee the competency of all individuals involved in the care and study of laboratory animals.

At a minimum, training will include instruction on:

- the humane practice of animal maintenance and experimentation
- how and to whom deficiencies in animal care and treatment can be reported
- instruction on the basic needs of each species of animal
- intent and requirements of the Animal Welfare Act and other federal requirements
- health procedures, as coordinated with the campus health service
- alternates to potentially painful and/or distressful procedures

Care and Maintenance of Animals

The living conditions of animals must be appropriate for their species and must contribute to their health and comfort. The housing, feeding and non-medical care of the animals must be directed by a veterinarian or other scientist trained and experienced in the proper care, handling, and use of the species being maintained or studied. Medical care for animals must be available and provided as necessary by a qualified veterinarian.

Euthanasia

The methods of euthanasia used must be consistent with the recommendations of the American Veterinary Medical Association's Guidelines on Euthanasia (June, 2007). Exceptions may be made to this requirement only when the proposed procedure is justified for scientific reasons by the Principal Investigator.

Concerns regarding animal welfare

Any concern about the welfare of animals can be confidentially reported to the Provost's Office, the ICCUA Chair, the Science Division Chair or the attending veterinarian. Contact information for these individuals is posted in the animal facilities and labs, and is listed on the ICCUA website. Concerns will be brought to the full ICCUA, which will investigate, discuss the findings at a convened meeting and report their findings and recommendations to the Institutional Official.