



**BYLAWS OF THE  
INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE**

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## I. PREAMBLE

The Institutional Animal Care and Use Committee (IACUC) of the University of Tennessee at Chattanooga is responsible for overseeing the use of animals and animal facilities, and for the review of basic science and biomedical research and teaching activities involving animals conducted at, or in association with The University of Tennessee at Chattanooga. Members of the IACUC are appointed by the Provost on behalf of the Chancellor of The University of Tennessee at Chattanooga. The IACUC ensures that animal care and use is in compliance with all federal, state, and local regulations. The basis of compliance is determined by the Federal Animal Welfare Act (P.L. 89-544) and amendments, the ILAR Guide for the Care and Use of Laboratory Animals, the Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching, the Public Health Service (PHS) Policy on the Care and Use of Laboratory Animals (hereafter called the PHS Policy), the Food and Drug Administration (FDA) Good Laboratory Practices, and other applicable regulations. The IACUC is the principal advisory source on humane care and use of animals within the University and, as such, the appropriate body for reviewing and investigating concerns or complaints involving the appropriate care and use of animals. The Committee has the authority to negotiate modifications, suspend or terminate animal use that is not in compliance with these regulations.

The Committee shall review the University animal program semiannually, inspect all University animal facilities, and review and approve the care and use of all animals as described in animal use protocols. The Committee shall recommend to the designated institutional official changes any improvements to the University animal program or facilities necessary to maintain a high quality animal use program that is in compliance with all appropriate regulations.

As stated in the PHS Assurance Document, the IACUC shall:

- ❑ Review the institution's program for humane care and use of animals at least once every six (6) months.
- ❑ Inspect all the institution's animal facilities, including satellite facilities at least once every six (6) months.
- ❑ Review concerns involving the care and use of animals at the institution.
- ❑ Make written recommendations to the appropriate Institutional Official regarding any aspect of the institution's animal program, facilities, or personnel training in their respective areas.
- ❑ Review and approve, require modifications, or withhold approval of protocols for the use of animals as set forth in the PHS Policy (Sec. IV., B).
- ❑ Review and approve, require modifications, or withhold approval of proposed significant changes regarding the use of animals in ongoing activities as set forth in the PHS Policy (Sec. IV., B).
- ❑ Notify investigators and the institution in writing of its decision to approve or withhold approval of those sections of protocols related to the care and use of

animals or of modifications required to secure IACUC approval as set forth in the PHS Policy (Sec. IV., C).

- Be authorized to suspend the use of animals (PHS Policy Sec. IV., C.6. )

## **II. IACUC MEMBERSHIP**

### **A. Composition**

The IACUC must be qualified through the experience, expertise, and diversity of its members to maintain oversight of the use of animals, animal facilities, and to provide review of basic science and biomedical research and teaching animal use conducted within the University.

All members shall be appointed by University Provost. The Committee will be composed of at least 4 members including the Veterinarian at least one faculty member actively involved in animal research, and one individual whose primary vocation is nonscientific in nature. An individual who meets the requirements of more than one of the categories detailed in II. A., may fulfill more than one requirement. Excluding the laboratory animal veterinarian(s), no more than three members shall be from the same department.

As deemed necessary, the Committee may also call on consultants, with a special expertise in areas of interest to the Committee.

### **B. Officers and Responsibilities**

- The office of Chair is appointed by the Provost and must be filled with an individual with previous experience on an IACUC. The Chair shall preside over IACUC meetings, approve minutes, sign letters of correspondence and other official documents for the IACUC.
- The Vice Chair shall be appointed by the Provost, and shall serve as Chair in the absence of the IACUC Chair.
- A veterinarian or their designate shall serve as a member of the IACUC for an indefinite term. It is the responsibility of the veterinarian or their designate to provide veterinary review of protocols.
- Various University officials and specialists may be asked to serve as non-voting ex-officio members of the IACUC.

### **C. Terms and Appointment**

All voting members (except the veterinarian) shall be appointed by the appropriate Provost to serve a one-year term. The term of the veterinarian is indefinite. The Provost may appoint members to fill the unexpired terms of members that have temporarily or permanently left the Committee. The Provost will appoint a committee Chair and Vice Chair who may fill these positions for two years.

### **D. Responsibilities of members**

The IACUC recognizes that University research scientists must conduct their research in a timely and responsible fashion. Therefore, to facilitate research while assuring animal welfare, the Committee must conduct its business as efficiently as possible. This can only be accomplished by all Committee members participating fully in Committee activities. Committee members should make every effort to attend and actively participate in all regularly scheduled meetings, promptly conduct complete reviews of assigned protocols, and participate in facility and program reviews. Committee members must also recognize the sensitive nature of Committee activities and maintain confidentiality.

All IACUC members are expected to:

- Attend regularly scheduled meetings of the IACUC. Three or more absences from scheduled meetings per year (except under documented extenuating circumstances) are unsatisfactory.
- Review protocols (Refer to Section IV of this document)
  1. Review the meeting packet before meetings.
  2. When assigned as a presenter, review assigned protocols completely, by contacting the principal investigator concerning incomplete applications or ambiguous responses, or other concerns.
  3. Attempt to resolve obvious problems in a protocol prior to the committee meeting.
  4. Actively participate in animal facility inspections
  5. Review and sign facility inspection reports semiannually.
  6. Maintain confidentiality about Committee activities.

The efficient operation of the IACUC depends on the full participation of its members. The name of any member who exhibits repeated unsatisfactory performance shall be submitted to the IACUC Chair. The Chair shall provide necessary documentation to the Provost, or his/her designated representative, who shall make the final decision regarding dismissal from the Committee.

### **III. RULES OF ORDER**

All meetings shall be governed by The Modern Edition of Robert's Rules of Order, except as otherwise indicated in this document.

#### **A. Regularly Scheduled Meetings**

The IACUC shall schedule regular monthly meetings. The meeting may be cancelled if the IACUC has no current business and may be rescheduled in extenuating circumstances. Emergency meetings may be called by the Chair or Vice Chair if required. An agenda listing all proposed activities involving the care and use of animals shall be provided to all IACUC members before the scheduled meeting. The names of reviewers of protocols requiring full committee review shall be provided with this list.

#### **B. Voting**

A motion may only be passed at a convened meeting of a quorum of the IACUC if it receives the affirmative vote of a majority of the quorum present. A quorum means a simple majority of the members of the Committee. A tally of the numbers of members who vote for, against, or abstain from voting shall be recorded in the minutes. Any minority views shall also be recorded in the minutes.

#### **C. Conflict of Interest**

An IACUC member should not vote on protocols in which he/she is listed as an investigator. The member may provide information to the Committee, if the Committee so desires. However, the Chair shall excuse the member during these deliberations: if no further information is required, or if another Committee member requests such action and before a vote is taken.

#### **D. Sub-committees**

The IACUC Chair may appoint sub-committees, as deemed appropriate, to facilitate the business of the Committee. All members of sub-committees shall consist of members in good standing. Sub-committees shall report directly to the IACUC with recommendations or reports. No actions may be taken by the sub-committee without prior approval of a majority of the quorum at a convened IACUC meeting.

## **IV. PROTOCOL REVIEW PROCEDURES**

The Federal Animal Welfare Act (P.L. 89-544) and amendments, the Institute of Laboratory Animal Resources (ILAR) Guide for the Care and Use of Laboratory Animals, the Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching, and the PHS Policy on the Care and Use of Laboratory Animals shall be used as basis for review.

### **A. Principal Investigator (PI)**

The principal investigator conducting research or teaching involving live vertebrate animals shall submit a typed and signed protocol for the use of live vertebrate animals. Protocols requiring full review received less than ten (10) working days before the scheduled IACUC meeting shall be reviewed the following month.

Animals may not be procured until the protocol has been approved by the IACUC. Research involving animals may not begin until the PI is notified in writing that the protocol has been approved. Only those persons listed on the protocol are authorized access to the animal facilities. Additions or substitutions to this list require a protocol amendment.

### **B. IACUC Committee Chair**

The IACUC Committee Chair accepts the completed protocol, reviews the protocol for clarity and completeness. The protocol is forwarded to the Veterinarian or their designate within one working day of receipt for veterinary review. If the protocol is incomplete, the IACUC Committee Chair notifies the principal investigator and immediately returns the protocol with a listing of information or sections needed.

### **C. Veterinarian**

The Veterinarian or their designate assigns a category of ethical concern, performs veterinary review, and assigns the application for expeditable or full committee review. The Veterinarian may obtain additional information relative to the use of animals before assigning a reviewer. Non-survival surgical procedures and procedures that involve no pain or have a minimal potential for pain, distress, or discomfort can be approved by the Veterinarian or their designate for expedited review. The Veterinarian shall return the protocol to the IACUC Committee Chair when veterinary review is completed.

#### **D. Expeditable Protocol\***

If the Veterinarian or their designate determines that a protocol is expeditable, the Secretary makes copies of the cover page and the non-technical summary and circulates them to all members of the IACUC for review. Copies of the complete protocol shall be available to any member who requests it. Any member may request a full committee review. The deadline for voting on expedited protocols is 10 working days from mailing. If a quorum of all members votes by the deadline, all vote for approval and none request full Committee review, the expedited protocol is approved. An approval letter is mailed to the principal investigator. Protocols are approved for a maximum of three years. After three years, the PI will rewrite and resubmit the protocol for review.

\* Expeditable protocols are those that are defined under Categories A and B, and C if the protocol follows previously approved IACUC Guidelines. See Appendix A for an explanation of the Categories of Ethical Concern.

#### **E. Full Committee Review:**

If full committee review is requested for an expeditable protocol, or if the protocol is not expeditable, the IACUC Committee Chair assigns the protocol to a member of the IACUC for review. The Secretary sends full copies of the protocol along with a Protocol Screening Form to the reviewer. Copies of the cover sheet and the non-technical summary are circulated to all other IACUC members. The designated reviewers shall receive the protocol at least ten (10) working days before the scheduled meeting. If the reviewers are unable to complete the review before the meeting, the reviewers shall notify the Secretary within forty-eight hours of receipt.

- Reviewer: After initial review, the reviewer will communicate with the principal investigator and attempt to clarify any questions and resolve any minor problems. If major irresolvable problems exist, the principal investigator may be asked to attend the meeting. If more than one reviewer is assigned, they should discuss the protocol before the IACUC meeting. This communication may raise discrepancies in the protocol or resolve misunderstandings.
- Approval of protocols assigned for full committee review: Approval of protocols assigned for full committee review may be granted only after review at a convened meeting of a quorum of the IACUC and the approval vote of a simple majority of the quorum present. Protocols are approved for a maximum of three years. After three years, the PI will rewrite and resubmit the protocol for review.

**G. Revisions:**

- Revisions must be submitted to the Department of Biological and Environmental Sciences secretary in writing.
- Revisions consisting of minor changes may be approved by the Chair or designate
- Significant revisions will require a full or expedited review. Material from both the original and the revised protocol will be distributed to the IACUC members and reviewer(s).

**H. Procedures for the Annual Review of Protocols**

- Approved protocols must be reviewed at least annually. Therefore, at least four (4) weeks prior to the anniversary date of an approved protocol, the Secretary shall send to the principal investigator an Annual Review of Protocol for Use of Live Vertebrates Form indicating that the annual review form must be completed and submitted to the IACUC Committee Chair before the first day of the anniversary month.
- The annual reviews approved by the Chair on behalf of the Committee will be listed on the agenda and minutes of the next monthly meeting.
- Administrative Review: Annual reviews consisting of minor changes may be approved by the Chair or their designate. Significant changes require a revision in writing and will be handled as in section G. above.

**V. PROGRAM AND FACILITIES REVIEW**

**A. Program Review and Site Inspection**

The IACUC shall review Animal Care and Use Program and all University animal facilities, as defined in the PHS Policy and the Animal Welfare Act, at least once every six months. A sub-committee of the IACUC may conduct the inspection, but any member wishing to participate may not be excluded and the program review and inspection report must be reviewed and approved by a majority of a quorum of the Committee at a convened meeting of the IACUC and include any minority views.

The sub-committee conducting the review and inspection must include at least two members. The sub-committee shall use the ILAR Guide for the Care and Use of Laboratory Animals as a standard for evaluating all laboratory animal facilities. Other guidelines and recommendations will be used as appropriate. The Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching shall be used as a standard for the non-PHS supported research and teaching activities involving production agricultural animals.

## **B. Program Review and Site Inspection Report**

The IACUC shall prepare a report based on the findings of these reviews. The report shall contain a description of the extent of each facility's adherence to the Federal Animal Welfare Regulations and shall distinguish significant deficiencies from minor deficiencies. A significant deficiency is one that, in the judgment of the IACUC and the appropriate Institutional Official, regarding the Animal Welfare Regulations, may be a threat to the health or safety of the animals. The IACUC shall include a plan of action with specific dates for correcting any deficiencies. Any failure to adhere to this plan that results in a significant deficiency remaining uncorrected shall be reported within 15 business days through the appropriate Institutional Official to United States Department of Agriculture, Animal and Plant Health Inspection Service (APHIS), Office for Protection from Research Risks (OPRR) and any federal agency funding that activity.

## **VI. ANNUAL REPORTS**

### **A. USDA, Regulatory Enforcement of Animal Care**

Annual reports shall be prepared by the IACUC according to the provisions of 9 CFR 2 (Subpart A, 2.36). This report shall be submitted to the Institutional Official as appropriate. The reports are submitted to APHIS on or before December 1.

### **B. PHS, OPRR**

Annual reports shall be prepared by the IACUC according to the requirements of the PHS Animal Welfare Policy (IV., F.) at least once every 12 months. This report shall be provided to the IACUC following signatures by the appropriate Institutional Official. Reports will be submitted to OPRR.

The IACUC, through the appropriate Institutional Official, shall provide OPRR with a full explanation of the circumstances and actions regarding:

- Serious or continuing noncompliance.
- Serious deviations from the ILAR Guide.
- Suspension of any PHS funded activity by the IACUC.
- Minority opinions.

## **VII. TRAINING**

### **A. Committee Members**

Committee members shall receive copies of these bylaws, the Animal Welfare Regulations, the PHS Policy, and other documents, as well as, copies of individual policies developed by the IACUC regarding specific animal use issues.

### **B. Scientists, Research Assistants, and Animal Technicians**

All scientists, research technicians, animal technicians, and other personnel involved in animal care, treatment and use must be qualified to perform their duties. The IACUC shall be responsible for reviewing and approving all teaching and training methods. Sub-committees of the IACUC may be appointed to develop specific training programs.

### **C. Training and instruction shall be made available in areas of:**

Humane methods of animal maintenance and experimentation, including:

- ❑ The basic needs of each species of animal.
- ❑ Proper handling and restraint for the various species of animals used.
- ❑ Proper pre-procedural and post-procedural care of animals.
- ❑ Aseptic surgical methods and procedures.
- ❑ The concept, availability, and use of research or testing methods that limit the use of animals or minimize animal distress.
- ❑ Proper use of anesthetics, analgesics, and tranquilizers for any species of animals used.
- ❑ Methods whereby deficiencies in animal care and treatment are reported, including deficiencies in animal care and treatment reported by any employee or student of the University.
- ❑ Regulatory rules and policies governing the care and use of laboratory animals.

## VIII. NONCOMPLIANCE

### A. Distribution of Procedures for Reporting Non-Compliance

Everyone involved in animal care and use at the University shall receive a copy of the reporting procedure. These procedures will be posted in appropriate places.

### B. Procedure for Reporting Noncompliance with Laboratory Animal Care and Use Guidelines

- Concerns or complaints regarding animal usage within The University of Tennessee should be brought directly to the attention of the people involved whenever possible.
- If the concern or complaint cannot be handled directly, it may be handled in one of two ways:
  1. If an emergency exists, the Veterinarian should be contacted immediately.
  2. If the situation is not an emergency, the concern or complaint should be submitted to the IACUC Chair. The Chair will assign an ad hoc committee to investigate the concern or complaint and prepare a report for the IACUC. The IACUC will review the concern or complaint during the next regularly scheduled meeting. The IACUC will determine what action will be taken and the Chair will notify the principal investigator of such action.
- A written reply to those primarily involved and to the appropriate Institutional Official will follow each written concern or complaint submitted to the IACUC.
- No facility employee, student, IACUC member or laboratory personnel will be discriminated against, or be subjected to any reprisal for reporting suspected noncompliance.
- The IACUC may suspend an activity that it previously approved if it determines that the activity is not being conducted in accordance with applicable provisions of the Animal Welfare Act.

### C. Suspension of Activity

If the IACUC suspends an activity due to continuing significant deficiencies in animal care and use, the Institutional Official in consultation with the IACUC shall review the reasons for suspension, take appropriate corrective action, and report the action with a full explanation to USDA, Regulatory Enforcement of Animal Care, OPRR, and any agency funding that activity.

Any proposal for animal use approved by the IACUC may be subject to further approval by the Institutional Official. However, Institutional Official may not approve activities involving the care and use of animals that have not been approved by the IACUC.

### D. Investigator Appeal

The principal investigator of any activity that has been disapproved/suspended by the IACUC may appeal that action to the IACUC and request another review based on the correction of misinformation or additional information not available at the time of the initial review.

## **IX. AMENDMENTS**

Any member may request a review of any part of these bylaws. The review shall be conducted by an ad hoc sub-committee appointed by the Chair. The IACUC may amend these bylaws by a two thirds vote at any meeting at which a quorum is present, providing that all IACUC members receive notification of the pending vote 10 working days prior to the meeting.

## **X. APPENDIX**

### **CLASSIFICATION OF PROTOCOLS**

#### **Based on anticipated level of pain and distress**

The following categories are based upon the relative level of pain, discomfort or distress that is associated with procedures commonly used in experimental animals. Categories C, D and E require full committee review and approval. A justification for Category D and E studies must be submitted by the investigator for inclusion with the USDA report (Animal Welfare Act).

#### **CATEGORY A.**

Procedures do not induce pain, discomfort or distress greater than that produced by routine injections or venipuncture; and do not use anesthetics, analgesics and/or tranquilizers for pain relief.

EXAMPLE/COMMENTS: This category includes simple procedures (injections, cystocentesis of the urinary bladder; blood sampling; ultrasound diagnostics; anesthetics, analgesics, and tranquilizers may be used for immobilization; percutaneous catheterization); physical examinations, live animal evaluations; behavioral testing without significant restraint or noxious stimuli; holding of animals for experimental purposes; nutritional studies; breeding studies; routine farm animal management practices.

#### **CATEGORY B**

Non-survival anesthetic surgical procedures; tissue collection following euthanasia.

EXAMPLE/COMMENTS: Euthanasia by exsanguination under anesthesia; any nonsurvival surgical procedure performed under general anesthesia. Tissue collection preceded by approved methods of euthanasia that induce rapid unconsciousness such as anesthetic overdose and decapitation, humane slaughter using USDA approved procedures.

### **CATEGORY C**

Procedures that may involve some minor distress or discomfort (short-lasting pain) not relieved by analgesics and procedures that induce moderate pain, distress or discomfort which will be alleviated with drugs.

EXAMPLE/COMMENTS: Exposure of blood vessels and surgical implantation of chronic catheters; behavioral experiments on awake animals that involve restraint (less than 4 hours) with or without food/water for short periods; noxious stimuli from which escape is possible; social isolation or crowding; surgical procedures under anesthesia that may result in some post-operative discomfort, but no gross anatomical or functional deficits (skin biopsies, suturing of skin, gonadectomy beyond the age recommended for routine farm management, fistulation, uterine flush, ovariectomy, dehorning of older animals); diagnostic procedures that require anesthesia (bone marrow sampling, CSF taps, arthrocentesis, endoscopy, laparoscopy, electrodiagnostics); induction of infection or infestation which is expected to produce mild or no clinical disease; application of toxic agents that do not produce major functional deficits and will result in mild or no clinical disease or discomfort; the administration of Complete Freund's Adjuvant.

### **CATEGORY D**

Surgical procedures which may induce more than minor post-operative pain or distress, and other procedures that may induce more than minor distress or discomfort which, for scientific reasons, cannot/will not be alleviated by the use of drugs.

EXAMPLE/COMMENTS: Major surgical procedures under anesthesia that result in significant post-operative discomfort or functional deficit invasion of chest or abdomen, orthopedic surgery, removal of organs, surgery involving organs of special sense, implantation, transplantation, surgery that will result in a prolonged recovery. Prolonged periods (more than 4 hours) of physical restraint; noxious stimuli in which escape is not possible; induction of infection or infestation which is expected to cause serious clinical disease; application of toxic agents that may cause major functional deficits and serious clinical disease. Chronic maintenance of a disease/functional deficit where the endpoint is death of the animal (e.g., toxicity testing - lethal dose determination; radiation sickness; tumor inducement; virulence challenge); severe chemical or physical injury experiments where post-procedural analgesics/anesthetics are not provided; experiments involving abnormal environmental conditions, e.g., hypoxic chambers or extreme temperatures or humidity levels; prolonged restrictions of food or water intake.

**CATEGORY E**

Procedures that involve inflicting severe pain on unanesthetized conscious animals.

EXAMPLE/COMMENTS: Use of muscle relaxants or paralytic drugs (succinylcholine or other curariform drugs used for surgical restraint without use of anesthetics in sufficient dosage to produce loss of consciousness); administration of colchicine to block central transmission of encephalins; inflicting burns or severe trauma on unanesthetized animals; permitting recovery of consciousness after severe trauma has been caused under anesthesia; other procedures involving severe pain or severe deprivation.