UNIVERSITY OF TEXAS AT ARLINGTON
INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE
PROTOCOL REVIEW SOP

New protocol applications for activities involving animals are forwarded to the Office of Research Administration. Research Administration will perform an initial review of the protocol to ensure that it is complete and ready for review by the IACUC. If there is any additional information or clarification required, the Research Administration will coordinate with the Principal Investigator (hereinafter referred to as the PI) to properly complete the protocol application.

The PI of a protocol application must be a UTA faculty member. External collaborators, undergraduate students, graduate students, or post-doctoral students must arrange a UTA faculty member to serve as the “faculty sponsor” of the protocol. The faculty sponsor will be responsible for the conduct of the research and the terms of protocol approval.

For protocols including the use of animals categorized as “Category E” as described in the UTA Protocol Application Form, the Principal Investigator or a named representative should attend the IACUC meeting scheduled for review of the protocol.

It is the PI’s responsibility to respond to requests for additional information/modifications during the IACUC review and approval process in a timely manner. If there is no response by the PI for a request made by the IACUC or Office of Research Administration after 60 days, the protocol may be withdrawn from the review process. At that time, the protocol must be resubmitted as a new protocol to repeat the IACUC review process.

When research covered by this Policy is conducted at or in cooperation with another entity, all provisions of this Policy remain in effect for that research. The UTA IACUC may accept the review of another entity’s IACUC established under a policy of compliance with the Public Health Service (PHS), Office of Laboratory Animal Welfare (OLAW). Procedurally, the contact information page only of the UTA IACUC Protocol Application Form may be submitted with the full application form of the cooperating entity. UTA’s IACUC approval will be contingent upon the cooperating entity’s IACUC approval. A copy of the approved protocol and approval letter from the cooperating entity must be submitted to the UTA IACUC for recordkeeping purposes. UTA’s post-approval processes still apply, i.e., continuing reviews and notification of changes to the protocol or animal procedures.

New protocols are either reviewed at fully convened IACUC meetings via Full Committee Review (FCR) or by email via Designated Member Review (DMR).

1. Procedures for Research Review at Fully Convened IACUC Meetings:

   New protocol applications are distributed to the IACUC via e-mail in advance of the scheduled meeting to allow reasonable time for preview. IACUC members are expected to bring a digital or hard copy of the protocol with them to the meeting; however, a full copy
of the protocol will always be made available to the members if so requested. During the preview period before the scheduled meeting, IACUC members are free to pose questions to the PI or request additional information/clarification to be provided for formal discussion of the protocol during the scheduled meeting. It is strongly recommended for the PI to attend the scheduled IACUC meeting to discuss the protocol, provide clarification, and/or field questions posed by the IACUC.

During review of the protocol application at a scheduled convened meeting requiring the presence of a quorum of Committee members, the IACUC will consider if the protocol meets the requirements of the Animal Welfare Act, the recommendations in the Guide for the Care and Use of Laboratory Animals, 8th Edition (the Guide), and the following items as required by PHS Policy IV.C:

a. Procedures with animals will avoid or minimize discomfort, distress, and pain to the animals, consistent with sound research design.

b. Procedures that may cause more than momentary or slight pain or distress to the animals will be performed with appropriate sedation, analgesia, or anesthesia, unless the procedure is justified for scientific reasons in writing by the investigator.

c. Animals that would otherwise experience severe or chronic pain or distress that cannot be relieved will be painlessly euthanized at the end of the procedure or, if appropriate, during the procedure.

d. The living conditions of animals will be appropriate for their species and contribute to their health and comfort. The housing, feeding, and non-medical care of the animals will 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. Location(s) for animal housing and procedures must be approved by the IACUC. Transport of animals between multiple locations requires prior approval by the IACUC and documentation through the “Request for Transportation of Animals” form.

e. Medical care for animals will be available and provided as necessary by a qualified veterinarian.

f. Personnel conducting procedures on the species being maintained or studied will be appropriately qualified and trained in those procedures.

g. Methods of euthanasia used will be consistent with the recommendations of the American Veterinary Medical Association (AVMA) Panel on Euthanasia unless a deviation is justified for scientific reasons in writing by the investigator.

h. Demonstrated consideration of the “three Rs.” The three Rs are Reduction in number of animals used, Refinement of methods to minimize pain and distress, and
**Replacement** of the animal model with a non-animal model or a species phylogenetically lower. A thorough literature search should accompany any protocol application in order to document possible alternatives, similar activity in the proposed research field, or related publications and references.

i. Drugs and compounds used in animal research and teaching, including acute procedures will be pharmaceutical-grade. If non-pharmaceutical-grade chemical compounds are to be used, the investigator will provide in writing justification for their use.

Once all of the above outlined requirements of **PHS Policy IV.C.** have been reviewed and verified, the IACUC will conduct a vote. A vote to 1) approve the protocol as submitted, 2) require modifications for approval, or 3) to withhold approval, requires a majority of the Committee members from the quorum of members present, although votes against and abstentions will be recorded in the meeting minutes. No member may participate in the IACUC review or approval of a research project in which the member has a conflicting interest (e.g., is personally involved in the project) except to provide information requested by the IACUC; nor may a member who has a conflicting interest contribute to the constitution of a quorum. The IACUC will vote to:

a. Approve the protocol as submitted—no modifications are needed to secure approval. The PI is notified in writing of the protocol approval and the official IACUC approval date.

b. Require modifications to secure approval—the IACUC requests modifications to comply with the regulatory requirements or improve procedures relating to the care and use of animals in the project. The IACUC will request that the modified version of the protocol be reviewed via the designated review process in order to obtain final approval. If the IACUC determines that the modifications requested are significant, they may request that the modified protocol be presented for review and discussion at the next fully convened meeting. The PI will be notified in writing that modifications are required to secure approval, and the PI will be provided with a summary of these modifications. Occasionally the IACUC will also identify procedures or processes that could improve the techniques or efficiency of the protocol. These IACUC suggestions will also be presented to the PI for consideration of modification to the protocol. The PI will have the opportunity to submit a modified protocol based on the IACUC’s requests, and also respond to any IACUC suggestions for improvements. The PI will submit the modified protocol to Research Administration to be sent to designated review (unless the IACUC had determined earlier that it will require review by the full Committee at a convened meeting). If the reviewer determines that the protocol meets all of the requirements and no further modifications are needed to secure approval, the PI is notified in writing of the protocol approval and the official IACUC approval date.
c. Withhold approval – the IACUC finds that the protocol, as submitted, does not meet the requirements of PHS Policy IV.C., the Animal Welfare Act, or recommendations in the Guide, and/or finds that significant changes are necessary before the IACUC can appropriately review and consider the protocol for approval. The PI will be notified in writing of the IACUC’s decision to withhold approval, and for what reasons. The IACUC Chair may meet with the PI to discuss the IACUC’s concerns and provide guidance on the PHS Policy IV.C. requirements.

2. Procedures for Review of Research Via the Designated Member Review Process:

a. Annual Reports, Triennial Reviews, and Amendments
   For designated review, the annual report, triennial report, or amendment is sent via e-mail to the IACUC Chair; all other IACUC members are copied on this correspondence. The IACUC Chair will complete the designated review or designate at least one other member of the IACUC, qualified to conduct the review, to review the research project and have the authority to approve, require modifications in (to secure approval) or request full committee review of those research projects. All other IACUC members copied on the correspondence are given a time period of 1-5 business days during which they have the opportunity to present any questions, concerns, or requests for clarification to the designated reviewer, or to request a full committee review of the project. Once the item is approved, the PI is notified in writing of the approval and the official IACUC approval date.

b. New Protocols
   All IACUC members will receive a copy of the protocol and are granted a specific time period (typically 3 to 5 business days) to indicate which method of review is preferred. If any member feels that this protocol should go before a full committee, then its review will be deferred to the next full IACUC meeting. Protocols containing unrelieved pain or distress, major survival surgery on USDA-covered species, multiple major survival surgeries, death as an endpoint, or breeding may be considered for full-committee review. If no member calls for a full-committee review, then the Chair can refer the protocol in question to a Designated Reviewer. During the designated review process the Designated Reviewer is granted a specific time period (typically 3 working days) during which they have the opportunity to present any questions, concerns, or requests for clarification to the PI. The Designated Reviewer may either approve the protocol as submitted, request modifications to secure approval, or request a full committee review of the item. If the Designated Reviewer requests Full Committee Review, review is deferred to the next full IACUC meeting. Once the item is approved, the PI is notified in writing of the approval and the official IACUC approval date.

3. Review of Protocol Changes:

a. Changes in personnel will be approved administratively after appropriate verification. This does not include changes in the PI which are handled via DMR.
b. In accordance with NOT-OD-14-126, changes in aseptic surgery technique, euthanasia, anesthesia, analgesia, and sedation will be forwarded to the IACUC Chair and Attending Veterinarian and reviewed according to the Veterinarian Verification and Consultation (VVC) procedure as follows: The Attending Veterinarian serves as a subject matter expert to verify that compliance with the IACUC-reviewed and -approved policy is appropriate for the animals in this circumstance. IACUC-reviewed and -approved policies include evaluation criteria such as guidelines and formularies. Consultation will be documented by having the Attending Veterinarian send an email (or appropriate documentation) approving the change to the IACUC Chair/Coordinator in an expeditious manner, but typically within 3 business days. The Chair will then send an approval letter with a summary of the change to the PI. This email will be appended to the protocol for which the change is authorized. The protocol will be updated by the IACUC Coordinator. The Attending Veterinarian may refer any request to the IACUC for DMR for any reason and must refer any request that does not meet the parameters of the IACUC-reviewed and -approved policies and/or procedures.

c. An Amendment is to be used to gain acceptance for a variation in the conduct of a protocol. In general, an amendment is used to correct problems that arise during the conduct of a study or to continue a study where the goal has not changed but the methods and procedures have been modified to better achieve the goals. An amendment requires action by the UTA IACUC before the changes can be initiated. Justification must be given for the changes requested. Any additional expenditure of resources should also result in an amendment. These changes must be submitted via Amendment Form and will be processed according to the Designated Review procedures described below. Examples requiring this method include, but are not limited to, a change regarding:

1. The number of animals per group.
2. The number of groups in an experiment.
3. The treatment schedule.
4. The duration of an experiment.
5. An improvement in the procedures which does not affect the pain classification.
6. The use of paralytics.
7. The species used as the animal model.
8. Methods of statistical analysis, i.e., change from descriptive to nonparametric statistics.
11. Treatment methods.

The Amendment Form will clearly explain and document what changes are proposed in accordance with PHS Policy IV.C. Amendments are reviewed by the IACUC via the
designated review system. Once the Amendment Form is received by Research Administration, the Amendment and a full copy of the original-approved protocol is sent via e-mail to the IACUC Chair; all other IACUC members are copied on this correspondence. The IACUC Chair will complete the designated review or designate at least one other member of the IACUC, qualified to conduct the review, to review the proposed significant changes and have the authority to approve, require modifications (to secure approval) or request full committee review of the Amendment. All other IACUC members copied on the correspondence are given a time period of 1-5 business days during which they have the opportunity to present any questions, concerns, or requests for clarification to the designated reviewer, or to request a full committee review of the Amendment. The IACUC has a review period of 5 working days before approval. Once the Amendment is approved, the PI is notified in writing of the approval.

d. Frequently during the course of a study, findings may lead an investigator to seek additional information, which can be easily accrued using the same methods as the existing protocol. Since the information to be sought is related to the previously approved study, an amendment may be submitted by the primary investigator. However, since the direction of the original study is changed, a literature review must be conducted, including AWIC and MEDLINE searches, to assure no duplication of effort and justification of the appropriate use of the species. If any change in instrumentation or surgical procedures must be made to accommodate the new treatment, it must be described. Examples of situation where more extensive addenda, but not entirely new protocols, are required are:

   (1) Testing of the efficacy of a different type of antimicrobial agent to prevent infection.
   (2) Testing the efficacy of different resuscitation fluids, which have entirely different modes of action to prevent ischemia/reperfusion injury.

e. Other investigators may be interested in using a particular protocol to study their subject of interest. If the original primary investigator will be conducting the protocol using the other investigator’s material but otherwise not changing the procedure, this procedure may be considered using an expanded amendment. The new investigator must be included as an associate investigator.

f. Amendments are not allowed under the following circumstances, i.e., full protocols must be submitted:

   (1) If an investigator wants to independently perform a procedure that is similar to one in an existing protocol that belongs to someone else, an amendment for that protocol cannot be used; a new, separate protocol must be submitted.
   (2) If a primary investigator leaves the Institute with unfinished active protocols and an existing associate investigator does not want to continue the study as a primary
investigator, those protocols must be terminated. An exception may be made if a new person is interested in continuing the study. That individual must be present at the Institution, be familiarized with the existing protocol and the use of animals, and demonstrate his/her qualifications to use the species and perform the work.

(3) A new protocol is required when the overall approach to a research issue must be changed. These changes are of such magnitude that the resulting protocol would bear little resemblance to the original protocol once the proposed changes are implemented. Initiating a new protocol insures that the new approach or procedure has scientific soundness and statistical validity and that impact on the experimental animal is given due consideration.

4. Continuing Review of Approved Research Protocols:

The IACUC performs two types of annual review in accordance with the Animal Welfare Regulations 9 CFR § 2.31 (5): a) annual protocol follow-up via email for protocols that do not involve USDA-covered species and b) annual reports for protocols involving USDA-covered species. The IACUC also performs c) triennial review in accordance with the PHS Policy at IV.C. 1-4.

a. Annual Protocol Follow-Up (Non-USDA Species) – About a month before the protocol expiration date, the IACUC Coordinator sends an email to the PI asking if the protocol has been active, the number of animals used in the last year, if there have been any unexpected deaths or adverse events, if any personnel need to be added or removed, and if the study has ended. If there have been unexpected deaths or adverse events, the IACUC Coordinator forwards the information to the Chair and the Chair follows up on animal welfare concerns as needed. If there have been no unexpected deaths or adverse events, the protocol is renewed for another year.

b. Annual Review – To complete an annual review for protocols involving USDA-covered species, the PI must submit an Annual Report Form to the Office of Research Administration. To ensure that the annual review is completed before the anniversary of the original approval date of the protocol, the PI is required to submit the Annual Report with sufficient time allowable to complete this process. Annual reviews are conducted by the IACUC via DMR utilizing the procedures described above.

(1) Early Submission of Annual Reports: The Animal Care Regulations (9 CFR Part 2 § 2.31 (d) (5)) state, “The IACUC shall conduct continuing reviews of activities covered by this subchapter at appropriate intervals as determined by the IACUC, but not less than annually.” An annual review must be completed by the anniversary of the original approval date of a protocol. To allow ample time for processing and IACUC review, the IACUC requests that Annual Reports be submitted at least 7 days in advance of the anniversary (annual review) date of
the protocol. For example, if the original approval date of a protocol is February 1, 2005, the annual review date is February 1, 2006; however, the Annual Report should be submitted at least 7 days in advance by January 26, 2006. The Office of Research Administration sends courtesy reminders via e-mail, including the requested date of submission.

(2) Protocol Expiration: The Annual Report must be reviewed and approved by the anniversary date of original IACUC approval of the study. Failure to submit an annual report in a timely manner will result in expiration of the protocol. If expiration of approval occurs, all activities involving the use of animals must cease immediately. The research will not be allowed to commence until a new protocol has been submitted, reviewed, and approved by the IACUC. If a protocol has expired and the use of animals continues, this is considered to be a violation of federal regulations that govern the use of animals in research. Such violations must be reported to the federal government and to University officials. This could result in termination of external and University funding and/or disciplinary action.

c. Triennial Review

(1) On the third year of protocol approval, the IACUC requires full de novo review of the protocol in accordance with PHS Policy at IV.C.1-4. If the protocol has been active during the last year, it will be reviewed via Full Committee Review or Designated Member review, in accordance with the procedures described above. If the protocol has not been active during the last year, it will be reviewed via DMR. The PI is requested to submit a completed Triennial Report ensuring that all animal use procedures, personnel, and training are current and updated. To ensure that the triennial review is completed before the anniversary of the original approval date of the protocol, the PI is required to submit the Triennial Report with sufficient time allowable to complete this process. The IACUC will perform a full review of the Triennial Report as outlined in the procedures above for review of new protocol applications. The PI will be notified in writing of IACUC approval.

(2) The approved number of animals for a protocol starts over at the time of the Triennial review. The PI is not to include any animals left over at the end of the last project period in the request for new animals. The PI should only specify and justify the number of animals requested for the next three-year project period.

5. Post Approval Monitoring

The IACUC provides oversight to the Post Approval Monitoring (PAM) program to ensure compliance with Federal, state, local and institutional regulations and policies and also to fulfill the requirement of the Guide. The program, herein referred to as PAM, is intended to achieve the following objectives:
• Ensure animal well-being,
• Keep the IACUC and Institutional official informed about program status and processes,
• Communicate IACUC positions on matters of animal care and use concern to researchers,
• Provide on-the-spot education and training needs in the laboratory,
• Protect the institution’s reputation,
• Serve as a resource to the research community,
• Support advancement of strong science, and
• Facilitate regulatory compliance.

a. Background
The Guide requires the IACUC to oversee and evaluate the institution’s animal program, procedures, and facilities to ensure that they are consistent with recommendations as prescribed in the Guide, the Animal Welfare Act (AWA), and the Public Health Service (PHS) Policy.

b. Applicability
All laboratories, surgical suites, housing areas and satellite facilities that house animals or are utilized for animal procedures are subject to monitoring. Additionally, all active IACUC protocols are subject to monitoring.

c. Type and Method of Assessments
(1) Routine Review: Routine audits will be performed at the discretion of the IACUC.
(2) Select or ‘For cause’ Review: “For cause” monitoring may be conducted at any time, with or without advance notice to the Principal Investigator or research personnel. “For Cause” reviews may be performed when requested by federal agencies and/or the IACUC.
(3) Follow-up Review: These assessments will be performed for the purpose of confirming resolution of any concerns or deficiencies found during regular PAM or during the Semi Annual Program Review and Facility Inspection Process. These monitoring visits will be unannounced.
(4) Other: The IACUC will also utilize continuing review/annual/triennial reviews, monitoring by Animal Care Facility (ACF) staff, and veterinarian-scheduled observations of procedures identified as necessary during protocol reviews to achieve its PAM objectives.

d. Post Approval Monitoring Process
The IACUC will perform PAM of approved research protocols to ensure consistency between written procedures and actual laboratory procedures. Monitoring will be performed at the discretion of the IACUC and include review of items such as:
• Protocol personnel and training;
• Animal breeding;
• Procedures for anesthesia, post-surgical care, and euthanasia;
• Recordkeeping;
• Surgical procedures and aseptic technique;
• Transport of animals;
• Hazardous materials;
• Pharmaceutical Drugs and Chemicals.

The goal of post-approval monitoring is to work with, and in support of, research staff members and to confirm accurate and consistent protocol performance in a collegial and unobtrusive manner. In this regard, for Routine Review, the PI and research personnel (where applicable and possible) must be present during the PAM process.

Documented discrepancies between procedures performed in the lab and those listed in the protocol will be brought to the attention of the Principal Investigator. Issues that pose an immediate threat to animal welfare shall be referred to the attending veterinarian or his designee and the IACUC for immediate resolution.

At the end of the review process, the PAM review team shall discuss the observations with the animal lab personnel and the Principal Investigator.

e. Roles and responsibilities:

(1) The PI and all protocol personnel must be familiar with IACUC policies and procedures, the USDA and Guide requirements and must be knowledgeable about changes in regulations and standards that may affect the way in which research is conducted.

(2) The PI will facilitate IACUC observation of procedures during PAM to ensure appropriate documentation and that such procedures are performed in compliance with the approved protocol.

(3) Office of Regulatory Services will coordinate visits, correspondence, documentation, maintain records, and correspond with the IACUC and PI.

(4) The IACUC shall maintain oversight of the Post Approval Monitoring program and review related procedures and effectiveness during its Semi-Annual Program Review.

(5) Results of PAM reviews are reported to the IACUC. When appropriate, the IACUC shall recommend corrective actions on PAM reports that contain deviations to assure compliance.