Introduction

The Institutional Animal Care and Use Committee (IACUC) maintains oversight review for federally mandated rules and regulations with regard to animal research, ethics, misconduct and biomedical research for the University of Colorado Denver | Anschutz Medical Campus (CU Denver | Anschutz). The IACUC reviews all procedures using animals in research or teaching. The IACUC evaluates and reviews all activities related to the care and use of animals and determines if the proposed activities are in accordance with regulations.

Policy Statement

This policy is intended to provide information on amendments to an approved animal protocol and establishes procedures to be followed concerning revisions to approved protocols. These are in accordance with Guidance from OLAW (NOT-OD-14-126) and in accordance with the PHS Policy IV.C.1.a.-g. This Guidance from OLAW has been reviewed by the USDA Animal and Plant Health Inspection Service and they concur with this Guidance. The CU Denver | Anschutz IACUC classifies changes to approved protocols under the categories:

- **Satellite Facility Request**: A change in housing of animals in a location that is not part of the animal program overseen by the IACUC or the addition of a satellite facility requires the submission of a Satellite Facility Request Form to the IACUC for Full Committee Review (FCR) (please contact IACUC Office).

- **New IACUC Protocol**: Significant changes requiring submission of a new IACUC protocol application and require full committee review (FCR). These include:
  - a change in the research objective being investigated

- **IACUC Amendment Subcommittee**: Examples of significant changes requiring the submission of an amendment for review by the IACUC Amendment Sub-Committee by designated member review (DMR). DMR is by at least two committee members of which one must be a veterinarian and a chair with consultation from the environmental health and safety member. The sub-committee may refer any amendment to the full IACUC for review for any reason. Examples include:
  - A change in the use of animals in a location that is not part of the animal program overseen by the IACUC
  - The addition or deletion of a new phase of the study
  - A change from non-survival to survival surgery
  - A change resulting in greater pain, distress, or degree of invasiveness
  - A change in species
  - A change in the Principal Investigator
  - A change that impacts personnel safety (e.g. ABSL1/2 to ABSL3)
  - The addition of a new genetically modified animal whose genetics are expected to result in an effect on the animal's health
  - Addition of a breeding colony
  - Change in animal numbers greater than 10% of that originally approved by the IACUC

- **Veterinary Verification and Consultation (VVC)**: Examples of significant changes that are covered by IACUC reviewed and approved policies and formularies that may be handled through an administrative process in consultation with any OLAR veterinarian. The veterinarian is acting as a subject matter expert to verify that there is compliance with IACUC reviewed and approved policies that are appropriate for the animals in the specific circumstance. The consultation with the veterinarian must be documented and the protocol must be updated by the Principal Investigator within 30 days of the consultation. The updated version of the protocol will be reviewed by the OLAR veterinarian that was consulted. The veterinarian may refer any request to the IACUC for review for ANY reason and must refer any request that does not meet the parameters of the
IACUC-reviewed and –approved policies and formularies. Examples of significant changes that can be handled administratively via VVC include:

- A change in anesthesia, analgesia, or sedation that is on the CU Denver | Anschutz Formulary
- A change in euthanasia method to anything that is approved in the most current version of the AVMA Guidelines for the Euthanasia of Animals
- A change in blood collection method or volume or route of substance administration that is included in the Blood/Fluid collection and Injection Guidelines
- Minor changes to the duration, frequency, timing, or number of IACUC approved procedures performed on an animal as long as the change is not reasonably expected to increase the pain, distress, or degree of invasiveness from what was originally approved. Guidance for possible changes can be found on the IACUC/OLAR policies page.

- IACUC Administrative Changes: Changes that may be handled administratively by the IACUC Office or OLAR and are covered by IACUC-reviewed and approved policies but without IACUC consultations or notifications include:
  - A change in animal numbers less than 10% of that originally approved by the IACUC
  - The addition of a mouse strain whose genetics are not expected to result in an effect on the animal’s health
  - Correction of typographical errors
  - Correction of grammar
  - Contact information updates
  - Change in personnel, other than the PI. (There must be an administrative review to ensure that all such personnel are appropriately identified, adequately trained and qualified, enrolled in occupational health and safety programs, and meet other criteria as required by the IACUC.)
  - Changes in grant funding/speedtype.

Note - Investigators may use fewer animals or less procedures than approved provided that it will not result in additional animals or increased procedures on other animals in the future. This does not require IACUC approval, notification, consultation, or administrative handling.

Procedures

- Significant Change requiring FCR
  - A new protocol application must be submitted for IACUC review (follow Protocol Submission Procedures)
- Significant Change requiring DMR
  - Requests for amendments to protocols are submitted on Protocol Amendment forms (through the online program)
  - A summary of the amendments requested is generated by the IACUC Office and the submitted amendment requests are sent as e-mail attachments to all IACUC members four days prior to the Amendment Sub-Committee meeting date
  - Any member may request full committee review of the protocol
  - Protocol amendments are considered by an IACUC Amendment Sub-Committee (the designated reviewers) which meets (when necessary) twice per month
  - The designated reviewers have the authority to approve, require modifications in (to secure approval), or, request full committee review of the amendment (designated reviewers do not vote).
  - Any questions arising are sent to the Investigator. Responses from the Investigator are forwarded to the designated reviewers for consideration. Using this procedure for review, a quorum is not sufficient and all designated reviewers must approve the amendment for it to be approved. If modification occurs at any stage of the review, all designated reviewers must review and approve the changes. If the designated reviewers cannot agree on an outcome, then the amendment is forwarded to the next scheduled meeting of the IACUC.
  - Actions decided are approved with Chair’s signature, documented, processed and filed in an IACUC Amendments binder in the IACUC Office and the Primary Investigator is sent an approval letter.
- Significant changes through VVC Review
  - The principal investigator or their designee contacts a member of the UC Denver veterinary staff to discuss a change that falls into one of the categories above
  - After consultation with the veterinarian, the veterinarian will send an email stating the changes that are approved to the protocol to the principal investigator and their designee, the IACUC office, and the rest of the veterinary staff
Within 30 days of the veterinary approval, the principal investigator must update their protocol and submit it through the IACUC office for review by the veterinarian that was consulted to confirm that the IACUC protocol has been updated appropriately to capture all of the changes.

- Non Administrative Changes
  - The IACUC office must be informed of the changes; e-mail notice from the PI is acceptable