RADFORD UNIVERSITY

Research Compliance Office

Institutional Animal Care and Use Committee (IACUC)

TITLE: PROTOCOL AMENDMENT, MODIFICATION, & VVC	**Effective Date:** 28-February-2022
IACUC POLICY: 001 **REVISION:** 0	**Last Revised:**
SCOPE: This policy applies to all approved IACUC protocols	**Review Date:**
PURPOSE: To define when protocol modifications are required, how protocol modifications are submitted, reviewed and approved including the use of Veterinary Verification Consultation (VVC).	
KEYWORDS: Protocol modification, Amendment, Full Committee Review (FCR), Designated Member Review (DMR), Veterinary Verification & Consultation (VVC), or Administrative Review (AR).	
Policy Owner: Research Compliance Office Radford University **Policy Contact:** Anna Marie Lee, Research Compliance Manager, alee16@radford.edu or irb-iacuc@radford.edu	

1. BACKGROUND

The PHS Policy on Humane Care and Use of Laboratory Animals (Policy) (IV.C.1.) and Animal Welfare Regulations (9 CFR 2.31 (d) (1) (i)- (iv)) define the responsibilities of the Institutional Animal Care and Use Committee (IACUC) regarding review and approval of proposed significant changes to animal activities. Changes to approved research projects must be conducted in accordance with the institution's Assurance, the United States Department of Agriculture (USDA) Animal Welfare Act and Animal Welfare Regulations and must be consistent with the Guide unless an acceptable justification for a departure is presented. Additionally, IACUCs are responsible for assuring that the changes to approved animal activities meet the requirements described in the PHS Policy IV.C.1.a.-g. According to the PHS 'NOT-OD-14-126,' institutions may establish and IACUCs may approve policies for conduct of animal activities. The institution is charged with developing the approval mechanisms, within the context of USDA and PHS boundaries. These policies must be reviewed by the IACUC at appropriate intervals of no less than once every three years to ensure they are appropriate and accurate.

2. POLICY

IACUC approval of proposed changes to previously approved animal activities is granted after Full Committee Review (FCR), Designated Member Review (DMR), Veterinary Verification & Consultation (VVC), or Administrative Review (AR). The IACUC has some discretion to use IACUC-reviewed and -approved policies to define what it considers a significant change, or to establish a mechanism for determining significance on a case-by-case basis in accordance with the PHS Policy IV.C.1.a.-g. Non-significant amendments are reviewed administratively either by the IACUC Administrator, IACUC Chair, or qualified designee. Significant amendments are reviewed via the Veterinary Verification and Consultation (VVC) process, or the FCR/DMR process (per the protocol's eligibility as described above for protocol reviews).

The Radford University IACUC manages the review and approval of **significant** amendments on a case-by-case basis in accordance with the PHS Policy IV.C.1.a.-g.

Institutional Animal Care and Use Committee (IACUC)

During the VVC process, the Attending Veterinarian (AV) is not conducting DMR, but acting as a subject matter expert to verify compliance with the previously IACUC-reviewed and -approved protocol or policy and that the amendment is appropriate for animal welfare. The AV retains the discretion to send any requested significant amendments to DMR/FCR as appropriate. All VVC activities will be reported to the IACUC during the next convened meeting.

Changes requiring PI to submit Amendment for review by FCR or DMR include:

- Change from non-survival to survival surgery;
- Change resulting in greater pain, distress, or degree of invasiveness;
- Housing or use of animals at a location that is not part of the animal program overseen by the IACUC;
- Change in species;
- Change in study objectives;
- Change in lead Principal Investigator (PI);
- Change that negatively impacts personnel or animal health and safety;
- Addition of a new procedure (defined by broad categories such as imaging, surgery, specimen collection, test substance administration, etc.);
- Strain, stock, breed or genetic modification associated with greater pain, distress, or unusual mortality or morbidity at a stage beyond embryonic development;
- Increasing approved animal numbers by greater than 10% and when combined with previously approved requests for additional animals, does not constitute a greater than 30% increase over the number of animals approved on the original IACUC submission.

Veterinary Verification and Consultation (VVC) includes:

Exclusion Note: *VVC cannot be used for DOD funded protocols as the DOD ACURO must approve all changes before they are implemented within a protocol*.

Provided they do not affect the list above, changes below may be handled administratively in consultation with the Attending Veterinarian. The Attending Veterinarian is not conducting DMR, but is serving as a subject matter expert to verify compliance with this policy and appropriateness of the proposed change for the animals in the already approved circumstances. In addition to publicly available drug formularies and list of acceptable administration routes, the parameters below may be verified by the Attending Veterinarian based on their subject matter expertise, training, experience, professional publications, or anecdotal information from professional meetings or colleagues.

The Attending Veterinarian may refer any request to the IACUC for review for any reason and must refer requests that do not meet the parameters below. VVC may be used for any change/addition of activities that are animal welfare neutral or positive such as:

Veterinary Care-Related

Examples include surgical methods and approaches, peri-operative care and preparation, preventive care, quarantine, analgesia, anesthesia, anesthesia reversing agents, health surveillance and treatment of disease or injury.

RADFORD UNIVERSITY
Research Compliance Office

Institutional Animal Care and Use Committee (IACUC)

Facility and Management-Related

- Changes to housing, cage type, diet, transportation or enrichment (e.g. provision of wheels to rodents);

Research Substances/Materials

- Standard-of-care veterinary purview items such as antibiotics, bandages, aseptic methods, analgesics, sedatives, anesthesia reversal agents and anticoagulants;
- Anesthesia, analgesia, sedation – May only be changed to agents and dosages previously IACUC reviewed and approved.
- Experimental substances, dosages, and administration may only be changed to substitute equivalent agents as scientifically justified and when possible established safe dosages for that species.
- Type, dose, method, route, concentration, volume or frequency of administration of drugs or experimental materials. *Note: Verification from Environmental Health & Safety (EHS) is required for substances that may adversely affect human health and safety.*
- Pharmaceutical grade when availability changes;
- Implant size, shape or materials;
- Neuromuscular blocking agents with specified monitoring;
- Change to any complete/balanced diet to contain drugs or test substances;

Activities/Procedures

- Duration, frequency, type, time points or number of procedures;
- Changes in the duration, frequency, type or number of procedures are only to substitute procedures that should be equivalent to previously IACUC-reviewed and -approved procedures (new procedures fall under significant amendments to be approved via FCR/DMR) and/or improve animal welfare and/or improve/protect the value of data being collected.
- Changes in procedure type must be to a type of procedure already IACUC reviewed and approved.
- Changes in procedure duration, frequency, and number must not negatively impact animal welfare.
- Change from euthanasia to terminal anesthesia or vice versa; Any change/addition under previously approved general, terminal anesthesia.

Euthanasia

- Euthanasia to any method approved by the "AVMA Guidelines for the Euthanasia of Animals" including conditional methods provided that conditions are met.

Changes requiring PI to submit an Amendment that may be Administratively Approved:

- Change in personnel, other than the lead PI; There must be an administrative review to ensure all personnel are appropriately identified, adequately trained and qualified, and OHS requirements have been met,
- Correction of typographical and formatting errors,
- Correction of grammar which does not change the intent of the animal research described,
- Change in protocol title;
- Change in funding sources, provided that there is no change in objectives or modification of methods or procedures;

- New procedure location within the animal program overseen by the IACUC;
- Increase in animal numbers no greater than 10% of the original approved animal numbers

Changes that do NOT require PI to submit Amendment for Administrative Approval:

Changes that may be handled administratively without additional PI submission of an amendment, IACUC-approval, veterinary consultations, or notifications include:

- Correction of typographical errors, grammar;
- Contact information updates;
- Removal of personnel.

Examples of changes not requiring review or approval:

- Use of fewer animals than approved or omission of experiments, experimental procedures or surgeries (this does not include withholding anesthetics, analgesics, sedatives, or other required pain-relieving measures);
- Change in strain, stock or breed including genetically modified stocks and strains (not associated with pain or distress or unusual mortality or morbidity at a stage beyond embryonic development or pain or distress);
- Change to sterile caging;
- Physical changes that reduce pain, distress, trauma or infection such as changing to a smaller needle or implant, an earlier endpoint, making a smaller incision, using a less traumatic surgical approach, leaving an animal in its familiar environment for a procedure rather than taking it elsewhere, achieving greater tissue apposition during surgery or using sterile gowns for rodent surgery;
- Change that increase human safety that do not impact animal welfare or research objectives such as using additional PPE or less of a toxic or noxious substance;
- Change in brand name or source of identical drugs, suture, materials or supplies;
- Use of discarded carcasses, tissues, organs, blood, eggs, etc. from animals as described in IACUC Policies;
- Replacement of animals that die or are euthanized for health reasons before research manipulations occur;
- Change in like housing, procedure or surgery rooms within the PRL facility.

3. PROCEDURE for VETERINARY VERIFICATION & CONSULTATION (VVC)

Mode of Communication and Submission of Requests

Communications described below may be made electronically via the Research Compliance Office (RCO)

Requesting VVC

Anyone on an approved protocol may request VVC from the Attending Veterinarian authorized by the IACUC. In addition, the RCO may determine that changes received as an amendment or by other modes fall within VVC and will refer the amendment to the Attending Veterinarian. The Attending Veterinarian may also initiate a VVC and use it to prescribe or withdraw standard-of-care veterinary purview items or activities as detailed above.

RADFORD UNIVERSITY
Research Compliance Office

Institutional Animal Care and Use Committee (IACUC)

When Changes May Be Initiated by the Laboratory

Changes will be reviewed by the RCO or the Attending Veterinarian to verify that the change requested can be authorized under this policy. Changes may be initiated as soon as the ROC or the Attending Veterinarian communicates authorization to the laboratory.

Researcher May Petition for Clarification of Items Not Included in this Policy

For areas or examples not included in this document, requestors may be asked to wait for veterinary and ROC discussion and concurrence that may conclude in the need for FCR or DMR. The requestor will be informed of each step as soon as it is determined.

Documentation

Whenever the Attending Veterinarian evaluates a change request, the request and the conclusion shall be communicated with ROC and updated in the protocol (when appropriate). The Attending Veterinarian may request protocol personnel to update the protocol document or she/he may elect to update the protocol.

Summary List of Protocols, Amendments and Administratively Handled Changes

At each meeting the IACUC will be provided with a list of VVC and ROC administrative changes and protocols and amendments approved by DMR since the last meeting for review and discussion.

Resources

- Animal Welfare Regulations 9 CFR 2.31 (d) (1) (*i*)- (*iv*)
- PHS Policy on Humane Care and Use of Laboratory Animals
- AVMA Guidelines for the Euthanasia of Animals
- Guidance on Significant Changes to Animal Activities: OLAW Special Seminar, August 21, 2014
- Implementing Guidance on Significant Changes: One Institution's Experience: OLAW Online Seminar, September 8, 2016
- NOT-OD-14-126: Guidance on Significant Changes to Animal Activities
- PHS Policy IV. C on review of PHS-Conducted or Supported Research Projects
- PHS Policy IV. D. on Information Required in Applications and Proposals

REVISION HISTORY:

Revision	Summary of Revisions	Revision Date