TITLE: Protocol Amendment & Modification	**APPROVED:** March 14, 2012
IACUC POLICY: 003 **REVISION:** 2	**REVISED:** July 11, 2016
SCOPE: This policy applies to all approved IACUC protocols	
PURPOSE: To define how protocol modifications are reviewed and approved including the use of Veterinary Verification Consultation (VVC)	
KEYWORDS: protocol modification, amendment, significant, minor, full committee review, species, and VVC.	
Policy Owner: Office of Research Integrity Assurance (ORIA) Georgia Institute of Technology (GIT) **Policy Contact:** Mary Beran, Associate Director, mary.beran@gtrc.gatech.edu or IACUC@gatech.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:

Changes to the protocol may require an amendment. Once received, the IACUC administrator reviews the changes and is responsible for determining if the modification is major (significant) or minor; however, the ultimate decision, should there be any questions, will lie with the IACUC Chair or his/her designee.

IACUC approval of proposed animal activities or significant changes to previously approved animal activities is granted after full committee review (FCR) or designated member review (DMR) 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..

In brief, significant changes include changes that have, or have the potential to have, a negative impact on animal welfare. In addition, some activities that may not have a direct impact on animal welfare are also considered to be significant.

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

The specific significant changes described below, are granted after full committee review (FCR) or designated member review (DMR).

- addition of a new procedure
- change from nonsurvival to survival surgery
- greater pain, distress, or degree of invasiveness
- housing and/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 Principal Investigator (PI)
- negative impact on personnel or animal health and safety
- a strain, stock, breed or genetic modification associated with unusual mortality or morbidity at a stage beyond embryonic development
- to exceed approved animal numbers by > 15%

Changes available via Veterinary Verification Consultation (VVC) (see procedures for documentation below)
The specific significant changes described below may be handled administratively according to IACUC-reviewed and -approved policies in consultation with a veterinarian authorized by the IACUC. A 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. This includes changes in:

a. Substances/Materials: Drugs or experimental substances*

- Type, dose, method, route, concentration, volume or frequency of administration of drugs or experimental substances
- Pharmaceutical grade when availability changes
- Implant size, shape or materials
- Anesthetics, analgesics, sedatives, anesthesia reversal agents, anticoagulants, etc.*
- Neuromuscular blocking agents with specified monitoring

b. Euthanasia: Euthanasia to any method approved by the "AVMA Guidelines for the Euthanasia of Animals" including conditional methods provided that conditions are met. Physical methods require additional justification.

c. Activities/Procedures: Duration, frequency, type or number of procedures

- Change from euthanasia to terminal anesthesia or vice versa (regardless of USDA coverage)
- Change in route, frequency or volume of blood collection as long as total blood volume collected does not exceed 0.5% of the body weight per week and anesthesias do not exceed every other day for rodents or cause decreased body weight or hematocrit for other species.
- Change of tissue type for genotyping/identification of mice maximally 12 days old with or without anesthesia/sedation
    - less invasive samples (urine, feces, blood, hair) are preferred
    - ear punch is next preferred
    - samples involving bone are least preferred but are acceptable provided that:
        - less than 2 mm of tail is removed
        - no more than half of no more than two toes per limb are removed at maximally 8 days old
- Change in approved acclimatization period following the receipt of animals

- Change of imaging time points with or without anesthesia/sedation provided that anesthesia do not exceed species requirements (e.g. every other day for rodents)
- Change in diet
- Change voluntary exercise (e.g. provision of wheels to rodents)

*Sources of documentation for changes to anesthesia, analgesia, reversal agents or sedation may include:

- Formulary for Laboratory Animals, Hawk, Leary, and Morris, Blackwell Publishing, in association with ACLAM and ECLAM
- Veterinary Drug Handbook, Plumb, Blackwell Publishing
- Exotic Animal Formulary, James W. Carpenter, Elsevier Health Sciences

In addition, drug therapies and dosages may be derived from anecdotal information provided by colleagues and/or published in journals. The IACUC believes this process provides the most reliable method of determining appropriate drug dose administrations to our laboratory animals.

Changes requiring PI to submit Amendment for Administrative Approval:

Significant and insignificant changes that may be approved administratively according to an existing IACUC-reviewed and -approved policy without additional consultation or notification to the IACUC include:

- change in personnel, other than the PI
- change in protocol title
- change in funding sources, provided that there is no change in objectives or modification of methods or procedures
- a new procedure location within the animal program overseen by the IACUC
- increased time of holding in a procedure area for up to 24 hours for non-USDA species and up to 12 hours for USDA species
- increase in species numbers ≤ 15% of the 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, vet consultations, or notifications include:

- correction of typographical errors
- correction of grammar
- contact information updates
- removal of personnel

Examples of changes not requiring review or approval

Changes below may be done without review or verification provided that these changes do not overlap any category above.

- 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 reliving measures)
- change in strain, stock or breed including genetically modified stocks and strains (not associated with unusual mortality or morbidity at a stage beyond embryonic development)
- 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
- changes 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
- replacement of animals that die or are euthanized before research manipulations occur
- 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 and Procedures Appendix B

3. VETERINARY VERIFICATION & CONSULTATION (VVC) PROCEDURE

Mode of Communication and Submission of Requests

Communications described below may be made in person, by phone or by electronic means except as specified under Documentation and Review by the IACUC below.

Requesting VVC

Anyone on an approved protocol may request VVC from any veterinarian authorized by the IACUC. In addition, the ORIA may determine that changes received as an amendment or by other modes fall within VVC and will refer the amendment to an IACUC-authorized veterinarian.

When Changes May Be Initiated by the Laboratory

Changes will be reviewed by ORIA or an IACUC-approved veterinarian to verify that the change requested can be authorized under this policy. Changes may be initiated as soon as ORIA or an IACUC-approved 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 ORIA 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 an authorized veterinarian evaluates a change request, the request and the conclusion shall be communicated with ORIA. ORIA will add a note to the protocol describing the change through VVC, and will add the change to the agenda for the next IACUC meeting. ORIA will follow-up with the PI summarizing the requested change to document that it has been added to 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 ORIA administrative changes and protocols and amendments approved by DMR since the last meeting for review and discussion.

REVISION HISTORY:

Revision Number	Summary of Revisions	Revision Date
1	Update links	March 10, 2015
2	Update and add VVC	July 11, 2016