

**Instruction Document for Completing
Central Michigan University's
Institutional Animal Care and Use Committee
Project Review Form**

INTRODUCTION

State and Federal Regulations require that all uses of **living vertebrate animals** within the institution be reviewed for their appropriateness by the Institutional Animal Care and Use Committee (IACUC) before any of these uses begin. Educational demonstrations and investigations conducted in the field must also be covered by an approved protocol.

For general reference, two publications detail the standards to which the university attempts to conform: 1) The [Guide for the Care and Use of Laboratory Animals](#) and 2) [Central Michigan University's IACUC Policies and Procedures Manual](#). Other regulations and guidelines may be applicable such as the [Animal Welfare Act](#) and the [2000 Report of the AVMA Panel on Euthanasia](#). Copies of these documents can be obtained by contacting the Office of Research and Sponsored Programs (774-6777).

GENERAL INSTRUCTIONS

- Person named as Project Director (PD) shall be the person responsible for conducting the majority of work on the project. In the case of multiple PD's, complete a cover page for each of the PD's involved in the project.
- All proposals are to be submitted to the IACUC Administrator.
- Options for submitting proposal form:
 - A) computer-generated hardcopy;
 - B) attachment sent via e-mail; or
 - C) document on computer disk.
- **NOTE:** If using Option B or C - a signed assurance page must be submitted to the IACUC Administrator at the time the attachment or disk is submitted.
- Altering the outline or content of this form is not permitted. Any submission that deviates from this form will be returned without benefit of review.
- Answer all questions. Indicate non-relevant questions by **N/A**.
- The committee may 1) approve, 2) withhold approval pending clarifications or responses to recommended changes or 3) deny approval of project.
- Projects may not begin until written approval has been received by the Project Director (PD).
- No animals may be purchased or procured until the PD receives written approval for a project.
- The PD is responsible for informing the IACUC Administrator of any additions or deletions of personnel while the project is active.
- All individuals involved in the use of animals must be qualified through experience or training. Personnel added to the project after initial approval must submit qualifications and/or complete training session(s) before beginning work on the project. Contact the IACUC Administrator for more information.

- The effective time period of approval for a project is the 3 years immediately following the month of IACUC approval. Annual reviews are required during this time period. Please inform the IACUC Administrator immediately upon completion or termination of a project.
- Designees of the IACUC, including non-scientists will review the information provided in this document; therefore, applicant should use non-technical language, understandable to all reviewers.

INSTRUCTIONS FOR PROJECT REVIEW FORM

SECTION B – Animal Information

Q. 1 – Species to be Used – A project may require more than one species or strain of animal.

Complete a separate set of Sections B – F for each species/strain of animal to be used in this project. In the case of projects that are of an (observational) nature only, the committee will accept a listing of all animals to be used rather than separate sections for each type of animal.

Along with species to be used, include the type (e.g., mouse: Swiss-Webster, gerbil: Mongolian).

Q. 6 – Classroom Housing – Animals may be held in classrooms for periods longer than 12 hours per day **ONLY** with prior IACUC approval. A written protocol regarding the care of animals in this setting must be developed in conjunction with, and approved by, the animal care manager. This protocol must be included with the proposal application.

SECTION C – Classification of Proposal

Q. 1 – Potential Pain or Distress – A major concern of reviewers of animal care and use protocols is the degree of pain and/or distress that might be imposed on the animals in the studies and the methods the investigators will use to prevent, relieve or minimize any potential suffering. The American Physiology Society has defined stimuli as potentially painful to animals if those stimuli:

- are detected as painful in humans,
- approach or exceed tissue damaging proportions, or
- produce escape behavior in animals.

Often an investigator is unaware of the potential for a procedure to cause distress in an animal. It is the PI's responsibility to amend his/her protocol immediately if an adverse outcome is observed.

The following is a partial list of procedures known to have the potential to cause significant pain and/or distress:

- surgery, including biopsy and gonadectomy
- electrical shocks, including shock reinforcement
- injection of any agent which induces excessive inflammation or necrosis, i.e., Bradykinin, Freund's complete adjuvant, certain infectious agents
- neurophysiological preparations
- restraint that does not allow the animal to make normal postural adjustments
- drug or radiation toxicity testing
- intracerebral or intracardiac inoculations
- intracardiac or periorbital blood collection
- application of noxious stimuli without escape
- induction of psychotic behavior
- natural or experimental diseases which will result in tissue destruction or death
- cage restraint of wild-caught animals
- imposition of abnormal environmental conditions

Q. 2 – Literature Search – Federal law requires that investigators planning potentially painful studies provide a written narrative description of the methods and sources used to determine that alternatives to the painful or distressful procedures were not available. Keep in mind that the government is interested in minimizing pain and suffering, so alternative surgical approaches, refinements in analgesia, etc. should be part of this review. One method of satisfying this requirement would be to utilize the Animal Welfare Library/AGRICOLA ([Agricultural Online Access](#)). The USDA offers consultation in the use of the aforementioned as well as other databases, such as:

- Alternative to Animal Testing on the Web altweb.jhsph.edu/
- Animal Welfare Information Center (AWIC)..... www.nal.usda.gov/awic/
- AWIC Databases www.nal.usda.gov/awic/databases/database.htm
- BioOne www.bioone.org/bioone/?request=index-html
- Biological Abstracts (online via Library catalog) catalog.lib.cmich.edu/
- Biological & Agricultural Index (online via Library catalog) catalog.lib.cmich.edu/
- Chemical Abstracts Hard copy available in CMU Library
- Current Research Information Service (CRIS) cris.csrees.usda.gov/
- Index Medicus Hard copy available in CMU Library
- ISI Web of Knowledge/Science (online via Library catalog)..... catalog.lib.cmich.edu/
- OCLC FirstSearch www.oclc.org/firstsearch/
- PubMed (including MEDLINE)..... www.ncbi.nlm.nih.gov/entrez/query.fcgi
- PubMed Central www.pubmedcentral.nih.gov/
- Scirus (comprehensive science-specific search engine) www.scirus.com/

SECTION D – Biological & Chemical Agents of Concern

PD's are responsible for obtaining the necessary institutional permits, as required by CMU, for any of the substances listed in Sections D and E of the proposal form. PD's are also responsible for ensuring that all personnel involved in the project have reviewed the chemical hygiene plan for their department.

Q. 3 – Known or Expected Effects of Biological & Chemical Agents of Concern – Animal care personnel should be acquainted with the project and any reactions/symptoms that may occur with the animals once the project begins. The following list should be used as a guide in assessing the health status of animals:

Signs for judging morbidity (illness) in animals:

- rapid breathing
- breathing rate very slow, shallow and labored
- rapid weight loss
- ruffled fur (rough hair coat)
- hunched posture
- hypothermia or hyperthermia
- ulcerative dermatitis or infected tumors
- inappetence
- diarrhea or constipation

Signs for judging moribund (dying) conditions in animals:

- impaired ambulation (unable to reach food or water easily)
- evidence of muscle atrophy or other signs of emaciation (body weight is not always proportionate)
- any obvious illness including such signs as lethargy (drowsiness, aversion to activity, lack of physical or mental alertness), prolonged inappetence, bleeding, difficulty breathing, central nervous system disturbances, or chronic diarrhea or constipation
- inability to remain upright

SECTION E – Project Details

Q. 1 – Survival and Non-survival Surgery – This section refers to experimental/teaching procedures and not those emergency interventions conducted in the course of providing veterinary care. **‘Survival surgery’** refers to any surgical procedures from which the animal will awaken from surgery. In **‘non-survival surgery’** the animal is euthanized while still anesthetized. **‘Major surgery’** is defined here as any surgical procedure that enters a body cavity or that has the potential to produce a permanent handicap. **‘Minor surgery’** would include skin and superficial tissue biopsy or surgery that does not enter the body cavity.

Multiple major survival surgeries on research animals are strongly discouraged. Exceptions require careful review by the IACUC. However, survival surgery followed by anesthetic recovery and subsequent non-survival surgery does not require the same stringent review.

Aseptic technique must be used on all animals (including rodents and rabbits) that undergo survival surgery.

Q. 3 – Known or Expected Adverse Effects of Procedure – Animal care personnel should be acquainted with the project and any reactions/symptoms that may occur with the animals once the project begins. The list provided in the guidance for Question 3 of Section D should be used as an aide in assessing the health status of animals.

SECTION F

Q. 2 – Method of Euthanasia – Any physical means of euthanasia in the absence of anesthesia is **not** considered acceptable unless required for the scientific goals of the project & justified in writing. References or citations must be provided in cases where such euthanasia is considered essential.

ASSURANCE PAGE

The signature of the department chairperson is required if animals are to be used in teaching or if the protocol is not part of a sponsored project. If the department chairperson is also the Principal Investigator/Project Director, the statement should be co-signed by the Dean or Dean’s designee.