### **Guidelines for Reviewing NMU IACUC Applications**

#### APPLICATION SECTIONS

### I. Principal Investigator

Check section V.A. to determine that "any experience with the proposed animal model and methodologies" is provided.

Check section VIII. to determine a) the roles the PI and co-investigators will have and b) that the CITI Program Modules have been completed.

# II. Project/Grant/Course Number and Title

Determine if title is appropriate (e.g., course title needed)

Determine if start and end dates are appropriate (Is there too much or too little time allotted for these studies? Does the start date needed to be changed?)

If additional funding is pending, ask if this funding is necessary to complete the study

### III. Species, number of animals and use category

Determine that all species are listed in table and that the number of animals listed matches the rationale for this number of animals in section V.B.

Determine appropriateness of the pain category after reading section VI (Experimental Protocol)

## IV. Description of Project

This section should be clear and address each subsection title appropriately

Determine if the significance of the work and the expected outcomes justify procedures that will be used to study these animals (i.e., ethical cost)

### Determine scientific merit of the project

While the specific study parameters of a study are left to a department head to determine (through own expertise, department committee review, or outside consultant), some degree of merit should be clear to the IACUC in order to weigh the ethical costs of the study. One indirect method to determine scientific merit is to review the acceptance of the PI's prior work by the scientific community. Such evidence includes presentations at scientific meetings, internal or external grants, and publications in refereed journals.

### Determine educational merit of the project

Again, while the specific study parameters of a study are left to a department head to determine (through own expertise, department committee review, or outside consultant), some degree of educational merit should be clear to the IACUC in order to weigh the ethical costs of the study. The project objectives should be consistent with the educational goals of this course.

### V. Judicious Use of Animals

Subsection A. ....rationale for the selection of the animal species that will be used in this project. Determine appropriate selection of species, including a) biological characteristics and b) appropriate experience of research personnel.

Determine if the chosen species can be Replaced by a non-animal model or in vitro procedure Determine if the chosen species can be Replaced by a "lower level" species (e.g., use a rat instead of a dog or invertebrate instead of a mouse)

Subsection B. ....rationale for the number of animals...

The number of animals per group and the number of groups must be provided.

Ideally, the number of animals per group should be basically on statistical analyses (e.g., power analysis) or a particular research design

Only the fewest number of animals necessary to complete the study objectives must be used (Reduction)

Subsection C. describe how you determined that acceptable alternatives to the use of animals in this project are not appropriate

Determine if information about the database search includes the database used, date accessed, and search terms used.

Search terms should include "alternatives" or an acceptable variation of this word For teaching projects, the search should include literature to address educational issues as well. A statement concerning the results of the search must be provided. In order to conduct this study, only one of these explanations is acceptable: A) no alternative procedures that would allow for the completion of the study objectives was found or B) alternatives to the use of animals were found, but these are not appropriate for the proposed study because.... . In the case of option B, reviewers must consider these reasons carefully

### IV. Sources, Husbandry, and Location of Animals

#### B. Housing Conditions

Determine that sufficient detail for these procedures are provided, per the instructions on the protocol application.

Consider the social and enrichment needs of the animals

#### IV. F. State and Federal Assurances

Determine if assurances are listed, if applicable

#### VII. Experimental Protocol

#### A. Procedure

Determine that sufficient detail for these procedures are provided, per the instructions on the protocol application.

Procedures must be understandable for a lay person

#### B. Pharmacological Agents

Determine that sufficient detail for these substances are provided, per the instructions on the protocol application.

Determine that the needle gauge is noted

#### C. Euthanasia

Determine that sufficient detail for these procedures are provided, per the instructions on the protocol application.

Note: Decapitation is a common method to ensure death

## D. Adverse effects

Determine that sufficient detail for these procedures are provided, per the instructions on the protocol application.

Determine how potential adverse effects will be addressed

# F. State and federal assurances for field studies

Determine if all appropriate assurances were listed for field studies, as applicable

## VIII. Personnel involved in project

Determine that everyone is listed and that their roles in the project are noted and seem appropriate

Determine that all CITI training appropriate for the project has been completed.

# IX. Occupational Safety and Hazardous Materials

Determine that sections A - D are filled in

# E. Containment protocol

Determine that this section is described in detailed, if applicable.

Proper personal protection equipment that will be used must be listed