**MOUNT HOLYOKE COLLEGE IACUC PROTOCOL PROPOSAL**

For work with Vertebrate Animals, Fresh Vertebrate Animal Tissue & Cephalopods

# Overall General Information

1. Title of project or brief description of vertebrate animal use:

Click or tap here to enter text.

1. Check all that apply:

[ ]  faculty research project

[ ]  295

[ ]  395

[ ]  independent student research (e.g. Psych 306)

[ ]  specific lab exercise in course (list course)

[ ]  natural history observation

[ ]  field study

1. Name of principal faculty investigator/sponsor:

name Click or tap here to enter text.

phone: Click or tap here to enter text.

e-mail: Click or tap here to enter text.

Department/Program: Click or tap here to enter text.

1. Is this study funded by a grant? Choose an item.

If yes, give name of funding agency and date of award.

Click or tap here to enter text.

1. Name(s) of student(s) or technician(s) using the animals in this project:

name: Click or tap here to enter text.

phone: Click or tap here to enter text.

email: Click or tap here to enter text.

Department/Program: Click or tap here to enter text.

name: Click or tap here to enter text.

phone: Click or tap here to enter text.

email: Click or tap here to enter text.

Department/Program: Click or tap here to enter text.

Class Information/Other:

Click or tap here to enter text.

1. Species used

Scientific and English name: Click or tap here to enter text.

Age (e.g. neonates, weanlings, adults, hatchling): Click or tap here to enter text.

Number of animals to be used over entire course of project: Click or tap here to enter text.

1. Source of animals:

[ ]  Biology stock

[ ]  Psychology stock

[ ]  to be purchased (give vendor name & address): Click or tap here to enter text.

[ ]  other (provide details): Click or tap here to enter text.

1. Housing

Location of housing: Building: Click or tap here to enter text. Room #: Click or tap here to enter text.

How will these animals be housed? (Check all that apply.)

[ ]  hanging wire cages

[ ]  plastic shoebox cages

[ ]  individually ventilated cages

[ ]  glass or plastic aquaria; size: Click or tap here to enter text.

[ ]  group house; # of animals per unit: Click or tap here to enter text.

[ ]  singly housed

[ ]  other (describe): Click or tap here to enter text.

Are there special housing or care requirements needed (e.g. lighting regime, temperature, humidity, live food items needed, burrowing substrate, basking areas, etc.)? Provide complete details.

Click or tap here to enter text.

1. Disposition of animals at end of project (if unknown, please explain why):

Click or tap here to enter text.

1. Name(s) of person(s) responsible for the care and feeding of animals used in this study:

name: Click or tap here to enter text.

phone: Click or tap here to enter text.

email: Click or tap here to enter text.

Department/Program: Click or tap here to enter text.

name: Click or tap here to enter text.

phone: Click or tap here to enter text.

email: Click or tap here to enter text.

Department/Program: Click or tap here to enter text.

# Project Details

1. Summarize the purpose of this study naming variables being studied and the applications or expected benefits of this project with respect to the biochemical, physiological, or behavioral processes that are being investigated, or the benefits to the health or welfare of people or other animals. Please be as nontechnical as possible. Also describe your basic procedures including any specialized equipment or apparatus to be used. Indicate any groupings of animals in experimental studies and the number of animals to be assigned to each group. Note any procedures that might produce pain or distress for the animal(s). Describe any discomfort or mortality that is expected.

Click or tap here to enter text.

2. Indicate the proposed start date and end date of the study. Where an exact end date is unknown, indicate the approximate duration of the project.

Click or tap here to enter text.

3. Why was this particular species chosen for this project?

Click or tap here to enter text.

4. In experimental studies, how was the number of animals to be used determined?

Click or tap here to enter text.

5. Does any part of this study duplicate previous studies? If yes, which part, and why is it necessary for your study to be duplicative?

Click or tap here to enter text.

6. If you subject vertebrate animals to more than momentary pain, the Animal Welfare Act regulations (Code of Federal Regulations, 1/92 edition; 9CFR, Ch.l,sect.2.31, 8i-8iv-A) and PHS Policy on Humane Care and Use of Laboratory Animals (1986) require consideration of alternatives to animal use in research, testing, and education.

What alternatives to the painful procedures described in the project details have been considered? If alternative procedures cannot be used, please provide a brief narrative describing the methods and sources, e.g. The Animal Welfare Information Center (301-504- 6212), used to determine that alternatives were not available.

Click or tap here to enter text.

Specify DATABASE, KEYWORD(S), and INCLUSIVE DATES in your search for alternatives. Provide a complete citation of a current work using the methods you propose to follow in your study.

Click or tap here to enter text.

7. Which of the following methods/procedures will you use during the course of this study? (Check all that apply and detail below.)

1. [ ]  behavioral observations (includes aggressive encounters)—type, duration, location

Click or tap here to enter text.

1. [ ]  food deprivation---% of free feeding; duration of deprivation phase

Click or tap here to enter text.

1. [ ]  water deprivation---% normal water intake/day; duration of deprivation

Click or tap here to enter text.

1. [ ]  immobilization/restraint (exclusive of confinement for weighing or manual restraint for injections)--total time/day, # of days, pattern of days; description of restraining and adaptation sessions

Click or tap here to enter text.

1. [ ]  injections — agent, concentration, vehicle, injection route, dose

Click or tap here to enter text.

1. [ ]  blood drawing, fluid collection—site, amount, frequency

Click or tap here to enter text.

1. [ ]  antibody production

Click or tap here to enter text.

1. [ ]  minor surgery (e.g. skin biopsy) --- type, location, description; anesthesia (agent, route. concentration, vehicle, dose); analgesia

Click or tap here to enter text.

1. [ ]  major recoverable surgery (Major surgery is defined as any intrusion into the major body cavities — cranial, thoracic, abdominal, or pelvic)---type, location, description; anesthesia (agent route, concentration, vehicle, dose); analgesia

Click or tap here to enter text.

1. [ ]  non-recoverable surgery—description; anesthesia(agent, route, concentration, vehicle. dose)

Click or tap here to enter text.

1. [ ]  application of painful or aversive stimuli (excluding injections): defined as the presentation of any stimulus considered painful/stressful to a human;-type, duration, frequency

Click or tap here to enter text.

1. [ ]  euthanasia---agent, route, concentration, vehicle, dose

Click or tap here to enter text.

1. [ ]  administration of toxins, carcinogens, teratogens (as defined by MHC Chemical Hygiene Plan) --- agent, route, concentration, vehicle, dose; in case of teratogens, use of fetal tissue

Click or tap here to enter text.

1. [ ]  parasites-species, site and route of administration

Click or tap here to enter text.

1. [ ]  administration of any controlled substances (drugs classified as such and requiring federal and/or state controlled substance license or registration)—agent, route, concentration, vehicle, dose; if self-administered, how will animals be induced to administer the substance?

Click or tap here to enter text.

1. [ ]  other --- explain below

Click or tap here to enter text.

# Occupational Health and Safety Issues and Training

Identify any hazardous agents to which animals will be exposed (pathogenic organisms, carcinogens, toxic chemicals, radioisotopes, etc.) which will consequently require special precautions for humans in contact with the animals or their waste products. You will need to consult with the College Health, Safety, and Environmental Protection Compliance Advisor (Nancy Apple, 538-2529, neapple@mtholyoke.edu) on appropriate procedures to be followed.

Detail here the biosafety procedures to be followed. Indicate if special training for animal care personnel is required.

Click or tap here to enter text.

If there is exposure to zoonoses, identify and indicate what precautions need to be taken by all personnel involved.

Click or tap here to enter text.

Have you had the relevant MHC Chemical Hygiene Training? (Provide date of training.)

Click or tap here to enter text.

Detail any other training you have received which would be relevant to the procedures to be undertaken in this proposed project.

Click or tap here to enter text.

# Alternatives to the use of vertebrate animals

Have alternatives to the use of vertebrate animals been considered (e.g. films, videotapes, computer simulations, or other models)?

Click or tap here to enter text.

Explain why animals must be used in this project and what will be learned from live animals or animal preparations that could not be learned from the above suggested alternatives.

Click or tap here to enter text.

# Assurance

As Faculty involved in research and teaching using vertebrate animals, and/or staff and students involved in a research project using vertebrate animals, I (We) certify that:

An adequate literature search has been conducted to ensure that the proposed research is not "unnecessarily duplicative" (CFR, 2.3 l,d,iii).[ Applies to faculty/student research projects, not class demonstrations. ]

Alternatives to the use of animals have been considered, but the educational objective(s) can be accomplished only with the use of animals.

The Faculty (staff, student) member has considered alternatives to procedures that may cause more than momentary or slight pain or distress to the animals and has provided a written description of the methods and sources used to determine that alternatives were not available (CFR.2.31,d,ii).

"discomfort and injury to the animals will be limited to that which is unavoidable in the conduct of scientifically valuable research, and that analgesic, anesthetic, and tranquilizing drugs will be used where indicated and appropriate to minimize pain and discomfort to animals" (CFR,2.31.iv).

"...all scientists, research technicians, animal technicians, and other personnel involved in animal care, treatment, and use, are qualified to perform their duties" (CFR. 2.3 l,a).

Proper care will be provided in accordance with the provisions of the Guide for the Care and Use of Laboratory Animals as amended (Institute of Laboratory Animal Resources, 1996; National Academy Press, 1996).

The physical condition of the animals will be monitored on a daily basis, and should their welfare seem in doubt, I(We) will call the Consulting Veterinarian for the College, Dr. Erin Goodreau, 413-306-0997.

Principal Investigator/Faculty Sponsor: Click or tap here to enter text.

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Signature Date

Student Investigator (if applicable): Click or tap here to enter text.

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Signature Date

 Rev. 09/08/2023