General Information
Name:

Faculty Sponsor (if student proposal):

Date Proposal Submitted:

Title of Project:

Project is ____ Biological (laboratory)

____ Psychological ______ Teaching

____ Other (describe here)

I. Purpose and Justification:

A. Summarize your proposed project, including the goals of the project and the major variables to be manipulated or measured.

B. How will the study (a) increase our understanding of evolution, development, biological or behavioral mechanisms, (b) increase our understanding of the species you are studying, or (c) provide results that benefit the health or welfare of people or other animals? (Answer as appropriate.)

C. Does the study duplicate earlier work? _____ If yes, why?

D. What steps will you take to monitor the animals’ welfare throughout the study so that, if necessary, you may change any conditions that contribute to stress or suffering that is not justified by the importance of your study?
II. Subjects

A. Species:
   1. What species will you study?
   
   2. What is the source of the animals?
   
   3. Why is this species important in your studies? Has it been used in previous research?
   
   4. What is the evidence that this species is sufficiently abundant in nature that continued study of it at present levels would not be expected to reduce its genetic variability or hasten its extinction?

B. Laboratory Housing

To the greatest degree possible, housing should be adapted to conform to the natural ecology of the animal. Will you house animals in the laboratory or during transport at any time? ______ If yes, complete this section.

   1. For how long will animals be housed in a laboratory or transportation setting?
   
   2. What provisions will you make to provide:
      
      a. Adequate space
      
      b. Objects and materials characteristic of the natural habitat:
      
      c. Companion animals (if you are working with a gregarious species):

C. Number of Animals:

The number of animals should be sufficient to provide a clear answer to your question, but you should use the smallest number that is consistent with sound experimental design. Consider the following suggestions and then describe and justify the number of animals you will use.
If the procedure involves little stress, it may be more humane to use fewer subjects over a longer time rather than more subjects over a shorter period of time. If the procedure involves pain or stress, the reverse may be true.

It is sometimes possible to economize on subjects and collect more data by collaborating with colleagues who are interested in related problems.

1. How many animals do you expect to need?
2. In what time period will this number of animals be used?
3. How have you reduced this number to the minimum necessary?

III. Procedures and Design

A. Deprivation. Do you plan to deprive the animals of any basic necessity? __________ If yes, complete this section.
   1. What event or activity will you withhold?

   2. Can you withhold a preferred food or activity instead of depriving the animals of food, water, or another necessity? (Depending upon the species, you might consider fruit, sunflower seeds, carrots; access to a running wheel, a visual reinforcer, or a companion animal.)

   3. If you cannot use a preferred food or activity, the minimal level of deprivation should be empirically determined.
      a. What level of deprivation will you use? (Answer in terms of hours, percentage ad libitum weight, or other specification.)
      b. Would the results of your study have more generality if the deprivation was less extreme?
      c. How was this minimal level determined?
      d. How will you adapt your animals to this level? (e.g., you might withhold food for 6 hours the first two days, 8-12 hours the next.)
      e. If you will be withholding food, will you gradually return your animals to free feeding at the end of the study and recalibrate ad libitum weight? ______________ If not, why not?
B. Aversive Stimulation
Will you expose your subjects to any form of aversive stimulation, e.g. electric shock, exposure to toxic substances, or extreme environmental conditions (high or low temperature, atmospheric pressure, humidity, etc.)? ______ If yes, complete this section.

1. Describe the form of aversive stimulation and the steps you have taken to minimize stress to the animal.

2. Can the experimental question be answered without use of aversive stimulation? Why not?

3. Is the proposed treatment likely to be lethal to some or all of the animals? What justification is there for exposing animals to this procedure?

C. Surgery or Invasive Procedures
Will the study entail surgery or other invasive procedures such as drawing of blood? N/A If yes, complete this section.

1. Briefly describe the surgery or other procedure in terms that the intelligent layman can understand including risks to life or health of the animals and how their health and welfare will be monitored during the procedures.

2. Describe the measures you will take to minimize the animals’ discomfort before, during, and after the procedure.

3. Will anesthesia be administered? If yes, describe route of administration and describe how the depth of anesthesia will be determined.

4. Describe the post-operative care the animals will receive.

5. Describe potential complications and how they will be handled.

D. Physical Restraint
Will the animals be physically restrained at any time during the study, other than for surgery or injections or drawing of blood or fluids? If yes, complete this section.

1. Briefly describe the conditions of restraint, including the duration of restraint during a single session and the probable total number of sessions.
2. Describe how these conditions were determined to be minimally stressful to the animal.

E. Plans for the animals after your experiments are concluded.

1. Will they be used in additional experiments?
2. Who will be responsible for their care? Student Researchers
3. Will they be euthanized?
4. If so, is the method consistent with the recommendations of the AVMA Panel on Euthanasia?

IV. Personnel
Personnel require appropriate training and experience to work with vertebrate animals in research and teaching. List all persons who will perform any technique with live animals. Give name, title and phone numbers. State the qualifications of the person to perform the specific techniques or procedures described in this proposal or how training will be obtained. N/A

Names, titles and contact information:

______________________________________________     __________
Signature of Investigator (required after approval)     Date

______________________________________________     __________
Signature of Faculty Sponsor (required after approval)     Date

Please forward this protocol form to Jonathan Diskin, Convener of the AICUC Committee at Earlham, jond@earlham.edu

Consult the following for guidelines in the care and use of laboratory animals
• American Psychological Association Guidelines for Ethical Conduct in the Care and Use of Animals, http://www.apa.org/science/anguide.html

• National Institutes of Health Office of Extramural Research Public Health Service Policy on Humane Care and Use of Laboratory Animals http://grants.nih.gov/grants/olaw/references/phspol.htm