

Widener University: Institutional Animal Care and Use Committee

Project Application Form

1. Name and Department of Applicant (faculty member or course instructor):

Students: Amy Curran, Corinne Robinson, Beth Wigo

2. Title of Project: Metabolism Curriculum: Grades 5, 7, and 11

3. Is this a new application, revision or renewal? new application

Date and approval number of last application? n/a

4. If this is a course project, please indicate:

Course Name and Number	Instructors	Estimated Enrollment
Biology 401, fall 2003	Itzick Vatnick and Bruce Grant	16

5. Dates of Project (1 Year):

From: October 2003

To: October 2004

6A. Statement of qualification of applicant. Provide a biographical statement of the experience and training of applicant for the procedures described below.

The students will receive extensive training in animal care for this project, which will not involve any harm to any of the study animals.

6B. Names and positions of persons (e.g. students) authorized by the applicant to participate in the procedures described below. Also, name the person responsible for instruction in the care and use of laboratory animals of each research participant.

Names	Title:	Instruction in Animal Handling by:
Amy Curran	Students	Dr. Vatnick and Dr. Grant
Corinne Robinson	Students	Dr. Vatnick and Dr. Grant
Beth Wigo	Students	Dr. Vatnick and Dr. Grant

7A. If this is a research project, supply an abstract of the project. Abstract should be written in terms understandable by a non-scientist. Describe the overall purpose of the project and the importance of the research.

7B. If this is a course project, provide a course description. Also, append a copy of the syllabus of the course.

Course project, Dr Gant and Dr Vatnick will provide needed information regarding course.

8. Give the specific reasons why live animals must be used for this study. Are alternative methods available (e.g. computer simulations, cell or tissue culture)? If so, why are they not used?

The purpose of our project is to develop a curriculum using live animal to give students hands-on experience with animals. And to provide them with realistic results.

9A. Animals to be used in this protocol. Numbers used may be estimates. If needed, base estimates on usage in previous years.

Species/Strain	No. / Year	Sex	Age	Weight
<i>Phodopus sungorus</i>	6	m/f	adult	38-43g
<i>Sceloporus occidentalis</i>	6	m/f	adult	8-10g

9B. How are the animals obtained? Where and how are they housed?

Purchased from the pet store. Housed in individual cages in each classroom.

10. Provide complete details on each procedure involving the species listed under section 9A.

The description of each procedure should supply the category of animal utilization (see appendix). If drugs or anesthetics are to be used, provide dosage and duration of treatment. As appropriate, identify all aspects of post-procedural care, including euthanasia, and describe procedures for identification and intervention in the care and use of animals if painful or stressful outcomes are anticipated. For course projects, refer to the course syllabus as possible.

Animals will be placed in the metabolic chambers until a accurate reading is obtained. They will be in the presence of soda lime, which will not be handled by the children. After experimental purposes the animals will be kept as classroom pets.

11. I hereby certify that the above information is accurate. The care and use of animals proposed will abide by the National Research Council guidelines published in the *Guide for the Care and Use of Laboratory Animals*.

Names	Title:
Amy Curran	Students
Corinne Robinson	Students
Beth Wigo	Students

Signature _____

Date _____

The signature of the Associate Dean of Science is required.

Name Marc Brodtkin

Title Associate Dean of Science

Signature _____

Date _____

APPENDIX

CATEGORIES OF USE LEVEL FOR APPLICATIONS UTILIZING VERTEBRATE ANIMALS IN RESEARCH TESTING AND INSTRUCTION.

CATEGORY A - Experiments on vertebrate animal species that are expected to produce little or no discomfort.

Mere holding of animals captive for experimental purposes; simple procedures such as injections of relatively harmless substances; blood sampling; physical examinations; food/water deprivation for short periods (a few hours); standard methods of euthanasia that induce rapid unconsciousness, such as anesthetic overdose or decapitation preceded by sedation or light anesthesia.

CATEGORY B - Experiments that involve some minor stress or pain (short-duration pain) to vertebrate animal species.

Experiments on completely anesthetized animals which do not regain consciousness; with anesthesia and subsequent recovery, exposure of blood vessels or implantation of chronic catheters behavioral experiments on awake animals that involve short-term stressful restraint; immunization employing Freund's Adjuvant; noxious stimuli from which escape is possible; major surgical procedures under anesthesia that result in post-operative discomfort that is treated with analgesics. Category B procedures incur additional concern in proportion to the degree and duration of unavoidable stress or discomfort.

CATEGORY C - Experiments that involve significant but unavoidable stress or pain to vertebrate animal species.

Deliberate induction of behavioral stress in order to test its effect; major surgical procedures under anesthesia that result in significant post-operative discomfort that is not treated with analgesics; induction of an anatomical or physiological deficit that will result in pain or distress; application of noxious stimuli from which escape is impossible for prolonged periods (up to several hours or more) or physical restraint; maternal deprivation with substitution of punitive surrogates; induction of aggressive behavior leading to self-mutilation or intra-species aggression; procedures that produce pain in which anesthetics are not used, such as toxicity testing with death as an end point, production of radiation sickness, certain injections, and stress and shock research that would result in pain approaching the pain tolerance threshold, i.e. the point at which intense emotional reactions occur. Category C experiments present an explicit responsibility on the investigator to explore alternative designs to ensure that animal distress is minimized or eliminated.

CATEGORY D - Procedures that involve inflicting severe pain near, at, or above the pain tolerance threshold of unanesthetized conscious animals.

Use of muscle relaxants or paralytic drugs such as succinyl choline or other curariform drugs used alone or surgical restraint without the use of anesthetics; severe burn or trauma infliction on unanesthetized animals; attempts to induce psychotic-like behavior; killing by use of microwave ovens designed for domestic kitchens or by strychnine; inescapably severe stress or terminal stress.