

Animal Use Protocol Form - Teaching

University of Maryland, College Park

(NOTE: Form must be submitted by the 1st of any month to be considered by the IACUC that month)

PROTOCOLS FORMS ARE GENERALLY NOT REVIEWED IN AUGUST

Principal Instructor:		Date of submission:	
Department:		Phone:	
E-mail:		FAX:	
Co-instructors (faculty):			
Collaborating instructors (including postdocs, visitors, etc.) include institution or address & phone number (use separate page if necessary)			
Teaching Assistants (Graduate Students):			
Teaching Assistants (Undergraduates):			
Facility in which animals will be housed:			
Semesters Course Taught: ___ Fall ___ Spring ___		___ Summer ___ Other:	
Course Designation and Title:			

I acknowledge responsibility for the conduct of these procedures with animals. I attest to the accuracy and completeness of the information provided. I promise to conduct this work with animals in accordance with the protocol as approved by the IACUC and the Campus Animal Care and Use Guidelines. I will not make any changes in the above protocol without first obtaining the approval of the IACUC and I will not use any procedures which are not included in this form.

	Printed Name	Signature	Date
Investigator:			
Supporting Signatures			
Facility Supervisor			
Department Chair			

Before completing this and the subsequent sections of the protocol form you should familiarize yourself with the material described in Section V.

SECTION II

If the animal procedures planned involve simple field observations with *NO IMPACT ON EITHER THE ANIMALS OR THEIR ENVIRONMENT* then continue here. Otherwise, skip to section III.

- a. **Lay summary:** On a separate sheet, provide a 1-2 paragraph overview of the teaching activity in terms understandable by a non-scientist. Include an explanation of the educational goals and rationale for the animal activities. Do not include undefined scientific terms.
- b. In more scientific terms, describe the study activities. Include all precautions taken to ensure no adverse impact on the study animals or their environment.
- c. Include copies of all required permits and/or letters of permission, or provide documentation that such permits are not required.
- d. You and your department chair (and not the facility supervisor) should sign and submit this form, You do *not* need to complete Sections III and IV..

SECTION III

ANSWER ALL QUESTIONS AS INDICATED (circle the appropriate answer)

1a. Will the animals be euthanized for or during the laboratory?	<input type="checkbox"/> NO	<input type="checkbox"/> YES
1b. Method of euthanasia (Review No. 16)		
2a. Is surgery to be performed? (If yes, complete items 2b to 2d and add surgical SOP=s as appropriate.)	<input type="checkbox"/> NO	<input type="checkbox"/> YES
2b. Surgery room (building and room number):		
2c. Is the surgical procedure terminal?	<input type="checkbox"/> NO	<input type="checkbox"/> YES
2d. Is the surgical procedure a survival procedure?	<input type="checkbox"/> NO	<input type="checkbox"/> YES
3a. Have the husbandry SOP=s been approved by the IACUC?	<input type="checkbox"/> NO	<input type="checkbox"/> YES
3b. If you answered ANo@ in item 3a, on a separate page please explain why not and describe the procedures to be used.		
4a. Are infectious agents to be used?	<input type="checkbox"/> NO	<input type="checkbox"/> YES
The agent is (are):?		
4b. Are chemical hazards to be used?	<input type="checkbox"/> NO	<input type="checkbox"/> YES
The chemical hazards are?		
4c. Are radioisotopes to be used?	<input type="checkbox"/> NO	<input type="checkbox"/> YES
The radioisotopes are?		
4d. Are other biohazards (including recombinants) being used?	<input type="checkbox"/> NO	<input type="checkbox"/> YES
The biohazards are?		
4e. If answer to any part of question 4 is YES, IACUC approval is contingent upon IACUC receipt of written approval of your procedures by the Department of Environmental Safety.		

SECTION IV. ANSWER EACH OF THE FOLLOWING QUESTIONS ON A SEPARATE SHEET(S) OF PAPER. PLEASE BE SURE AND USE THE APPROPRIATE NUMBER FOR EACH QUESTION.

5. **Course Summary:** What are the educational/informational goals of the course?
6. **Animal Laboratories:** What are the overall educational goals of the animal laboratories? Please review No. 22
7. **Alternatives:** Explain why animal studies are preferred to non-animal alternatives in achieving these educational goals.
8. **Species:** Why is this the most appropriate species/strain to use in these activities?
9. **General Description:** Describe the animal laboratories that are to be performed and the learning goals for each of these laboratories. The description must be specific about any procedure which may impact on the health and comfort of the animals (ex. Frequency of performance of the procedure, methods of restraint, blood sample volumes, etc.)

When describing the animal procedures, be sure to differentiate between those procedures performed by yourself, the teaching assistants and the students.

Please include in this section the numbers of animals used for each of the laboratories and the student/animal ratios. Please be sure to provide a justification for the animal numbers used in each procedure.

If undergraduate students will be performing euthanasia, please indicate the specific laboratories where this would occur and provide a justification for why it is necessary for them to perform this procedure.

10. **Surgery:** If surgery is involved, described the surgical procedures to be performed. Include the procedures planned to ensure asepsis (e.g., surgical site preparation, instrument sterilization, etc.). If aseptic procedures are not being used, explain why not and describe the procedure(s) of choice. Finally, describe the immediate and post-operative (next day and thereafter) care.
11. **Anesthetic:** If any anesthetic is used, provide information on: (a) Anesthetic/analgesic to be used (types/names), (b) method(s) of administration, and (c) dosage(s) to be used.
12. **Training:** Describe the training and qualifications of yourself or the individual responsible for overall supervision and training in the animal procedures. Please provide information on attendance at the IACUC Animal Users Training Seminar.

What type of training in and supervision of the animal procedures will be provided for the teaching assistants? In particular, please be very specific about the hands-on training of these individuals performing procedures which may produce animal discomfort, ie. Restraint, injections, blood collection, euthanasia, etc. Who will provide this training.

What type of training in and supervision of the animal procedures will be provided for the undergraduate students? Who will provide this training and supervision?

13. Animal Number and Welfare Status: (Note, the numbers on this chart must equal those presented in the laboratory descriptions (for category definitions see No. 17). **The numbers should representation those used per semester.**

Species	Category I (Little or no pain, anesthetic may be used for sedation)	Category II (anesthetic used for relief of potential pain or distress)	Category III (Pain not relieved)

For all animals in categories II and III, please fill in the following information on your **Alternative Search** (See Nos 21 & 22)

Category	Databases searched	Inclusive dates of literature searched	Date Search Conducted	Key words used in search
II				
III				

Describe the results from the literature searches (if alternatives are found and not used, explain why are they NOT acceptable).

If animals were listed in Category III, explain why pain or discomfort cannot be relieved and what procedures will be used to minimize pain/discomfort.

14. Do any approved SOP=s apply to this protocol? If so, please list and attach copies to this protocol.

Title	Approval date

15. **HANDOUTS:** For all the animal use procedures, you **MUST** provide all laboratory handouts which will be given to the students.

SECTION V: PLEASE BE SURE TO REVIEW THE FOLLOWING INFORMATION

16. The Campus accepts only those euthanasia practices which are consistent with the recommendations in A2000 Report of the American Veterinary Medical Association (AMVA) Panel on Euthanasia. @ Copies of this document are available through CARF
17. Definitions of animal welfare categories:
 - I. Little or momentary pain or discomfort (peripheral blood collection, injections, vaccinations, sedation, etc.).
 - II. Potential discomfort or pain which is relieved by the appropriate anesthetic or analgesic (surgery under anesthesia, cardiac puncture under anesthesia).
 - III. Discomfort or pain which is not relieved (toxicity studies, disease studies).
18. U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing states AThe animals selected for a procedure should be of an appropriate species and quality and the minimum number required to obtain valid results@
19. The Animal Welfare Act states that: AProcedures that may cause more than momentary or slight pain or distress to the animals will: a) Be performed with appropriate sedatives, analgesics or anesthetics unless withholding such agents is justified for scientific reasons, in writing, by the principal investigator and will continue for only the necessary period of time; b) Involve in their planning, consultation with the attending veterinarian..., c) Not include the use of paralytics without anesthesia...@
20. The Animal Welfare Act states: AThe principal investigator has considered alternatives to procedures that may cause more than momentary or slight pain or distress to the animals, and has provided a written narrative description of the methods and sources, e.g., the Animal Welfare Information Center, used to determine that alternatives were not available,@
21. Please remember that in discussing alternatives, we are considering the A3Rs.@
 - (A). **Replacement**: those methodologies (computer programs, tissue culture techniques, epidemiological data, etc.) which replace the use of animals.
 - (B). **Reduction**: Those methodologies which reduce the numbers of animals used in the protocol.
 - (C). **Refinement**: Those methodologies which refine the procedure to minimize the amount of discomfort that the animal may experience.
22. The U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research and Training includes: AProcedures involving animals should be designed and performed with due consideration of their relevance to human or animal health, the advancement of knowledge or the good of society.@
23. The Animal Welfare Act States: AActivities that involve surgery include appropriate provision for pre-operative and post-operative care of the animals in accordance with established veterinary medical and nursing practices. All survival surgery will be performed using aseptic procedures, including gloves, masks, sterile instruments, and aseptic techniques.@
24. The Animal Welfare Acts states: APersonnel conducting procedures to the species being maintained or studied will be appropriately qualified and trained in those procedures.@

CONTINUE ANSWERS TO QUESTIONS IN SECTION IV [HERE](#).