

## **CARE AND USE OF VERTEBRATE ANIMALS IN INSTRUCTION AND RESEARCH**

**PURPOSE:** Establish CCSN policy for care and use of vertebrate animals pursuant to appropriate rules and regulations.

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### **1.0 APPLICABILITY**

CCSN recognizes that the proper humane care and management of animals used in research and instruction is essential to the well being of the animals, to the validity of research data, to the quality of instruction, and to the health and safety of those caring for and using animals.

Therefore, this policy is applicable to all research and instruction activities conducted at or under the auspices of CCSN that involve vertebrate animals, including non-laboratory species.

### **2.0 POLICY**

2.1 It is the policy of the College that use of live vertebrate animals in research and instruction will conform to all applicable laws, rules, and regulations of the United States Government, the State of Nevada, and any other local regulations. Furthermore, all such research and instruction must be performed in compliance with the highest standards of ethics, practice, and conduct of each of the fields or disciplines involved in each of the specific research projects or instructional activities.

2.2 To ensure compliance with regulations regarding the humane care and use of animals in research and instruction, CCSN's President or designee will appoint an Institutional Animal Care and Use Committee (IACUC) which meets regulatory requirements and is charged with the responsibility of ensuring the humane care and use of animals at the College.

2.3 CCSN and the Institutional Animal Care and Use Committee recognize the following regulatory authorities for the care and use of animals:

2.3.1 The U.S. Department of Agriculture (USDA). The Animal Care (AC) section of the Animal and Plant Health Inspection Service (APHIS) of the USDA is responsible for implementing the regulations and standards promulgated by the Secretary of Agriculture under the mandate of the Animal Welfare Act. The regulations define institutional responsibility for assuring compliance with the Animal Welfare Act. The standards set minimal requirements for humane handling, housing, space, feeding, watering, sanitation, ventilation, exercise, and psychological well being of various species. Compliance requirements include annual reporting, application of standards for animal care and use during experimentation, documentation of the number of animals used, and summaries of exceptions granted for scientific necessity. USDA personnel perform unannounced inspections of institutional animal facilities.

2.3.2 The Office for Laboratory Animal Welfare (OLAW) is found at:

<http://grants.nih.gov/grants/olaw/olaw.htm>

OLAW is responsible for the general administration and coordination of National Institutes of Health (NIH) policy regarding animal care and use. Public Health Service (PHS) awarding units may not make an award for a project involving vertebrate animals unless the institution submitting the application or proposal is on the list of institutions that have an acceptable animal welfare assurance letter on file with OLAW, and the responsible institutional official has provided verification of approval by the Institutional Animal Care and Use Committee. As prescribed below, responsible parties must maintain all records that directly relate to applications, proposals, and proposed changes in ongoing research reviewed and approved by the Animal Care Committee for at least three years after completion of the research and must be accessible to OLAW with reasonable notice.

2.4 CCSN and the Institutional Animal Care and Use Committee (IACUC) further recognizes the following guidelines, and any others, which are subsequently officially adopted by the IACUC, for the care and use of non-laboratory animals in research and instruction.

2.4.1 Guidelines for Use of Fishes in Field Research. American Society of Ichthyologists and Herpetologists (ASIH), American Fisheries Society (AFS), and American Institute of Fisheries Research Biologists (AIFRB); Fisheries. Available at <http://www.asih.org/pubs/fishguide.html>.

2.4.2 Guidelines for Use of Live Amphibians and Reptiles in Field Research. American Society of Ichthyologists and Herpetologists (ASIH), The Herpetologists' League (HL), and Society for the Study of Amphibians and Reptiles (SSAR). Available at <http://www.asih.org/pubs/herpcoll.html>.

2.4.3 Guidelines for the Use of Wild Birds in Research. Edited by Abbot S. Gaunt & Lewis W. Oring, Special Publication of The Ornithological Council, 1997.

Available at <http://www.nmnh.si.edu/BIRDNET/GuideToUse>.

2.4.4 Guidelines for the Capture, Handling, and Care of Mammals. The American Society of Mammalogists (ASM); 1998. Available at

<http://www.mammalsociety.org/committees/commanimalcareuse/98acucguidelines.PDF>.

2.4.5 Guidelines for Ethical Conduct in the Care and Use of Animals. Developed by the American Psychological Association's Committee on Animal Research and Ethics (CARE), 2003. Available at <http://www.apa.org/science/anguide.html>.

2.5 CCSN does not intend to own animals, but to use privately owned animals with the permission of the owners.

### **3.0 COMPOSITION AND GOVERNANCE OF THE INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE (IACUC)**

3.1 The Institutional Animal Care and Use Committee (IACUC) will be appointed by the President or designee and will advise the Vice President of Academic Affairs (VPAA) (Institutional Official) about matters pertaining to animal care and utilization in research and instruction.

3.2 The membership of the IACUC will meet the requirements of Federal regulations and will include members who are qualified through experience and expertise. The IACUC will include at least three voting members, one of whom will be a Doctor of Veterinary Medicine with training or experience in laboratory animal science and medicine who will have responsibility for providing veterinary care to the animals. At least one member of the committee will not have any affiliation with the College except service on the IACUC.

3.3 IACUC members are appointed for a term of three years with reappointment possible.

3.4 The terms of voting IACUC members will be staggered with at least one member completing his/her term each academic year (July 1 to June 30).

3.5 An IACUC Chair and an IACUC Vice-Chair will each be elected for a three-year term at the first IACUC meeting of the academic year.

3.6 In the event of resignation of the Chair from the position but not the committee, the Vice-Chair will assume the Chair position and will complete the departing Chair's term of office. A new Vice-Chair will then be elected from among the voting members.

3.7 In the event of resignation of the Chair from the committee, the Vice-Chair will assume the Chair position and will complete the departing Chair's term of office. He/she will then identify and recommend a replacement member for appointment by the

President. A new Vice-Chair will then be elected from among the voting members to complete the departing Vice-Chair's term of office.

3.8 In the event of resignation of the Vice-Chair from the position but not the committee, the Chair will hold a special election to select a new Vice-Chair from among the voting members. The new Vice-Chair will complete the original Vice-Chair's term of office.

3.9 In the event of resignation of the Vice-Chair from the committee, the Chair will identify and recommend a replacement member for appointment by the President. The Chair will then hold a special election to select a new Vice-Chair from among the voting members. The new Vice-Chair will complete the departing Vice-Chair's term of office.

3.10 In the event of resignation from the committee of a voting member who is not an officer, the Chair of the IACUC will identify and recommend a replacement for appointment by the President or designee. The member appointed to fill the vacancy will assume the remaining term of the departing member.

3.11 Non-voting consultants to the IACUC will include the Director of the Veterinary Technology Program at CCSN, who will also be the Director of the Institutional Animal Care and Use Program (IACUP), and the Director of Resource Development (ORD).

3.12 The Dean's will provide staff support to the IACUC by providing announcements and agendas for its meetings, recording the minutes of its meetings, serving as a repository of all IACUC correspondence and records, and the like.

3.13 The Dean's Office of Resource Development will serve as the first and primary contact point for inquiries and submissions to the IACUC. SPO staff will forward applications to IACUC members for review.

3.14 If deemed necessary by the IACUC, during the Spring semester of each year, the Dean's Office will issue a request to the faculty for nominations to replace outgoing IACUC members. Current IACUC members may also submit nominations.

3.15 The Dean's Office, after consultation with the IACUC Chair, and the Director of the Institutional Animal Care and Use Program, will submit to the VPAA a slate of individuals recommended to replace outgoing IACUC members. The VPAA will recommend to the President the appointment of new members.

3.16 The IACUC will meet at least once per month during September, January, and May to review protocols and to tend to other business as needed. Meeting dates and protocol review application deadlines will be made public to the College at the beginning of each semester. Other meetings will be held as needed.

3.17 In addition to its regular meetings, the IACUC will meet at the beginning of each academic term, including Summer, to review the institution's animal care and use program and to inspect the animal facilities. The IACUC will serve the entire institution,

and its meetings and inspections may be conducted immediately preceding or immediately following a regularly scheduled IACUC meeting. IACUC will maintain a current inventory of animal facilities.

3.18 A simple majority of the voting members will constitute a quorum.

3.19 Alternate members may be appointed by the President or designee to serve and participate on the IACUC in the absence of voting members. When a quorum of voting members is not present, the IACUC Chair may delegate full responsibilities of membership (including voting privileges) to an alternate member.

3.20 The IACUC may solicit ad hoc reviewers with specific expertise to assist in protocol reviews on a case-by-case basis. Ad hoc reviewers may participate, but not vote, in the designated reviews.

#### **4.0 RESPONSIBILITIES OF THE INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE (IACUC)**

4.1 The Institutional Animal Care and Use Committee will conduct semi-annual reviews of the College's Institutional Animal Care and Use Program (IACUP) and will report findings to the VPAA.

4.2 The IACUC will conduct semi-annual inspections of all of the College's animal facilities, including satellite facilities, and will report findings to the VPAA.

4.3 The IACUC will receive and review concerns or complaints reported by faculty, staff, students, or members of the general public concerning the care and use of animals at CCSN.

4.4 The IACUC may make written recommendations to the VPAA regarding any aspect of the College's animal care and use program, facilities, or personnel training.

4.5 The IACUC will review all research and instruction protocols involving vertebrate animals conducted at, or under the auspices of, any unit of the CCSN, whether or not supported by an external agency. The following types of projects are subject to IACUC review and approval:

4.5.1 Externally or Internally Funded Research Proposals. Prior to submitting a grant proposal for extramural or intramural funding, the investigator must coordinate with the Office of Resource Development and submit an Animal Care and Use Protocol Review Application (ACUPRA). No animals may be acquired for research or instruction before review and approval of the protocol by the IACUC.

4.5.2 Independent Faculty Research or Laboratory Exercises. All independent faculty research with vertebrate animals, including pilot experiments conducted to

obtain data necessary to the preparation of extramural grant proposals, and other laboratory exercises require approval of the experimental protocols and husbandry methods by the IACUC before being initiated.

4.5.3 Field Research and Biological Surveys. All fieldwork involving vertebrate species, whether research or instruction, must be approved by the IACUC prior to initiation. Particular attention must be given to activities that may involve animals that are on the State or Federal threatened, endangered, or protected species lists, that require special permits for handling, or that involve use of equipment and procedures that may be construed by some as inhumane.

4.5.4 Independent Student Research (excluding senior paper). Faculty members who supervise independent research projects may submit a set of procedures for approval by the IACUC from which the student may select to address the independent research question identified. Procedures not included in those approved for the class instructor and specific for the laboratory will require submission of an independent request for protocol evaluation. Students should be made aware by the faculty member that this may delay research and may adversely affect their ability to complete the course in the prescribed time interval.

4.5.6 Classroom Instruction. All classroom instruction activities involving the use of live vertebrate animals must be approved by the IACUC prior to initiation.

4.5.7 General Animal Care and Use Protocols. The Investigator or instructor responsible for general animal care and use in any facility must submit an Animal Care and Use Protocol Review Application (ACUPRA) for these tasks. Included under this project classification are procedures for animal display facilities and animal breeding programs. These submissions must include a list of the species to be maintained and an estimate of the numbers of each animal bred and/or used annually. If animals maintained or produced under such an approval are transferred to an Investigator for use in experiments or to an instructor for educational purposes, the investigator or instructor must have a valid IACUC approved project for use and maintenance of the transferred animals and must notify the IACUC of the species and number of animals transferred.

4.6 The use of vertebrate animals in research or instruction covered by this policy will not be permitted until the IACUC has reviewed and approved the protocol. The IACUC will not normally consider any requests for retroactive approvals.

4.7 The IACUC will exercise its responsibility and authority to approve, withhold approval of, or require changes in research or instructional protocols involving vertebrate animals in accordance with Federal regulations and accepted guidelines.

4.8 The IACUC will review, approve, withhold approval of, or require modifications to proposed significant changes regarding the use of vertebrate animals in previously approved research or instruction protocols.

4.9 The IACUC will notify the investigator or instructor, the Office of Resource Development, the Department Chair/Cognizant Administrator, and the VPAA in writing of decisions to approve, withhold approval of, or require modifications to those proposed protocols reviewed.

4.10 The IACUC or the attending veterinarian has the authority to suspend any activity involving vertebrate animals that is not being conducted in compliance with applicable provisions of Federal or State law or College policy or in accordance with a protocol approved by IACUC.

4.11 The IACUC will report suspended activities or continuing or serious non-compliance with the requirements of this policy to the investigator's/ instructor's Department Chair and Dean and the VPAA and to Federal authorities as required by the Federal Animal Welfare Act available at <http://www.animal-law.org/welfact/> and the Public Health Service Policy on Humane Care and Use of Laboratory Animals which is available at: <http://grants.nih.gov/grants/olaw/references/phspol.htm> and to any applicable funding agency.

4.12 When research or instruction involving vertebrate animals is conducted through a cooperative project at, or in cooperation with, another entity, all provisions of this policy remain in effect. The CCSN IACUC may accept, for the purpose of meeting the IACUC review requirements, the review of an IACUC established in accordance with U.S. Department of Agriculture and U.S. Department of Health and Human Services, Public Health Service, rules and regulations. Such acceptance must be in writing and must be signed by the Chairs of the Institutional Animal Care and Use Committees at each of the cooperating institutions.

## **5.0 RESPONSIBILITIES OF THE INVESTIGATOR/INSTRUCTOR**

5.1 The investigator/instructor who anticipates using vertebrate animals should become knowledgeable about, and conduct all research and instruction in accordance with, approved policies governing the care and use of animals.

5.2 The investigator/instructor should participate in continuing education and training programs designed to keep animal users abreast of the latest regulations and procedures. The investigator/instructor should also emphasize the role of animals in their studies when presenting research results or discussing human and animal diseases with lay audiences and should describe the contributions of humanely conducted animal studies to the development of new technologies and treatment capabilities.

5.3 The investigator/instructor should maintain a scholarly, sensitive, and respectful environment during all experimentation and instructional activities involving the use of animals.

5.4 The investigator seeking external funding should indicate the involvement of vertebrate animals through application processes of the College's Office of Resource Development. The Office of Resource Development will submit the grant proposal and ACUPRA to the President's Cabinet and the IACUC for review and approval.

5.5 The investigator/instructor should prepare an Animal Care and Use Protocol Review Application (ACUPRA). The investigator/instructor will make provisions for the humane care and use of the animals and will ensure that pertinent laws, regulations, and guidelines are observed.

5.6 The investigator/instructor will ensure that all protocols involving vertebrate animals are submitted to the Institutional Animal Care and Use Committee through the Office of Resource Development and approved by the IACUC prior to initiating the proposed work.

5.7 The investigator/instructor will submit a protocol modification request to the IACUC when the plans for use of vertebrate animals previously submitted will be different from that which was initially approved by the IACUC. The investigator/instructor will not initiate changes without prior IACUC review and approval, except when necessary to eliminate apparent immediate hazards to the animals or to humans.

5.8 The investigator/instructor using vertebrate animals will comply with all IACUC decisions, conditions, and requirements.

5.9 The investigator/instructor will maintain and use animals only in approved animal facilities. IACUC approval is required when animal use protocols dictate unusual environmental, dietary, or colony requirements that cannot be met in approved animal care facilities.

5.10 The investigator/instructor will ensure that animal care and use records are retained for a minimum of three years after animal use is completed and that they are easily accessible by U.S. Department of Agriculture inspectors and IACUC monitors. These records may not be removed from the campus without the prior approval of the IACUC.

5.11 The investigator/instructor will submit continuing review applications to the IACUC as often as, and in the manner, prescribed by the IACUC, but not less than once per year, as long as the use of animals is ongoing.

5.12 The investigator/instructor will report promptly to the IACUC, the Director of the Institutional Animal Care and Use Program, and/or the Attending Veterinarian any injuries to or illnesses of the animals.

5.13 The investigator/instructor will promptly report to the IACUC any non-compliance with the requirements of this policy or the determinations of the IACUC.

5.14 To facilitate the review of research and instructional protocols involving the use of vertebrate animals, the investigator/instructor is expected to attend IACUC meetings when requested by the IACUC.

5.15 To facilitate the review of research and instructional protocols involving the use of vertebrate animals, the investigator/instructor may request a meeting with the IACUC. Requests should be submitted to the Chair of the IACUC.

## **6.0 RESPONSIBILITIES OF THE DEPARTMENT CHAIR OR COGNIZANT ADMINISTRATOR**

6.1 Department Chairs (or cognizant administrators) will review and approve applications for use of vertebrate animals in research and instruction prior to their submission to the Office of Resource Development for consideration by the IACUC.

6.2 Department Chairs (or cognizant administrators), through appropriate procedures established within their respective departments/units, will review research protocols for ethical considerations and for scientific and/or educational merit.

6.3 In conjunction with the investigator/instructor, Department Chairs (or cognizant administrators) will report promptly to the IACUC any serious or continuing non-compliance with the requirements of this policy or the determinations of the IACUC.

6.4 To facilitate the review of research and instructional protocols involving the use of vertebrate animals, Department Chairs (or cognizant administrators) are expected to attend IACUC meetings when requested by the IACUC.

## **7.0 THE COLLEGE'S INSTITUTIONAL ANIMAL CARE AND USE PROGRAM (IACUP)**

7.1 Responsibility for the College's Institutional Animal Care and Use Program (IACUP) rests with the Office of the VPAA. Day-to-day management of the program is the responsibility of the Director of the IACUP. The IACUP was established to assure compliance with applicable standards, laws and regulations for humane treatment of animals used in research and instruction, to provide professional expertise and services to the College in matters concerning the care and use of vertebrate animals, and to facilitate implementation of this policy.

7.2 The responsibilities and authority of the Director of the Institutional Animal Care and Use Program include:

- 7.2.1 Supervising the operation of all animal facilities, including direct supervision of animal care staff and provision of all animal care.
- 7.2.2 Interpreting Federal and State laws, regulations, policies and guidelines concerning the utilization of animals in research and teaching activities.
- 7.2.3 Developing and documenting all procedures and working policies pertaining to the animal care and use program and facility management.
- 7.2.4 Coordinating and monitoring all vertebrate animal procurement and ensuring that appropriate permits and transportation arrangements are completed properly.
- 7.2.5 Maintaining an information resource center pertaining to the utilization of animals.
- 7.2.6 Providing information and services to investigators regarding requirements and procedures necessary to achieve a level of animal care and use that meets or exceeds contemporary professional standards and Federal and State regulations.
- 7.2.7 Sponsoring and coordinating seminars and training programs for campus faculty, staff, and students on topics of appropriate animal utilization and care as required by Federal law.
- 7.2.8 Providing a consulting service to investigators on matters of animal research, including housing; appropriate methods of handling and restraint; selection of analgesics, anesthetics, and tranquilizers; and methods of euthanasia.
- 7.2.9 Monitoring and providing recommendations on all aspects of surgery programs, including preoperative procedures, surgical techniques, and postoperative care.
- 7.2.10 Ensuring that appropriate monitoring programs are implemented to detect and treat ill or injured animals.
- 7.2.11 Providing or otherwise ensuring the provision of veterinary care services to College housed animals.
- 7.2.12 Ensuring that the Attending Veterinarian is contacted whenever it appears that veterinary services are necessary.
- 7.2.13 Making independent emergency decisions concerning the treatment regimen of individual animals found to be experiencing unalleviated pain or suffering, and ensuring that these animals are provided appropriate veterinary care or are humanely euthanized, unless this is in direct conflict with experimental goals that have been previously described in a protocol approved by the IACUC.

(The investigator will be consulted prior to initiating treatment or euthanasia. In all cases, however, the welfare of the animal will be the primary consideration).

7.2.14 Suspending activities that do not comply with this policy until they can be reviewed by the IACUC.

7.2.15 Immediately reporting suspended activities to the VPAA, the Director of Resource Development, and the Chair of the IACUC for resolution.

7.2.16 Serving as a consultant to the IACUC.

7.2.17 Coordinating semiannual inspections of animal facilities by the IACUC.

7.2.18 Hosting and escorting persons inspecting the animal facilities (e.g., U.S. Department of Agriculture inspectors).

7.2.19 Developing and submitting annual plans and budget requests for the Animal Care and Use Program to the Director of Veterinary Technology and the Director of Resource Development, if grant funds are to be sought.

7.2.20 Preparing annual reports, Letters of Assurance, and Applications for Registration as required by the USDA and PHS.

7.2.21 Acting as a liaison between faculty, College administrators, the IACUC and regulatory and funding agencies concerning animal welfare and use activities.

From Ethics Committee

## **Forms and Protocols**

**Field Studies and Biological Surveys Supplement**  
**Community College of Southern Nevada**  
**Institutional Animal Care and Use Committee**  
(Use a separate form for each species or assemblage)

*CCSN's form, available from the Director of Veterinary Technology, supplements the form for Care and Use Protocol Review. (See following form.) It is required for all protocols that use vertebrate animals in a field setting.*

TO SENATE

From Ethics Committee

**Animal Care and Use Protocol Review Application**  
**Institutional Animal Care and Use Committee**  
**Community College of Southern Nevada**  
*(Required for Use of Non-Human Vertebrate Animals in Teaching and Research)*

**Course Title:** \_\_\_\_\_  
\_\_\_\_\_

**Course Instructor or Program Director:** \_\_\_\_\_

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Department:** \_\_\_\_\_ **Email address:** \_\_\_\_\_

**Campus Mailing Address:** \_\_\_\_\_  
\_\_\_\_\_

**Phone:** \_\_\_\_\_ **Fax:** \_\_\_\_\_

**Other Responsible Persons:**

Instructor	Address	Phone	E-Mail

**1. Check all items that apply to this project:**

- |                                                         |                                                                 |
|---------------------------------------------------------|-----------------------------------------------------------------|
| <input type="checkbox"/> Blood and/or tissue collection | <input type="checkbox"/> Aseptic surgery                        |
| <input type="checkbox"/> Prolonged physical restraint   | <input type="checkbox"/> Multiple surgeries on the same animal  |
| <input type="checkbox"/> Food and water deprivation     | <input type="checkbox"/> Alleviated pain                        |
| <input type="checkbox"/> Environmental extremes         | <input type="checkbox"/> Anesthetics used                       |
| <input type="checkbox"/> Electric stimuli               | <input type="checkbox"/> Immobilizing agents without anesthesia |
| <input type="checkbox"/> Induction of trauma            |                                                                 |
| <input type="checkbox"/> Survival surgery               |                                                                 |
| <input type="checkbox"/> Non-survival surgery           |                                                                 |

**2. Animal Requirements:**

Species	Strain	Sex	Age/Wt.	Total No.	Use Rate	Source

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**3. Location of animal housing facility (the WVC Animal care and Use Committee (ACUC) will complete this item)**

Will animals be removed from the Housing Facility for use elsewhere?  
 No  Yes. If yes, specify location.

**4. Is surgery involved in the proposed project?**

No  Yes. If yes, describe procedure on a separate page.

*(Include procedures for preparation of the instruments, pre- and post-preparation/care of the animal, provisions for asepsis and closure of surgical wounds if a recovery procedure, etc.)*

**5. Are stressful or painful procedures, other than surgery, part of this procedure?**

No  Yes. If yes, explain on a separate page.

*(For purposes of responding to this question, consider any procedure that might be expected to cause distress or pain to a human as being potentially stressful or painful to the animals. Also, if such procedures are a part of this project, provide a description of procedures that will be used to minimize potential stress or pain.)*

**6. Are prolonged (more than a few hours) physical restraint procedures part of this presentation?**  No  Yes. If yes, explain on a separate page.

**7. Will animal be euthanized?** \_\_\_\_\_

No  Yes. If yes, list the method(s) (by species) and, if applicable, the dose and route of administration.

**8. Will animals be alive at the end of the project?**

\_\_\_\_\_ No  Yes. If yes, how will they be used or disposed of (e.g., returned to source or adopted)?

**9. Are there any special requirements for animal housing, diet, or restraint?**

No  Yes

If no, animals will be maintained according to the standard operating procedures. If yes, provide (an) explanation(s) for each parameter involved (e.g., light:dark cycles, humidity, ambient temperature, caging, bedding, diets, and so forth) :

### 10. Teaching plan:

Answer the following questions in sufficient detail to permit evaluation by the members of the Animal Care and Use Committee (ACUC), (use continuation pages if necessary) :

- a. What is (are) the objective(s) and potential significance of the activities involving animal use?
- b. Specifically, why are live animal required for this laboratory rather than non-animal alternatives?
- c. What non-animal alternatives did you consider using and how did you determine that they are not suitable or that other alternatives are not available? What were your sources of information about the availability of alternatives?
- d. Why is this an appropriate exercise?

In addition to a description of the alternatives considered and the identification of the sources of information consulted, include an indication of when the search for alternatives was conducted, the key words used in the search, and the time period searched (e.g., 1990 to present) .

**Suggested Text:**

*Non-animal alternatives considered were models, mannequins, and videotapes of veterinarians performing the procedures. These alternatives were rejected because it is the unanimous opinion of the faculty who will present the wet lab that the hands-on use of live, [awake] [and/or] [anesthetized] animals is the superior method for teaching the procedures to be taught. Availability of other suitable alternatives was determined by a thorough search of the literature pertaining to teaching these procedures and direct communication with experts involved in such training programs. In addition, an inquiry to the Animal Welfare Information Center at the National Agriculture Library in Beltsville, Maryland and a search of the Web site of Veterinarians for Animal Rights failed to provide any information on alternative teaching*

From Ethics Committee

*methods other than those already considered. Key words used in these searches included "animals," "education," "teaching," "laboratory," "instruction," "wet lab," and "professional;" individually and in combination. The searches were accomplished in [date] and covered all years in the databases.*

Suggested Text:

To teach small animal procedures to practicing veterinarians and veterinary technicians, it is necessary to use a species representative of the species commonly found in veterinary practices. Evaluation of the course objectives, local animal availability, experience of course faculty with the use of animal models, and the ability to support animal handling and maintenance led to the conclusion that the species proposed for use are the best models for these particular teaching laboratories.

e. What are the reasons for requiring the number of animals requested?

Suggested Text:

We are able to have a maximum of six to ten teaching stations in our laboratory facilities. Several of the laboratory instructional blocks will be repeated twice. Using these numbers, and given the number of animals required for each instructional iteration, we determined that the numbers listed in Item 9 above are the minimum number possible to achieve the objectives of the laboratory sessions.

What are the specific procedures you are proposing to use which will involve or affect the animals?

Explain in detail the procedures to be taught and how the lab participants and/or the instructors will interact with the animals.

Instructions for disposition of sick or injured animals

Call course director

Veterinarian to treat (depends on \_\_\_ Euthanize (injury)

Signature of Course Director

**Mail the signed original of this application to:**

Norma Bucelato  
Director, Office of Resource Development  
Cheyenne Campus Z2A  
Community College of Southern Nevada

Application Deadlines: IACUC applications must be made at least two weeks prior to a regularly scheduled IACUC

From Ethics Committee

meeting. Meeting dates are available at: \_\_\_\_\_

This space for IACUC:

IACUC Protocol: \_\_\_\_\_ Date Approved: \_\_\_\_\_

Date Received: \_\_\_\_\_ Date disapproved: \_\_\_\_\_

Date Reviewed: \_\_\_\_\_ Chair of IACUC: \_\_\_\_\_

Required Signatures:

- All people using animals under my direction will be trained to use appropriate methods and will read and agree to comply with this protocol.
- All animal use will be in accordance with the guidelines set forth in Animal Care Policy.

PI or Faculty Sponsor

\_\_\_\_\_ Date: \_\_\_\_\_

Department Chair or Dean

\_\_\_\_\_ Date: \_\_\_\_\_

## Appendix A: Animal Protocol Preparation Instructions

Answer questions 1-7 below. If more space is needed attach additional pages. Clearly number each item as listed below. If references are used, list full reference citation.

### 1. Acquisition of Animals:

- a. Where will the animals be procured?
- b. Who is the responsible receiving party?
- c. What is the protocol for delivery? Include what measures have been take to ensure that the animals are delivered when a responsible party can receive them.
- d. How will animals be moved between and within facilities? Specify what methods will be used to minimize stress, injury and chance of escape.

NOTE: The Director of the Animal Care and Use Program must be notified at least two weeks before procurement. Procurement is contingent upon the availability of housing and physical plant limitations.

### 2. Rationale:

- a. What is the purpose or value of the research? Fro classroom and teaching use, include a description of the goals of the course and the relationship to the protocol.
- b. Is this a duplication of previous research? If yes, explain.
- c. Why must animals be used? Are there alternatives?
- d. Why must this species be used?
- e. Provide a justification for the number of animals used and explain procedures for determining the total number of animals.

### 3. Procedures:

Describe all experimental procedures using animals. Include detailed information about all aspects of animal use, for example:

- a. Environment in which experiments will be conducted.
- b. Experimental manipulations
- c. Chemical and pharmaceutical manipulations (include dose, frequency, rout of administration, etc.)
- d. Food deprivation (or any unusual feeding patterns).
- e. Animal handling.
- f. Animal transportation from housing site to experimental site.

### 4. Husbandry:

Include information for the first year only. You will be asked to address subsequent years use on the annual continuation form. (Note: This section should only be filled out for those animals that are held for more than 12 hours).

- a. Where will the animals be house and used?
- b. Who is responsible for daily care?
- c. What feeding regimen will be used?
- d. What cleaning regimen (method and frequency) will be used?
- e. Provide type of housing used and number of animals per unit.
- f. Describe the temperature, humidity and light requirements of the animals and how those requirements will be met.

From Ethics Committee

Species

Total animals per semester:

Maximum daily census:

Initial date of animal use:

Ending date of animal use:

Animal use location:

Animal housing location:

Housing is in an approved facility? (yes/no)

Animal Care by IACUP Staff? (yes/no)

#### 5. Disposition of Animals:

Include a description of how animals will be disposed of at the end of use.

- a. For transfer to another protocol of same investigator, provide approved protocol number.
- b. For transfer to another researcher at CCSN, provide name and approved protocol number.
- c. For transfer to another researcher/institution, provide name of individual or entity receiving the animals, how the transfer will be handled and how the animals will be used following the transfer.
- d. For euthanasia describe the method to be used as well as the methods by which death will be confirmed before the disposal of the animals. All euthanasia methods should comply with the 2000 Report of the American Veterinary Medical Association (AVMA) Panel on Euthanasia:  
<http://www.avma.org/resources/euthanasia.pdf>
- e. For adoption, submit an adoption form at the time of adoption.
- f. For release into the wild, provide location as well as all pertinent information regarding the animals' ability to survive as well as their environmental impact.

#### 5. Pain/Distress

For Moderated and Unmoderated Pain/Distress Categories:

- a. These categories have the potential for more than momentary or slight pain or distress. Include a description of the methods used to assess pain and a written narrative describe the methods and sources used to determine that alternative procedures (i.e., less painful or distressful) are not available. Investigators might consult with staff veterinarian, Dr. \_\_\_\_\_ or other sources which such as the Animal Welfare information Center at email : AWIC@NAL. USDA.GOV or other relevant sources.

The narrative might include information similar to that in the following sample:

I have performed the following database searches (insert database titles and key words used). Based on (insert number) of years of experience in this field in conjunction with periodic consultation of bibliographic sources (insert titles) and a number of other references including journals (insert titles), I believe there is no alternative to performing this potentially painful/distressing procedure. Based on the aforementioned references and my experience, this (insert species) animal model is the most appropriate for conducting research.

From Ethics Committee

- b. Provide a list of anesthetics (including paralytics) and other drugs. Include dosage, routes, and frequency of administration.
- c. For Unmoderated Pain/Distress Category ONLY Provide written explanation of the procedures producing pain or distress for any portion of the protocol and the reason drugs can not be used to fully alleviate pain/distress. Include the species, number of animals affected and the criteria used for determining from the experimental view point or the time timely intervention for removal of animals from the pain and distress. Investigator(s) may be requested to attend an IACUC meeting to discuss proposed research.

#### 6. Training of Personnel

Describe how personnel who perform animal anesthesia, surgery or other experimental manipulations are qualified through training and/or experience to accomplish these tasks in a humane and scientifically acceptable manner. If any personnel are in need of training, indicate who will train them prior to personnel's use of the animals.

## Appendix B

### Public Health Service Policy and Resources on Humane Care and Use of Laboratory Animals

#### OFFICE OF LABORATORY ANIMAL WELFARE

Amended August, 2002

#### PREFACE

This 2002 reprint of the Public Health Service (PHS) Policy on Humane Care and Use of Laboratory Animals reflects the August 7, 2002 PHS Policy amendment permitting institutions with PHS Animal Welfare Assurances to submit verification of Institutional Animal Care and Use Committee (IACUC) approval for competing applications or proposals subsequent to peer review but prior to award (67 FR 51289). New footnotes (6 and 12) are incorporated to provide institutions with the option of coding the names of IACUC members in materials routinely submitted to the Office of Laboratory Animal Welfare (OLAW). Citations and addresses are also updated in this reprint, and language specifying that information be submitted on institutional letterhead or in letter form is eliminated to allow for electronic submission of information to OLAW in the future. OLAW, which has responsibility for the general administration and coordination of the Policy, provides specific guidance, instruction, and materials to institutions that must comply with the Policy. For supplemental materials please contact OLAW at the National Institutes of Health, RKL1, Suite 360, MSC 7982, 6705 Rockledge Drive, Bethesda, Maryland 20892-7982 (for express or hand delivered mail, use zip code 20817) or visit the OLAW website at <http://grants.nih.gov/grants/olaw/olaw.htm>. This reprint includes the Health Research Extension Act of 1985, Public Law 99-158, "Animals In Research" (November 20, 1985), which provides the statutory mandate for the PHS Policy. Also included in this reprint are the U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research and Training. The U.S. Principles were promulgated in 1985 by the Interagency Research Animal Committee and adopted by U.S. Government agencies that either develop requirements for or sponsor procedures involving the use of vertebrate animals. The Principles were incorporated into the PHS Policy in 1986 and continue to provide a framework for conducting research in accordance with the Policy.

**OFFICE OF LABORATORY ANIMAL WELFARE  
OFFICE OF EXTRAMURAL RESEARCH  
NATIONAL INSTITUTES OF HEALTH**

**Health Research Extension Act of 1985**

**Public Law 99-158 November 20, 1985, "Animals in Research"**

Sec.495.

(a) The Secretary, acting through the Director of NIH, will establish guidelines for the Following: "(1) The proper care of animals to be used in biomedical and behavioral research. "(2) The proper treatment of animals while being used in such research. Guidelines under this paragraph will require- "(A) the appropriate use of tranquilizers, analgesics, anesthetics, paralytics, and euthanasia for animals in such research; and "(B) appropriate pre-surgical and post-surgical veterinary medical and nursing care for animals in such research. Such guidelines will not be construed to prescribe methods of research. "(3) The organization and operation of animal care committees in accordance with subsection (b). (1) Guidelines of the Secretary under subsection (a)(3) will require animal care committees at each entity which conducts biomedical and behavioral research with funds provided under this Act (including the National Institutes of Health and the national research institutes) to assure compliance with the guidelines established under subsection (a). "(2) Each animal care committee will be appointed by the chief executive officer of the entity for which the committee is established, will be composed of not fewer than three members, and will include at least one individual who has no association with such entity and at least one doctor of veterinary medicine. "(3) Each animal care committee of a research entity will- "(A) review the care and treatment of animals in all animal study areas and facilities of the research entity at least semiannually to evaluate compliance with applicable guidelines established under subsection (a) for appropriate animal care and treatment; "(B) keep appropriate records of reviews conducted under sub-paragraph (A); and "(C) for each review conducted under subparagraph (A), file with the Director of NIH at least annually (i) a certification that the review has been conducted, and (ii) reports of any violations of guidelines established under subsection (a) or assurances required under paragraph (1) which were observed in such review and which have continued after notice by the committee to the research entity involved of the violations. Reports filed under subparagraph (C) will include any minority views filed by members of the committee. "(c) The Director of NIH will require each applicant for a grant, contract, or cooperative agreement involving research on animals which is administered by the National Institutes of Health or any national research institute to include in its application or contract proposal, submitted after the expiration of the twelve-month period beginning on the date of enactment of this section- "(1) assurances satisfactory to the Director of NIH that- "(A) the applicant meets the requirements of the guidelines established under paragraphs (1) and (2) of subsection (a) and has an animal care committee which meets the requirements of subsection (b); and "(B) scientists, animal technicians, and other personnel involved with animal care, treatment, and use by the applicant have available to them instruction or training in the humane practice of animal maintenance and experimentation, and the concept, availability, and use of research or testing methods that limit the use of animals or limit animal distress; and "(2) a statement of the reasons for the use of animals in the research to be conducted with funds provided under such grant or contract. Notwithstanding subsection (a)(2) of section 553 of title 5, United States Code, regulations under this subsection will be promulgated in accordance with the notice and comment requirements of such section. "(d) If the Director of NIH determines that- "(1) the conditions of animal care, treatment, or use in an entity which is receiving a grant, contract, or cooperative agreement involving research on animals under this title do not meet applicable guidelines established under subsection (a); "(2) the entity has been notified by the Director of NIH of such determination and has been given a reasonable opportunity to take corrective action; and "(3) no action has been taken by the entity to correct such conditions; the Director of NIH will suspend or revoke such grant or contract under such conditions as the Director determines appropriate. "(e) No

guideline or regulation promulgated under subsection (a) or (c) may require a research entity to disclose publicly trade secrets or commercial or financial information which is privileged or confidential."

### **U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training**

The development of knowledge necessary for the improvement of the health and well-being of humans as well as other animals requires in vivo experimentation with a wide variety of animal species. Whenever U.S. Government agencies develop requirements for testing, research, or training procedures involving the use of vertebrate animals, the following principles will be considered; and whenever these agencies actually perform or sponsor such procedures, the responsible Institutional Official will ensure that these principles are adhered to:

- I. The transportation, care, and use of animals should be in accordance with the [Animal Welfare Act \(7 U.S.C. 2131 et. seq.\)](#) and other applicable Federal laws, guidelines, and policies.\*
- II. Procedures 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.
- III. The animals selected for a procedure should be of an appropriate species and quality and the minimum number required to obtain valid results. Methods such as mathematical models, computer simulation, and in vitro biological systems should be considered.
- IV. Proper use of animals, including the avoidance or minimization of discomfort, distress, and pain when consistent with sound scientific practices, is imperative. Unless the contrary is established, investigators should consider that procedures that cause pain or distress in human beings may cause pain or distress in other animals.
- V. Procedures with animals that may cause more than momentary or slight pain or distress should be performed with appropriate sedation, analgesia, or anesthesia. Surgical or other painful procedures should not be performed on unanesthetized animals paralyzed by chemical agents.
- VI. Animals that would otherwise suffer severe or chronic pain or distress that cannot be relieved should be painlessly killed at the end of the procedure or, if appropriate, during the procedure.
- VII. The living conditions of animals should be appropriate for their species and contribute to their health and comfort. Normally, the housing, feeding, and care of all animals used for biomedical purposes must be directed by a veterinarian or other scientist trained and experienced in the proper care, handling, and use of the species being maintained or studied. In any case, veterinary care will be provided as indicated.
- VIII. Investigators and other personnel will be appropriately qualified and experienced for conducting procedures on living animals. Adequate arrangements will be made for their in-service training, including the proper and humane care and use of laboratory animals.
- IX. Where exceptions are required in relation to the provisions of these Principles, the decisions should not rest with the investigators directly concerned but should be made, with due regard to Principle II, by an appropriate review group such as an institutional animal care and use committee.

Such exceptions should not be made solely for the purposes of teaching or demonstration.

\*For guidance throughout these Principles, the reader is referred to the [Guide for the Care and Use of Laboratory Animals](#) prepared by the Institute of Laboratory Animal Resources, National Academy of Sciences.

### **Public Health Service Policy on Humane Care and Use of Laboratory Animals**

#### **I. Introduction**

It is the Policy of the Public Health Service (PHS) to require institutions to establish and maintain proper measures to ensure the appropriate care and use of all animals involved in research, research training, and biological testing activities (hereinafter referred to as activities) conducted or supported by the PHS. The PHS endorses the "U.S. Government Principles for the Utilization

and Care of Vertebrate Animals Used in Testing, Research, and Training" developed by the Interagency Research Animal Committee. This Policy is intended to implement and supplement those Principles.

## II. Applicability

This Policy is applicable to all PHS-conducted or supported activities involving animals, whether the activities are performed at a PHS agency, an awardee institution, or any other institution and conducted in the United States, the Commonwealth of Puerto Rico, or any territory or possession of the United States. Institutions in foreign countries receiving PHS support for activities involving animals will comply with this Policy, or provide evidence to the PHS that acceptable standards for the humane care and use of the animals in PHS-conducted or supported activities will be met. No PHS support for an activity involving animals will be provided to an individual unless that individual is affiliated with or sponsored by an institution which can and does assume responsibility for compliance with this Policy, unless the individual makes other arrangements with the PHS. This Policy does not affect applicable state or local laws or regulations which impose more stringent standards for the care and use of laboratory animals. All institutions are required to comply, as applicable, with the [Animal Welfare Act](#), and other Federal statutes and regulations relating to animals.

## III. Definitions

A. *Animal* - Any live, vertebrate animal used or intended for use in research, research training, experimentation, or biological testing or for related purposes.

B. *Animal Facility* - Any and all buildings, rooms, areas, enclosures, or vehicles, including satellite facilities, used for animal confinement, transport, maintenance, breeding, or experiments inclusive of surgical manipulation. A satellite facility is any containment outside of a core facility or centrally designated or managed area in which animals are housed for more than 24 hours.

C. *Animal Welfare Act* - Public Law 89-544, 1966, as amended, (P.L. 91-579, P.L. 94-279 and P.L. 99-198) 7 U.S.C. 2131 et. seq. Implementing regulations are published in the [Code of Federal Regulations \(CFR\), Title 9, Chapter 1, Subchapter A, Parts 1, 2, and 3](#), and are administered by the U.S. Department of Agriculture.

D. *Animal Welfare Assurance or Assurance* - The documentation from an institution assuring institutional compliance with this Policy.

E. *Guide* - [Guide for the Care and Use of Laboratory Animals](#), National Academy Press, 1996, Washington, D.C., or succeeding revised editions.

F. *Institution* - Any public or private organization, business, or agency (including components of Federal, state, and local governments).

G. *Institutional Official* - An individual who signs, and has the authority to sign the institution's Assurance, making a commitment on behalf of the institution that the requirements of this Policy will be met.

H. *Public Health Service* - The Public Health Service or PHS currently includes the Agency for Healthcare Research and Quality, Centers for Disease Control and Prevention, the Food and Drug Administration, the Health Resources and Services Administration, the Indian Health Service, the National Institutes of Health, and the Substance Abuse and Mental Health Services Administration.

I. *Quorum* - A majority of the members of the Institutional Animal Care and Use Committee (IACUC).

## IV. Implementation by Institutions

### A. Animal Welfare Assurance

No activity involving animals may be conducted or supported by the PHS until the institution conducting the activity has provided a written Assurance acceptable to the PHS, setting forth compliance with this Policy. Assurances will be submitted to the Office of Laboratory Animal Welfare (OLAW), Office of the Director, National Institutes of Health.<sup>1</sup> The Assurance will be signed by the Institutional Official. OLAW will provide the institution with necessary instructions and an example of an acceptable Assurance. All Assurances submitted to the PHS in accordance with this Policy will be evaluated by OLAW to determine the adequacy of the institution's proposed program for the care and use of animals in PHS conducted or supported activities. On the basis of this evaluation OLAW may approve or disapprove the Assurance, or negotiate an approvable Assurance with the institution. Approval of an Assurance will be for a specified period of time (no longer than five years) after which time the institution must submit a new Assurance to OLAW. OLAW may limit the period during which any particular approved Assurance will remain effective or otherwise condition, restrict, or withdraw approval. Without an applicable PHS-approved Assurance no PHS-conducted or supported activity involving animals at the institution will be permitted to continue.

1. Institutional Program for Animal Care and Use

The Assurance will fully describe the institution's program for the care and use of animals in PHS-conducted or supported activities. The PHS requires institutions to use the *Guide for the Care and Use of Laboratory Animals (Guide)* as a basis for developing and implementing an institutional program for activities involving animals.<sup>2</sup> The program description must include the following:

- a. a list of every branch and major component of the institution, as well as a list of every branch and major component of any other institution, which is to be included under the Assurance;
- b. the lines of authority and responsibility for administering the program and ensuring compliance with this Policy;
- c. the qualifications, authority, and responsibility of the veterinarian(s) who will participate in the program and the percent of time each will contribute to the program;
- d. the membership list of the Institutional Animal Care and Use Committee(s) (IACUC) established in accordance with the requirements set forth in IV.A.3. of this Policy;<sup>3</sup>
- e. the procedures which the IACUC will follow to fulfill the requirements set forth in this Policy;
- f. the health program for personnel who work in laboratory animal facilities or have frequent contact with animals;
- g. a synopsis of training or instruction in the humane practice of animal care and use, as well as training or instruction in research or testing methods that minimize the number of animals required to obtain valid results and minimize animal distress, offered to scientists, animal technicians, and other personnel involved in animal care, treatment, or use;
- h. the gross square footage of each animal facility (including satellite facilities), the species housed therein and the average daily inventory, by species, of animals in each facility; and
- i. any other pertinent information requested by OLAW.

2. Institutional Status

Each institution must assure that its program and facilities are in one of the following categories:

**Category 1** - Accredited by the [Association for Assessment and Accreditation of Laboratory Animal Care International \(AAALAC\)](#). All of the institution's programs and facilities (including satellite facilities) for activities involving animals have been evaluated and accredited by AAALAC, or another accrediting body recognized by PHS.<sup>4</sup> All of the institution's programs and facilities (including satellite facilities) for activities involving animals have also been evaluated by the IACUC and will be reevaluated by the IACUC at least once every six months, in accordance with IV.B.1. and 2. of this Policy, and reports prepared in accordance with IV.B.3. of this Policy.

**Category 2** - Evaluated by the Institution. All of the institution's programs and facilities (including satellite facilities) for activities involving animals have been evaluated by the IACUC and will be reevaluated by the IACUC at least once every six months, in accordance with IV.B.1. and 2. of this Policy, and reports prepared in accordance with IV.B.3. of this Policy. The most recent semi-annual report of the IACUC evaluation will be submitted to OLAW with the Assurance.

3. Institutional Animal Care and Use Committee (IACUC)

a. The Chief Executive Officer will appoint an Institutional Animal Care and Use Committee (IACUC), qualified through the experience and expertise of its members to oversee the institution's animal program, facilities, and procedures.<sup>5</sup>

b. The Assurance must include the names,<sup>6</sup> position titles, and credentials of the IACUC chairperson and the members. The committee will consist of not less than five members, and will include at least:

- (1) one Doctor of Veterinary Medicine, with training or experience in laboratory animal science and medicine, who has direct or delegated program authority and responsibility for activities involving animals at the institution (see IV.A.1.c.);
- (2) one practicing scientist experienced in research involving animals;
- (3) one member whose primary concerns are in a nonscientific area (for example, ethicist, lawyer, member of the clergy); and
- (4) one individual who is not affiliated with the institution in any way other than as a member of the IACUC, and is not a member of the immediate family of a person who is affiliated with the institution.

c. An individual who meets the requirements of more than one of the categories detailed in IV.A.3.b.(1)-(4) of this policy may fulfill more than one requirement. However, no committee may consist of less than five members.

**B. Functions of the Institutional Animal Care and Use Committee**

As an agent of the institution, the IACUC will with respect to PHS - conducted or supported activities:

1. review at least once every six months the institution's program for humane care and use of animals, using the [Guide](#) as a basis for evaluation;<sup>7</sup>
2. inspect at least once every six months all of the institution's animal facilities (including satellite facilities) using the [Guide](#) as a basis for evaluation;

3. prepare reports of the IACUC evaluations conducted as required by IV.B.1. and 2. of this Policy, and submit the reports to the Institutional Official;<sup>8</sup> (NOTE: the reports will be updated at least once every six months upon completion of the required semiannual evaluations and will be maintained by the institution and made available to OLAW upon request. The reports must contain a description of the nature and extent of the institution's adherence to the *Guide* and this Policy and must identify specifically any departures from the provisions of the *Guide* and this Policy, and must state the reasons for each departure. The reports must distinguish significant deficiencies from minor deficiencies. A significant deficiency is one which, consistent with this Policy, and, in the judgment of the IACUC and the Institutional Official, is or may be a threat to the health or safety of the animals. If program or facility deficiencies are noted, the reports must contain a reasonable and specific plan and schedule for correcting each deficiency. If some or all of the institution's facilities are accredited by AAALAC International or another accrediting body recognized by PHS, the report should identify those facilities as such.);
4. review concerns involving the care and use of animals at the institution;
5. make recommendations to the Institutional Official regarding any aspect of the institution's animal program, facilities, or personnel training;
6. review and approve, require modifications in (to secure approval) or withhold approval of those components of PHS-conducted or supported activities related to the care and use of animals as specified in IV.C. of this Policy;
7. review and approve, require modifications in (to secure approval), or withhold approval of proposed significant changes regarding the use of animals in ongoing activities; and
8. be authorized to suspend an activity involving animals in accordance with the specifications set forth in IV.C.6 of this Policy.

### **C. Review of PHS-Conducted or Supported Research Projects**

1. In order to approve proposed research projects or proposed significant changes in ongoing research projects, the IACUC will conduct a review of those components related to the care and use of animals and determine that the proposed research projects are in accordance with this Policy. In making this determination, the IACUC will confirm that the research project will be conducted in accordance with the *Animal Welfare Act* insofar as it applies to the research project, and that the research project is consistent with the *Guide* unless acceptable justification for a departure is presented.<sup>9</sup> Further, the IACUC will determine that the research project conforms with the institution's Assurance and meets the following requirements:
  - a. Procedures with animals will avoid or minimize discomfort, distress, and pain to the animals, consistent with sound research design.
  - b. Procedures that may cause more than momentary or slight pain or distress to the animals will be performed with appropriate sedation, analgesia, or anesthesia, unless the procedure is justified for scientific reasons in writing by the investigator.
  - c. Animals that would otherwise experience severe or chronic pain or distress that cannot be relieved will be painlessly killed at the end of the procedure or, if appropriate, during the procedure.
  - d. The living conditions of animals will be appropriate for their species and contribute to their health and comfort. The housing, feeding, and nonmedical care of the animals will be directed by a veterinarian or other scientist trained and experienced in the proper care, handling, and use of the species being maintained or studied.

- e. Medical care for animals will be available and provided as necessary by a qualified veterinarian.
- f. Personnel conducting procedures on the species being maintained or studied will be appropriately qualified and trained in those procedures.
- g. Methods of euthanasia used will be consistent with the recommendations of the [American Veterinary Medical Association \(AVMA\) Panel on Euthanasia \(PDF\)](#), unless a deviation is justified for scientific reasons in writing by the investigator.<sup>10</sup>

2. Prior to the review, each IACUC member will be provided with a list of proposed research projects to be reviewed. Written descriptions of research projects that involve the care and use of animals will be available to all IACUC members, and any member of the IACUC may obtain, upon request, full committee review of those research projects. If full committee review is not requested, at least one member of the IACUC, designated by the chairperson and qualified to conduct the review, will review those research projects and have the authority to approve, require modifications in (to secure approval) or request full committee review of those research projects. If full committee review is requested, approval of those research projects may be granted only after review at a convened meeting of a quorum of the IACUC and with the approval vote of a majority of the quorum present. No member may participate in the IACUC review or approval of a research project in which the member has a conflicting interest (e.g., is personally involved in the project) except to provide information requested by the IACUC; nor may a member who has a conflicting interest contribute to the constitution of a quorum.

3. The IACUC may invite consultants to assist in the review of complex issues. Consultants may not approve or withhold approval of an activity or vote with the IACUC unless they are also members of the IACUC.

4. The IACUC will notify investigators and the institution in writing of its decision to approve or withhold approval of those activities related to the care and use of animals, or of modifications required to secure IACUC approval. If the IACUC decides to withhold approval of an activity, it will include in its written notification a statement of the reasons for its decision and give the investigator an opportunity to respond in person or in writing.

5. The IACUC will conduct continuing review of each previously approved, ongoing activity covered by this Policy at appropriate intervals as determined by the IACUC, including a complete review in accordance with IV.C.1.-4. at least once every three years.

6. The IACUC may suspend an activity that it previously approved if it determines that the activity is not being conducted in accordance with applicable provisions of the [Animal Welfare Act](#), the [Guide](#), the institution's Assurance, or IV.C.1.a.-g. of this Policy.<sup>11</sup> The IACUC may suspend an activity only after review of the matter at a convened meeting of a quorum of the IACUC and with the suspension vote of a majority of the quorum present.

7. If the IACUC suspends an activity involving animals, the Institutional Official in consultation with the IACUC will review the reasons for suspension, take appropriate corrective action, and report that action with a full explanation to OLAW.

8. Applications and proposals that have been approved by the IACUC may be subject to further appropriate review and approval by officials of the institution. However, those officials may not approve an activity involving the care and use of animals if it has not been approved by the IACUC.

#### **D. Information Required in Applications-Proposals for Awards Submitted to PHS**

1. All Institutions

Applications and proposals (competing and non-competing) for awards submitted to PHS that involve the care and use of animals will contain the following information:

- a. identification of the species and approximate number of animals to be used;
- b. rationale for involving animals, and for the appropriateness of the species and numbers used;
- c. a complete description of the proposed use of the animals;
- d. a description of procedures designed to assure that discomfort and injury to 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 discomfort and pain to animals; and
- e. a description of any euthanasia method to be used.

Non-competing applications and contract proposals for other than full and open competitions need not repeat the information required by IV.D.1.a.-e. if the information was complete in the last competing application or proposal and there are no significant changes to that information. However, the application or proposal must contain a statement to that effect. If there are significant changes in the information, then the application or proposal must specifically identify them and state the reasons for the changes.

#### 2. Institutions That Have an Approved Assurance

Applications or proposals (competing and non-competing) covered by this Policy from institutions which have an approved Assurance on file with OLAW will include verification of approval (including the date of the most recent approval) by the IACUC of those components related to the care and use of animals. For competing applications or proposals only, such verification may be filed at any time prior to award unless specifically required earlier by the funding component. If verification of IACUC approval is submitted subsequent to the submission of the application or proposal, the verification will state the modifications, if any, required by the IACUC. The verification will be signed by an individual authorized by the institution, but need not be signed by the Institutional Official.

#### 3. Institutions That Do Not Have an Approved Assurance

For applications and proposals covered by this Policy from institutions that do not have an approved Assurance on file with OLAW, the signature of the official signing for the applicant organization will constitute a declaration that the institution will submit an Assurance when requested by OLAW. Upon such request, the institution will prepare the Assurance as instructed by OLAW and in accordance with IV.A. of this Policy. The authorized IACUC will review those components of the application or proposal as required by IV.C. of this Policy. Upon IACUC approval of those components of the application or proposal the institution will submit the Assurance to OLAW.

### **E. Recordkeeping Requirements**

1. The awardee institution will maintain:
  - a. a copy of the Assurance which has been approved by the PHS;
  - b. minutes of IACUC meetings, including records of attendance, activities of the committee, and committee deliberations;
  - c. records of applications, proposals, and proposed significant changes in the care and use of animals and whether IACUC approval was given or withheld;
  - d. records of semiannual IACUC reports and recommendations (including minority views) as forwarded to the Institutional Official; and
  - e. records of accrediting body determinations.

2. All records will be maintained for at least three years; records that relate directly to applications, proposals, and proposed significant changes in ongoing activities reviewed and approved by the IACUC will be maintained for the duration of the activity and for an additional three years after completion of the activity. All records will be accessible for inspection and copying by authorized OLAW or other PHS representatives at reasonable times and in a reasonable manner.

#### **F. Reporting Requirements**

1. At least once every 12 months, the IACUC, through the Institutional Official, will report in writing to OLAW:
  - a. any change in the institution's program or facilities which would place the institution in a different category than specified in its Assurance (see IV.A.2. of this Policy);
  - b. any change in the description of the institution's program for animal care and use as required by IV.A.1.a.-i. of this Policy;
  - c. any changes in the IACUC membership;<sup>12</sup> and
  - d. notice of the dates that the IACUC conducted its semiannual evaluations of the institution's program and facilities and submitted the evaluations to the Institutional Official.
2. At least once every 12 months, the IACUC, at an institution which has no changes to report as specified in IV.F.1.a.-c. of this Policy, will report to OLAW in writing, through the Institutional Official, that there are no changes and inform OLAW of the dates of the required IACUC evaluations and submissions to the Institutional Official.
3. The IACUC, through the Institutional Official, will promptly provide OLAW with a full explanation of the circumstances and actions taken with respect to:
  - a. any serious or continuing noncompliance with this Policy;
  - b. any serious deviation from the provisions of the *Guide*;<sup>13</sup> or
  - c. any suspension of an activity by the IACUC.
4. Reports filed under IV.F. of this Policy will include any minority views filed by members of the IACUC.

#### **V. Implementation by PHS**

##### **A. Responsibilities of the Office of Laboratory Animal Welfare (OLAW)**

OLAW is responsible for the general administration and coordination of this Policy and will:

1. request and negotiate, approve or disapprove, and, as necessary, restrict or withdraw approval of Assurances;
2. distribute to Scientific Review Administrators of initial review and technical evaluation groups, and to PHS awarding units, lists of institutions [[domestic](#) and [foreign](#)] that have an approved Assurance;
3. advise awarding units and awardee institutions concerning the implementation of this Policy;
4. evaluate allegations of noncompliance with this Policy;
5. have the authority to review and approve or disapprove waivers to this Policy (see V.D. of this Policy); and
6. conduct site visits to selected institutions.

##### **B. Responsibilities of PHS Awarding Units**

PHS awarding units may not make an award for an activity involving animals unless the prOGCective awardee institution and all other participating institutions have approved Assurances on file with OLAW, and the awardee institution has provided verification of

approval by the IACUC of those components of the application or proposal related to the care and use of animals. If any one of these institutions does not have an approved Assurance on file with OLAW, the awarding unit will ask OLAW to negotiate an Assurance with the institution(s) before an award is made. No award will be made until all required Assurances have been submitted by the institution(s), been approved by OLAW, and the institution(s) have provided verification of approval by the IACUC of those components of the application or proposal related to the care and use of animals.

### **C. Conduct of Special Reviews/Site Visits**

Each awarded institution is subject to review at any time by PHS staff and advisors, which may include a site visit, in order to assess the adequacy or accuracy of the institution's compliance or expressed compliance with this Policy.

### **D. Waiver**

Institutions may request a waiver of a provision or provisions of this Policy by submitting a request to OLAW. No waiver will be granted unless sufficient justification is provided and the waiver is approved in writing by OLAW.

## **FOOTNOTES**

### **Footnote 1:**

Assurances should be sent to the Office of Laboratory Animal Welfare (OLAW), National Institutes of Health, Rockledge I, Suite 360, MSC 7982, 6705 Rockledge Drive, Bethesda, Maryland 20892- 7982 (for express or hand delivered mail use zip code 20817).

### **Footnote 2:**

This Policy requires that Assured institutions base their programs of animal care and use on the *Guide for the Care and Use of Laboratory Animals* and that they comply with the applicable regulations (9 CFR, Subchapter A) issued by the U.S. Department of Agriculture (USDA) under the Animal Welfare Act. The *Guide* may differ from USDA regulations in some respects. Compliance with the USDA regulations is an absolute requirement of this Policy.

### **Footnote 3:**

The name Institutional Animal Care and Use Committee (IACUC) as used in this Policy is intended as a generic term for a committee whose function is to ensure that the care and use of animals in PHS-conducted or supported activities is appropriate and humane in accordance with this Policy. However, each institution may identify the committee by whatever name it chooses.

### **Footnote 4:**

As of the 2002 revision of this Policy, the only accrediting body recognized by PHS is the [Association for Assessment and Accreditation of Laboratory Animal Care International AAALAC](#)).

### **Footnote 5:**

The [Health Research Extension Act of 1985](#) requires the IACUC to be appointed by the chief executive officer (CEO) of the entity for which the committee is established. OLAW considers the CEO to be the highest operating official of the organization (such as the President of a College). If the CEO delegates authority to appoint the IACUC then the delegation must be specific and in writing. The CEO may or may not be the Institutional Official as defined by this Policy (see definition at III.G.).

### **Footnote 6:**

Institutions may, at their discretion, represent the names of members other than the chairperson and veterinarian with program authority (see IV.A.3.), by using numbers or other symbols in submissions to OLAW. Sufficient information for OLAW to determine that all appointees are appropriately qualified must be provided. The identity of

## From Ethics Committee

each member must be readily ascertainable by the institution and available to authorized OLAW or other PHS representatives upon request.

### **Footnote 7:**

This Policy requires that Assured institutions base their programs of animal care and use on the *Guide for the Care and Use of Laboratory Animals* and that they comply with the regulations (9 CFR, Subchapter A) issued by the U.S. Department of Agriculture (USDA) under the Animal Welfare Act. The *Guide* may differ from USDA regulations in some respects. Compliance with the USDA regulations is an absolute requirement of this Policy.

### **Footnote 8:**

The Institutional Animal Care and Use Committee (IACUC) may, at its discretion, determine the best means of conducting an evaluation of the institution's programs and facilities. The IACUC may invite ad hoc consultants to assist in conducting the evaluation. However, the IACUC remains responsible for the evaluation and report.

### **Footnote 9:**

This Policy requires that Assured institutions base their programs of animal care and use on the *Guide for the Care and Use of Laboratory Animals* and that they comply with the applicable regulations (9 CFR, Subchapter A) issued by the U.S. Department of Agriculture (USDA) under the Animal Welfare Act. The *Guide* may differ from USDA regulations in some respects. Compliance with the USDA regulations is an absolute requirement of this Policy.

### **Footnote 10:**

[Journal of the American Veterinary Medical Association \(JAVMA\), 2001, Vol. 218, No. 5, pp. 669-696 \(PDF\)](#), or succeeding revised editions.

### **Footnote 11:**

This Policy requires that Assured institutions base their programs of animal care and use on the *Guide for the Care and Use of Laboratory Animals* and that they comply with the applicable regulations (9 CFR, Subchapter A) issued by the U.S. Department of Agriculture (USDA) under the Animal Welfare Act. The *Guide* may differ from USDA regulations in some respects. Compliance with the USDA regulations is an absolute requirement of this Policy.

### **Footnote 12:**

Institutions may, at their discretion, represent the names of members other than the chairperson and veterinarian with program authority (see IV.A.3.), by using numbers or other symbols in submissions to OLAW. Sufficient information for OLAW to determine that all appointees are appropriately qualified must be provided. The identity of each member must be readily ascertainable by the institution and available to authorized OLAW or other PHS representatives upon request.

### **Footnote 13:**

This Policy requires that Assured institutions base their programs of animal care and use on the *Guide for the Care and Use of Laboratory Animals* and that they comply with the applicable regulations (9 CFR, Subchapter A) issued by the U.S. Department of Agriculture (USDA) under the Animal Welfare Act. The *Guide* may differ from USDA regulations in some respects. Compliance with the USDA regulations is an absolute requirement of this Policy.