CWU IACUC Operating Manual

Governing the Use of Animals in Research and Teaching

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This document is intended to provide the local practices that supplement the ARENA/OLAW IACUC Guidebook.

Section 1

CWU POLICIES AND PROCEDURES FOR THE CARE AND USE OF LIVE VERTEBRATE ANIMALS (hereafter, "animals")

A. CENTRAL WASHINGTON UNIVERSITY AND THE PUBLIC HEALTH SERVICE (PHS) ASSURANCE

- 1. Each institution that receives US Public Health Service (PHS) support for activities involving live vertebrate animals or is subject to the authority of the Animal Welfare Act (AWA) must operate an animal care and use program with clear lines of authority and responsibility. Institutions such as Central Washington University prepare a PHS Institutional Animal Welfare Assurance (referred to as 'Assurance' throughout this document) as evidence of their commitment to comply with the federal regulations for the care and use of animals. In addition, the U.S. Department of Agriculture (USDA) requires registration of facilities.
- 2. Central Washington University has prepared an Assurance (approval# D16-00918 (A4729-01)) that was approved by the Office of Laboratory Animal Welfare (OLAW) for an approval period of September 17, 2019 through June 30, 2023.
- 3. As part of its Assurance, Central Washington University has an Institutional Animal Care and Use Committee (IACUC). The IACUC is mandated by and derives its authority from the Health Research Extension Act (HREA) of 1985 and the AWA.
- 4. The CWU IACUC is a Presidential Committee charged with the institutional oversight of live vertebrate animals and animal care personnel involved in research and teaching. The major purpose of the IACUC is to certify the use of animals and to minimize discomfort or pain in animals, guided by the scientific and educational relevance of the research being conducted to human or animal health, advancement of knowledge, and societal benefits. When discharging its oversight mission, IACUC will be engaged in a constructive way to ensure that all institutional personnel are in compliance with approved protocols and applicable guidelines for the humane care and use of animals.

B. IMPLICATIONS FOR CWU POLICY AND PROCEDURES

As an institution that accepts public support for its operation, Central Washington University has a legal and ethical obligation to develop and implement appropriate procedures for the care and use of animals in teaching laboratories and university-endorsed research. Furthermore, the University's Assurance obligates the institution to comply with specific federal regulations. The current CWU animal care and use policy was developed in recognition of the institution's legal and ethical responsibilities to animal welfare.

C. UNIVERSITY POLICY FOR ANIMALS IN RESEARCH AND TEACHING

The Central Washington University policy manual currently contains the following set of policies for the care and use of animals: CWUP 2-40-040 Animals in Research and Teaching.

Section 2

LEGAL AND ETHICAL CONSIDERATIONS IN ANIMAL RESEARCH

A. FEDERAL LAWS

CWU follows the guidelines established by the Public Health Service in its publication, <u>Public Health Service Policy on Humane Care and Use of Laboratory Animals</u>. Standards for laboratory animal husbandry, veterinary care, and physical plant (animal facilities and environments) meet those described by the <u>Animal Welfare Act</u> administered by the U.S. Department of Agriculture and <u>The Guide for the Care and Use of Laboratory Animals</u> published by the U.S. Department of Health and Human Services. The latest editions of these publications are available for inspection at the office of Graduate Studies and Research (Barge 214). For animals housed on campus, CWU IACUC created a set of guidelines for emergency and disaster preparedness (**Section 13**), with hard copies kept at campus facilities housing animals.

B. STATE LAWS

The Revised Code of Washington (RCW) contains statutes specific to the unlawful use and treatment of animals such as:

Chapter 16.52 RCW PREVENTION OF CRUELTY TO ANIMALS

Chapter 9.08 RCW ANIMALS, CRIMES RELATING TO

Researchers should check for regulations specific to permits for field studies if intending that type of research.

C. ETHICAL PRINCIPLES

The <u>U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research and Training</u> provides the basic principles behind the current regulations.

CWU faculty, staff, and students follow requirements described in the <u>Guide for the Care and</u> Use of Laboratory Animals.

In addition to these ethical principles, a number of scholarly disciplines and organizations offer specific ethical guidelines for the care and use of animals in research.

Section 3

USE OF VERTEBRATE ANIMALS IN RESEARCH

A. INTRODUCTION

- 1. It is the policy of CWU that all research, teaching and educational outreach involving vertebrate animals will be reviewed by the IACUC. The involvement of animals in research and educational activities conducted by faculty, staff, or students is not permitted until the IACUC has reviewed and approved the relevant protocol application. This includes:
 - a. Faculty members and students who will collect data from animals as part of research activities.
 - b. Faculty members who intend to have students collect data from animals as part of course educational activities or requirements.
 - c. Research that takes place at another institution that falls under the jurisdiction of the PHS, the USDA, and/or the Animal Welfare Act may be exempt from review by the CWU IACUC. Such determination will be made by the IACUC Chairperson.
- 2. Pilot studies, pretests, and other "preliminary" investigations are considered research, and must be reviewed.
- 3. The following activities are exempt from the requirement of protocol approval for animal care and use:
 - a. Use of dead animals or parts of dead animals obtained from a USDA certified facility or other approved collection site (email iacuc@cwu.edu).
 - b. Archived data collected or collected under a protocol at a different facility (see **Part D** for archived data guidelines).

B. UNIVERSITY RESEARCHERS

The University's Assurance requires the institutional review of all animal care and use, regardless of the funding source. All members of the university community who conduct **research**, **teaching** or **educational outreach** using **vertebrate animals** must submit a protocol application for the use of animals for **prospective** institutional review and approval before proceeding with either the purchase of animals or the observation and collection of data.

C. EDUCATIONAL ACTIVITIES

Students may participate in course-related research projects and/or directed studies that are designed to provide students an opportunity to practice various research methods and data analysis. Within the quarter system, it can be difficult to complete a research project in a timely manner, but the IACUC wants to encourage such activities. Therefore, it is important that protocol applications be submitted early in the quarter so there is time for IACUC review.

An instructor must submit a protocol application for the class research projects prior to the time when the projects are to be conducted. The instructor is advised to submit the protocol application well enough in advance to allow for the normal review process, including the possible request for and submission of additional information. The protocol must specify all possible species and procedures, and combinations thereof, that could be conducted by students, along with the usual justification of numbers of animals that could be used and the justification for the species, procedures, and numbers to be used. Instructional/educational research projects involving procedures in the classroom that are not in an approved protocol are not allowed.

If students are submitting individual protocol applications for classroom projects, they must do so in advance of starting the research project. It is the instructor's responsibility to inform students of the <u>Protocol Submission Deadlines</u> found on the IACUC website. Protocols submitted by the deadline will be reviewed at an upcoming IACUC meeting; however, this is not a guarantee that the protocol will be approved, as the IACUC may require additional information to be submitted prior to final approval.

D. USE OF ARCHIVAL DATA

Archival data constitutes any records (e.g., videos, samples, logs, etc.) that were previously gathered on animals. The researcher(s) do not conduct any activities with "live" animals, but rather use existing data to complete their investigation.

IACUC review is not required for using archival data, when:

- a. The original data was collected under a previously approved IACUC protocol. In this case, cite the protocol approval number in any presentations or publications AND/OR
- b. The original data was collected by another institution (e.g., sanctuary, zoo, etc.) for their own purposes and under their own regulations/policies.

Neither the Primary Investigator nor any other personnel associated with the proposed research can play a role in reproducing the original data without IACUC approval and later claim it as "archival research."

If you are planning to use archival data, please contact the IACUC Chairperson to describe your potential plan and get verification that IACUC approval is not needed. For graduate

students using vertebrate animals, this is also required by the CWU School of Graduate Studies and Research for degree completion.

E. RESPONSIBILITY OF FACULTY SUPERVISORS FOR ALL STUDENT PROJECTS/RESEARCH

- A. Faculty supervisors of both undergraduate and graduate student projects or research must have appropriate training in the care and use of animals which can be documented for the IACUC. This includes CITI trainings and medical clearance from CWU's Occupational Health and Safety Program.
- B. It is the responsibility of faculty supervisors to assist students in preparing a protocol application for the IACUC and to ensure that the research is conducted in accordance with CWU's agreement with the federal government (Assurance) and with applicable CWU policy. Faculty supervisors may add a student to an existing protocol via an amendment (see **Section 8**), however it is the responsibility of the faculty supervisor to ensure students have read the protocol and are comfortable with the procedures included in the protocol in accordance with the Assurance and CWU policy.
- C. It is the responsibility of faculty supervisors to ensure that classroom educational activities involving live vertebrate animals are conducted according to the relevant ethical standards and that students receive appropriate training outlined in the Training Policy for Educational Protocols (Section 4D).

Section 4

INVESTIGATOR AND ANIMAL HANDLER TRAINING

A. INTRODUCTION

The Animal Welfare Act (Section 13(d)) outlines requirements for the training of scientists, animal technicians, and other personnel involved with animal care and treatment. At minimum, training must include instruction on:

- 1. the humane practice of animal maintenance and experimentation;
- 2. research or testing methods that minimize or eliminate the use of animals or limit animal pain or distress;
- 3. utilization of the information service at the National Agricultural Library; and
- 4. methods whereby deficiencies in animal care and treatment should be reported.

Researchers must certify that they (and their research staff) have met training requirements on each protocol application and annual renewal submission for IACUC review.

B. REQUIRED TRAININGS

Training is required for all researchers, scientists, animal technicians, and other personnel involved in animal care, treatment, or use. This includes students involved in field work, laboratory studies and educational purposes.

Prior to approval to work on a protocol, any personnel involved in animal care, treatment and use must complete trainings offered through Collaborative Institutional Training Initiative (CITI)

including "Working with the IACUC" and specific trainings relevant to the protocol they will be working under. More information and a complete list of CITI trainings available is posted at https://www.cwu.edu/iacuc/citi-program.

In addition to the CITI training, the faculty supervisor (or animal facilities manager as appropriate) will review proper techniques and complete in-person training specific to the protocol as appropriate. This may include Standard Operating Procedures (SOP) specific training, hazard training (as appropriate), species-specific housing methods, husbandry procedures, and handling techniques, including but not limited to:

- 1. Basic needs, proper handling and care, and maintenance of daily log (feeding, behaviors of concern, etc.);
- 2. Methods to minimize animal pain and distress;
- 3. Anesthesia and surgical techniques if applicable;
- 4. Methods of reporting concerns or deficiencies in animal care and treatment; and
- 5. How to access additional information on care and use of animals in research.

The animal facilities managers are updated immediately by the IACUC Chairperson on any changes in federal regulations. The manager then updates any employee or student working in the facility. The faculty supervisor or facility manager will maintain records of hands-on training for these individuals.

New faculty meet with their Department Chair, and are encouraged to meet with the IACUC Chairperson, to discuss their research intentions and/or needs prior to submission of any protocol application. Any pertinent specific policies of CWU are discussed at this time.

C. OCCUPATIONAL HEALTH AND SAFETY PROGRAM

All university personnel involved in the research of live vertebrate animals must obtain annual medical clearance from CWU's Occupational Health and Safety Program before engaging in any activities. Enrollment forms for medical clearance are available on the CWU's OHSP IACUC website.

The enrollment forms will be reviewed by CWU's OHSP medical professionals, who may request further information (i.e., basic medical tests or a physical). In addition, the OHSP professionals may request follow-up actions, such as vaccinations for those working with potentially infectious animals. Those planning international travel and research are advised to enroll in this program well in advance of their anticipated travel dates.

Medical clearance from the OHSP must be completed before any IACUC protocol applications and continuing annual renewals will be approved. Personnel will be notified via email from IRBManager 30 days prior to medical clearance expiration so they can resubmit their medical clearance forms annually.

D. TRAINING POLICY FOR EDUCATIONAL PROTOCOLS

The following policy applies to educational animal activities associated with CWU courses involving CWU students. This policy outlines the minimum requirements for training and

medical clearance that must be met in order for an educational protocol to receive and maintain IACUC approval.

All Principal Investigators (PIs), Teaching Assistants, and others in instructional or technician roles must be listed as personnel on educational protocols, have up-to-date medical clearance through the Occupational Health and Safety Program, and complete all CITI trainings relevant to the proposed activities.

PIs must provide participating students with appropriate hands-on training and orientation and assume responsibility for ensuring students follow proper procedures. Student training should include information on the species to be used, safety and health risks and how to minimize risks, proper methodologies to minimize animal pain and distress (techniques in animal handling, capture, observation, etc.), use of best practices for proper collection of data and how to report any animal care or use concerns. PIs must document that all participating students received and signed off on their hands-on orientation/training (see template on IACUC website). PIs must provide this completed documentation of student training to the IACUC by the time they submit their final reports (Section 9) for the protocol(s).

Provided that PIs fulfill the above requirements, students participating in educational protocols do not need to be listed as personnel on those protocols, receive medical clearance, or complete CITI trainings. If PIs would like to require students to complete training/clearance beyond what the above policy mandates (for instance, in cases of long-term involvement or repeated animal handling), IACUC administrators will help track the completion of those requirements.

PIs may use the template form available on the IACUC website or they may develop one. If they choose to develop their own form for tracking student training, it must be submitted with a protocol application and must receive approval from the IACUC before animal activities begin.

Section 5

THE IACUC REVIEW PROCESS

A. INTRODUCTION

Faculty and student Principal Investigators (PI) must submit a protocol application to the IACUC for all projects using live vertebrate animals. Submission forms are available in IRBManager via the university's website and require CWU credentials for log in. An investigator may consult with the attending veterinarian or the IACUC Chairperson during protocol application development or may request a preliminary review before submitting an application. Protocols originating from undergraduate or graduate students are first directed to the student's faculty supervisor, who must approve the protocol before it is forwarded to the IACUC for review.

Submitted protocols undergo review by the IACUC for 14 days during which the committee members will determine whether it should be reviewed in a convened meeting of the IACUC for Full Committee Review (FCR) or not. If any one committee member makes a request for FCR, then it will occur at the next scheduled monthly IACUC Meeting. If FCR is not requested, the

protocol will undergo Designated Member Review (DMR). Committee members are able to respond with comments in IRBManger for consideration for either review type (FCR or DMR).

Pursuant to review by committee members, if clarifications or changes are required to secure approval, the PI is notified of the concerns in email via IRBManager and allowed to make changes to the protocol. The protocol then undergoes the same review process as a new protocol application.

This process may continue until the committee or Designated Member Reviewer is satisfied that concerns have been addressed and the protocol is approved. If this process does not reach a satisfactory conclusion, the protocol undergoes a Full Committee Review which may withhold approval. The PI is notified of approval status via email with an attached approval letter. If the protocol is not approved, reasons are explained in in a letter that is attached to an email.

B. FULL COMMITTEE REVIEW

If a Full Committee Review (FCR) is requested by any member of the IACUC, review of the protocol is scheduled for the next meeting of the IACUC. IACUC Meetings occur once a month as listed on the <u>Protocol Submission Deadlines</u> page on the website.

If the IACUC desires more scientific and technical expertise to evaluate aspects of a proposal it may contact outside consultants to provide information. Such consultants may not vote. The responsibility lies with the PI to justify and explain the proposed experiments to the satisfaction of the IACUC.

- 1. The PI may, but is not required to, attend the IACUC meeting in order to clarify protocol issues that arise. The PI will leave the meeting prior to final discussion and voting on approval.
- 2. In order to complete the review, a quorum (simple majority of members) must be present.
- 3. A simple majority of those present is required to approve the protocol.
- 4. The committee may approve, require modifications, or withhold approval.

C. DESIGNATED MEMBER REVIEW

If a FCR is not requested, a Designated Member Review (DMR) can occur where a selected member of the committee is assigned to formally review the protocol at the end of the 14-day committee comment period. The designated member can view other comments made by IACUC members for consideration. The designated reviewer will apply the same criteria as the Full Committee Review. Protocols that undergo DMR may be approved, returned for modification or referred for FCR. The designated member does not have authority to deny approval.

D. IACUC REVIEW CRITERIA

The IACUC shall review protocols considering the criteria for review listed in the PHS Policy on Humane Care and Use of Laboratory Animals, the Federal Animal Welfare Act regulations, and the U.S. Government Principles for the Utilization and Care of Vertebrate Animals in Testing, Research, and Training.

E. REVIEW OF REQUIRED PROTOCOL REVISIONS DURING FCR OR DMR

If IACUC requires revisions of a protocol submitted for review, such revisions are reviewed as follows:

- 1. If revisions are required after FCR, the resubmission of the revised protocol will return to FCR for consideration and review. At this time the committee can approve the revised protocol or send it back for additional revisions to secure approval.
- 2. If revisions to a protocol are required from a designated member (DMR), the resubmission of the revised protocol will return to the designated member (DMR) for their consideration and review. The designated member can approve the revised protocol, send it back for additional revisions to secure approval, or send it to FCR for further consideration and discussion. If any revisions to a protocol are outside of what was originally requested, the designated member will return the protocol to FCR for consideration.

Minor modifications of an administrative nature, i.e., typographical or grammatical errors, required signatures, etc. may be approved by the IACUC Chairperson.

F. CONFLICTS OF INTEREST

IACUC members who have a conflict of interest with respect to a protocol should notify the IACUC Chairperson and may not participate in the review or approval except to provide information if requested by the IACUC. If the IACUC member is listed on the protocol, the IRB Manager system will remove them from the list of reviewers. They cannot be counted toward a quorum and may not vote. In the event that a conflict of interest exists with the Chairperson of the IACUC, the appointed De Facto Chair is designated to act in his or her place for the purpose of reviewing the relevant protocol.

If the PI believes that an IACUC member has a potential conflict, the investigator may request that the member be excluded.

Some possible examples of conflict of interest include:

- 1. A IACUC member is a co-investigator on this research project or is involved in a potentially competing research program;
- 2. Funding or other financial ties exist or place the member in a competitive position;
- 3. An IACUC member's personal biases may interfere with impartial judgment.

G. APPEAL OF IACUC DECISIONS

The author of a protocol may appeal decisions of the IACUC to the Institutional Official. However, Federal law prohibits administrative approval of an activity not approved by the IACUC. Nevertheless, the Institutional Official may work to facilitate the communication between the PI and the IACUC ensuring that the protocol has been fully presented and reviewed.

Section 6

GUIDELINES FOR PREPARING ANIMAL RESEARCH MATERIALS

A. GENERAL SUGGESTIONS

- 1. Begin the application process by carefully reviewing the CWU Animal Care and Use policy and Section 5 of this manual "The IACUC Review Process." Visiting the IACUC website's frequently asked questions (<u>FAQs</u>) may also be helpful.
- 2. Log onto the IRBManager website (https://cwu.my.irbmanager.com/) and begin the application sections. The PI will enter their email as well as anyone else who will be working on the project. If another person on the project is not recognized by the system, that person must log into IRBManager first using their CWU credentials so the system initiates a user account for them. Once they have logged into the system, try adding them to the protocol application again. The PI will also be asked what type of research project this is (Educational Research, Field Research, or Lab Research). You can save progress on this form in the system and return as needed to complete and submit. It may be helpful to copy the protocol application questions into a Word document to complete, especially if several people are collaboratively working on the protocol.
- 3. Review the IRBManager User Guide for more information on using the system available on the IACUC <u>IRBManager website</u>.

Undergraduate and graduate students should work with their faculty supervisor to complete the protocol application form. If at any time you have questions about required information, feel free to contact the IACUC at iacuc@cwu.edu.

B. OVERVIEW OF PROTOCOL PROCESS

- 1. Initial Protocol Application via IRBManger (may be approved for up to 3 years with a required annual review) as described in **Section 6A**.
- 2. Annual Review (approval required in Year 2 and Year 3) described in Section 7
- 3. Amendments (as necessary) as described in **Section 8**.
- 4. Final Report (required at completion or expiration) as described in **Section 9**.

Section 7

APPLICATIONS FOR CONTINUATION OF APPROVAL (i.e., ANNUAL REVIEW)

A. INTRODUCTION

Each study approved by the IACUC are for the dates requested in the protocol application and are provided on the approval letter, after which the research cannot be conducted without a new protocol application. Protocols can be approved for up to 3 years; however, they must undergo annual review (IACUC approval for continuation in Years 2 and 3). After 3 years, a new protocol application must be completed.

Researchers may not start or continue activities with animals past one year unless they have an active (i.e., not expired) protocol and/or annual renewal approved by the IACUC. Investigators should submit the required annual review form in Years 2 and 3 in order to avoid delays in continuation approval of ongoing research activities. These forms are available in IRBManager.

B. PROCEDURES FOR ANNUAL REVIEW

1. The PI is responsible to note the study expiration date as stated in the approval letter for the study. The dates are also available to view in IRBManager.

- 2. Thirty days in advance of the annual expiration date, PIs are notified that an annual review is required. It is the PI's responsibility to complete the annual renewal process in a timely manner.
- 3. If the study is continuing past one year (up to 3 years maximum), the PI is instructed to complete an annual review form available in IRBManager. These forms will be reviewed by IACUC and if approved, the study will be allowed to continue for another year.
- 4. If the study is expired and/or completed, the PI is required to submit a Final Report (Section 9) regarding the outcome of the study. This will close the protocol.

Section 8

REQUEST FOR APPROVAL OF AMENDMENTS IN STUDY PROCEDURES

A. INTRODUCTION

Federal regulations require review and approval by the IACUC of significant changes in any activity involving the use of live vertebrate animals. Broad interpretation by regulatory officials shows that deviations from approved protocols that seem insignificant to investigators as well as their institutional animal care and use committees have later been determined to be significant by regulatory officials investigating particular incidents. Guidance they provide indicates that it is better to confer beforehand with the IACUC or regulatory officials about what constitutes a significant change rather than after the fact.

The process for amending/modifying an existing approved IACUC protocol varies depending on the nature of the desired amendment/modification. Some amendments/modifications are considered routine or minor, and can be reviewed and approved by the IACUC Administrators or the IACUC Chairperson. Other proposed amendment/modifications are substantive or major and must be reviewed either by DMR or by FCR using the same process as a new protocol application listed in **Section 5.** Regardless of the nature of the proposed amendments, all revisions in study procedures must be approved by the IACUC *in advance* of being implemented by the investigator.

An application may be amended with respect to one or more of the following:

- 1. funding source;
- 2. personnel: investigators, including principal investigator, may change, as may other authorized personnel (e.g., animal technician), or such relevant information as an investigator's contact telephone number;
- 3. population: the size of the study population may change, or a new species may be included:
- 4. procedures: methods, interventions, or other approved procedures, instruments;
- 5. purpose: timing of treatments, type of data behavioral data collected.

B. DEFINITIONS AND EXAMPLES

Major or Significant Change

The following are examples of major changes that are to be presented to the entire IACUC and the procedure is followed as outlined in **Section 5** under the IACUC Review Process.

- 1. A change in the overall aim or objective of the study which supports the need to perform the animal work.
- 2. A change which may involve an increase in the level of pain, distress, and/or discomfort so as to categorize it in a different USDA pain category.
- 3. An increase in mortality over levels that were either specified or presumed to occur when the protocol was originally reviewed.
- 4. A change from non-surgery to surgery; from minor to major surgery; from non-survival to survival surgery, or from single to multiple survival surgery.
- 5. A change involving the need for euthanasia, where none had originally been anticipated.
- 6. A large (>20%) increase in the number of animals to be used.
- 7. A change in the genus.
- 8. The addition of a hazardous agent used in the animal procedure.
- 9. A change in Principal Investigator (PI).

Minor change

The following are examples of minor changes and may be approved by the IACUC Administrator or IACUC Chairperson.

- 1. Additions or changes in the personnel who will be working with animals, other than the PI (e.g., animal technicians or students).
- 2. A small ($\leq 20\%$) increase in the number of animals to be used.
- 3. A minor change in technique, drug, diet, and the like which is not inconsistent with the intent of the original protocol application, nor does it change the level of discomfort, distress, or pain (remains in the same USDA pain category).

C. PROJECT AMENDMENT PROCEDURES

- 1. Investigators should complete and submit an amendment form (referred to as "copy for amend" in IRBManager). See the IRBManager User Guide for more information.
- 2. The IACUC Chairperson will determine the type of review required and initiate the process.
- 3. Investigators must wait for IACUC approval of project amendments/modifications before implementing any proposed changes.
- 4. It is the responsibility of the IACUC Chairperson to inform the IACUC of changes they have approved at the next scheduled IACUC meeting.

D. ADDITIONAL INFORMATION

- 1. Study-related procedures, instruments and forms are approved only in the context of a specific IACUC protocol application. Materials that are not reviewed cannot be approved. Only approved study procedures and materials may be implemented by an investigator.
- 2. The PI on an IACUC protocol application will not be changed without a signed letter from the current PI assigning the protocol application (i.e., research) to a PI. In cases where a PI has died or is otherwise unavailable, this letter of assignment may be signed by the chair of the department, dean of the college and should include an explanation of the circumstances justifying the change in investigators.

Section 9

SUMMISSION OF FINAL REPORTS

A. INTRODUCTION

At the expiration or completion of the study, the PI is required to submit a Final Report regarding the outcome of the study. The Final Report is uploaded in IRBManager and requires detailed information such as disposition and final number of animals used, summary of research results and whether there were any unanticipated events, complications or incidents during the study. The Final Report for Educational Protocols should include the student training form detailed in **Section 4D**. The submission of the final report will be reviewed by IACUC Chairperson and committee as necessary and then close the protocol. If the student has graduated, it is the responsibility of the faculty supervisor to complete the form. Lack of completion of Final Reports could impact review of future protocols as determined by IACUC.

Section 10

REPORTING CONCERNS ABOUT THE CARE AND USE OF ANIMALS

A. INTRODUCTION

One function of an IACUC is to ensure investigators provide appropriate care for research and teaching animals. One method for ensuring this is to be open to individuals' questions and concerns.

The IACUC may be able to educate observers about the standards of care. They will also immediately review any allegations of suspected misuse of animals or deficiencies regarding the care and use of research or teaching animals, and determine whether action is warranted. Finally, the IACUC has the authority to suspend or terminate approval of research and teaching activities that is not being conducted in accordance with the IACUC's requirements or that has been associated with unexpected serious harm to animals.

B. PROCEDURES FOR REPORTING CONCERNS ABOUT THE CARE AND USE OF ANIMALS

An individual reporting a suspected deficiency need not identify themselves to make a report. If an individual chooses to identify themselves, their identity will be kept in confidence.

There are several ways to report a concern or discuss a perceived problem as listed on the IACUC website Report an Animal Care or Use Concern Page. Concerns may be submitted in verbal or written form. When not submitted in written form, individuals who receive concerns will document them fully. No facility employee, committee member, or laboratory personnel shall be discriminated against or be subject to any reprisal for reporting violations of any regulation or standards.

All concerns will be investigated as outlined in the non-compliance document in **Section 11** and posted on the IACUC website.

Section 11

INSTITUIONAL ANIMAL CARE AND USE COMMITTEE MANAGING REPORTS OF ANIMAL WELFARE OR NONCOMPLIANCE CONCERNS

Principal investigators are responsible for ensuring that members of their staff who work with animals are familiar with relevant procedures and details specified in the protocols. In addition, supervision of work performed on animals must be adequate to ensure that approved protocols are being followed and that significant changes are not implemented prior to IACUC approval. Any staff or student who will be working with animals must be listed on the protocol and complete the required trainings and obtain medical clearance. The trainings (three-year approval) and medical clearance (one year approval) must be kept up to date as necessary. Thirty-day notices will be sent via email prior to expiration of trainings and medical clearances so they can be updated in a timely manner.

A. INTRODUCTION

The Institutional Animal Care and Use Committee (IACUC) administers the vertebrate animal care and use program and facilities at Central Washington University (CWU). To ensure ethical and humane treatment of all live vertebrate animals, the IACUC oversees all policies and procedures involving animal welfare and approves all protocols for the use of live vertebrate animals in research and teaching. This document establishes guidelines to address instances of regulatory or policy noncompliance by individuals engaged in the care or use of animals used for research or teaching. This policy is intended to address compliance issues that may require action based on the determination of the IACUC and in some instances, the Institutional Official (IO). The document was reviewed and approved by IACUC on May 21, 2021.

I. POLICY

- A. Research and Activity Requiring IACUC Oversight
 - 1. Federal laws and regulations require that all research, teaching, training, or testing involving live vertebrate animals have oversight by the IACUC at CWU.
 - 2. These animal-related activities are subject to oversight by the United States Department of Agriculture (USDA) and the National Institutes of Health (NIH) Office of Laboratory Animal Welfare (OLAW) and must meet the standards set forth by the USDA *Animal Welfare Act and Animal Welfare Regulations* and the NIH *Guide for the Care and Use of Laboratory Animals*.
- B. Reporting Suspected Noncompliance
 - 1. CWU is committed to the ethical and compliant care and use of animals in research, teaching, and testing.
 - 2. If anyone is aware of potential violations to existing animal care and use regulations or observes misuse or mistreatment of animals, they are strongly encouraged to report their concerns.
 - 3. Concerns may be reported to those responsible for animal care and use, to IACUC, or anonymously. Visit the following website for further reporting information: http://www.cwu.edu/iacuc/report-animal-care-or-use-concern.

- 4. The phone numbers of all IACUC members, including the IACUC Chair, Attending Veterinarian, and Institutional Official are posted in areas where animal activities occur.
- 5. All concerns will be treated as suspected noncompliance when initially reported, treated as confidential to protect all parties involved, and will be investigated promptly by IACUC.
- 6. CWU will not tolerate retaliation against individuals who report suspected noncompliance violations in good faith.

C. Examples of Noncompliance

- 1. Noncompliance with university policies or federal regulations can be classified as major or minor.
- 2. <u>Major noncompliance</u> is the result of willful or repeated activities (intentional) in breach of federal, state, or university animal welfare regulations or policies, or violations that pose a real or potential threat to the health and welfare of animals.

Examples of major noncompliance (this list is representative, not exhaustive):

- a. Conducting animal-related activities that pose a real or potential threat to health and welfare of animals without appropriate IACUC review and approval.
- b. Implementation of any significant change to an IACUC-approved protocol that poses a real or potential threat to health and welfare of animals without prior IACUC approval.
- c. Performing a procedure in such a manner that animals endure distress, pain, or suffering that is not addressed in the approved protocol.
- d. Breeding animals without IACUC approval.
- e. Failure to ensure death of animals after euthanasia procedures (e.g., failed euthanasia with CO2).
- f. Not following aseptic technique as described in the protocol when performing survival surgery.
- g. Failure to monitor animals post-procedurally as necessary to ensure well-being (e.g., during recovery from anesthesia or during recuperation from invasive or debilitating procedures).
- h. Extreme cage overcrowding.
- i. Not administering analysesics as required in the approved IACUC protocol.
- j. Not following safety procedures such that personnel are unknowingly exposed to hazards (e.g., dangerous chemicals, radioactivity, biohazards).
- k. Failing to adhere with veterinary-mandated instructions (e.g., treatments).
- 1. Conducting animal-related activities beyond the expiration date established by the IACUC.
- m. Exceeding the number of animals approved on the study, where the protocol entails real or potential threat to the animals.
- 3. <u>Minor noncompliance</u> includes instances of honest error (unintentional) that do not pose a threat to the health or welfare of animals.

Examples of minor noncompliance (this list is representative, not exhaustive):

- a. Conducting animal-related activities that do not pose a real or potential threat to the health and welfare of the animals, but without appropriate IACUC review and approval.
- b. Implementation of a change to an IACUC-approved protocol that does not pose a real or potential threat to the health and welfare of the animals without prior IACUC approval.
- c. Failure to respond to IACUC designated deadlines (e.g., annual renewal of multi-year protocol, annual renewal of medical clearance, renewal of CITI training).
- d. Housing animals in a laboratory or the vivarium without IACUC approval.
- e. Allowing new personnel to work with animals before they are qualified and trained.
- f. Insufficient records of monitoring animals (disease condition, survival surgery, post procedure care).
- g. Insufficient daily recording of animal care (e.g., feeding, bedding changes, health check).
- h. Personnel ignorant of IACUC-approved protocol content.
- i. Performing an unapproved procedure without causing pain or distress.
- j. Controlled substances not secured properly, or dispensing logs not kept.
- k. Improperly labeled bottles or secondary containers.
- 1. Relocating animals from a laboratory without properly notifying the IACUC, or research conducted in areas not approved on the protocol.
- m. Improper waste disposal practices.
- n. Exceeding the number of animals approved on the study (e.g., breeding colonies).
- o. Cage cards that fail to identify IACUC protocol number, species, and any dangers or risks to people or to animals posed by the caged animals (e.g., rattlesnakes not labeled).
- p. For animals who are part of on-going experiments, cage cards lacking adequate information (e.g., date of surgery, chemical administration, tumor inoculation).
- q. Failure to maintain cleanliness, hygiene and upkeep of lab or vivarium space where animal work is done.
- r. Failure to follow established IACUC policy.

II. PROCEDURES

- A. Initial Appraisal of Noncompliance Reports
 - 1. In response to internal tips or possible concerns, the IACUC Chair and IACUC Program Coordinator will immediately conduct an initial appraisal to determine if circumstances merit a full investigation.
 - 2. The initial appraisal will consider in consultation with the Attending Veterinarian the nature and extent of the concern, whether the issue presents a potential immediate animal health or welfare risk, and if the concern involves noncompliance with university policy or federal regulations.

- 3. Formal allegations or concerns submitted anonymously will automatically receive a full investigation.
- 4. At this initial appraisal stage, the IACUC Chair will determine if a <u>preliminary report</u> must submitted to the NIH Office of Laboratory Animal Welfare (OLAW). Reportable situations and guidance for the preliminary report are available at https://olaw.nih.gov/guidance/reporting-noncompliance.htm

B. Full Investigation of Noncompliance Reports

- 1. The involved individual(s) will be informed of the suspected noncompliance investigation that is being conducted.
- 2. If the IACUC Chair concludes that the noncompliance merits a full evaluation, the IACUC, at a convened meeting with quorum, will determine the appropriate course of the investigation. This may include formation of subcommittee and/or interviews with involved individual(s).
- 3. When the investigation deems that noncompliance with university policies or federal regulations has occurred, or that there is a past, present, or future threat to the health and well-being of animals, a noncompliance incident report will be filed with the IACUC office and provided to the Institutional Official. The report shall include:
 - a. A description of the noncompliance violation and whether the violation resulted in any adverse events, if known.
 - b. A summary of the records and evidence reviewed during the investigation.
 - c. Identification of university policies or federal violations under which noncompliance occurred.
 - d. Corrective actions (D below) that should be implemented to avoid noncompliance in the future and a timeline by which the corrective actions will be implemented.
 - e. A description of mandated noncompliance reporting to be submitted to federal entities (OLAW, USDA).

C. Formal Determination of Noncompliance

- 1. When determination that a violation of university policy or federal regulation has occurred, the IACUC Chair will formally notify the involved individual(s) in writing of the noncompliance violation and corrective actions.
- In cases where the noncompliance is ongoing and presents risk to the health or well-being of the animal(s), the IACUC can suspend the research or teaching activity.
- 3. If corrective actions are required, a timeline will be established in which the individual(s) must implement corrective actions.
- 4. The individual(s) will have the opportunity to request, in writing, to modify the corrective actions. Such requests require approval of the IACUC during a convened meeting.
- 5. In addition to the IACUC and the Institutional Official, the Provost, Department Chair, College Dean, Research and Sponsored Programs (if externally funded), and Grant/Contract Accounting (if externally funded) may be notified of the noncompliance violation.

- D. Examples of Corrective/Disciplinary Actions After Determination of Noncompliance
 - 1. Most minor noncompliance violations that are not a result of willful intent and that do not pose a threat to animal health or welfare or violate federal regulations can be resolved administratively. However, continuing minor noncompliance events from an individual may be reclassified as major noncompliance.
 - 2. For major noncompliance violations, the IACUC may mandate remedial corrective actions. Such corrective actions may include, but are not limited to:
 - a. Requiring specific training or retraining of the individuals involved in the proper care and use of animals.
 - b. Additional monitoring by the IACUC of the animal-related activities or regulations that pertain to the noncompliance violation.
 - c. Regular updates on the status of the corrective action plan.
 - d. Requiring submission and approval of an IACUC protocol or a modification to an already approved IACUC protocol prior to continuation of the research for which noncompliance was reported.
 - e. Restricting or limiting the scope of activities in which the individual(s) may engage.
 - f. Suspending approval of an IACUC protocol.
- E. Submission of reports to OLAW and USDA as a result of noncompliance
 - 1. If it has been determined through the full investigation that there were or was serious or continuing noncompliance with *PHS policy*; any serious deviations from the provisions of *the Guide*; or any suspension of an activity by the IACUC, a final report will be submitted to OLAW. Guidance for the final report is available at https://olaw.nih.gov/guidance/reporting-noncompliance.htm
 - 2. If it has been determined through the full investigation that there were USDA regulated species and there was suspension of an activity by the IACUC, a report will be submitted to the USDA. Guidance for the USDA report is available at https://www.nal.usda.gov/awic-faq-categories/protocol-noncompliance

Section 12

THE ATTENDING VETERINARIAN AND THE ANIMAL CARE PROGRAM

A. INTRODUCTION

Under the Animal Welfare Act, the U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) requires that all persons who use animals in research or for exhibition, sell them at the wholesale level, or transport them in commerce provide these animals with adequate veterinary care and animal husbandry. Toward this end, APHIS requires the owner of each licensed and registered facility to establish a formal program of veterinary care and for an attending veterinarian (AV) to oversee the animals' care.

B. THE ROLE OF THE ATTENDING VETERINARIAN

- 1. CWU works with its veterinarian under formal arrangements on a consulting basis.
- 2. The AV delegates direct authority and responsibility to prepare a written program of veterinary care and implement the PHS Policy on a daily basis to the animal care facilities managers. They schedule regular visits by the attending veterinarian as needed. The AV is responsible for reviewing the facility's veterinary care program semi-annually.
- 3. The veterinarian has authority to ensure adequate veterinary care for the animals.
- 4. The veterinarian is involved in the review and approval of all animal care and use in the institutional program. This includes advising on the design and performance of experiments using animals as related to model selection, collection and analysis of samples and data from animals, and methods and techniques proposed or in use. This responsibility is shared with investigators and the IACUC.

See **Appendix D** for more complete description of the veterinarian's responsibilities in the animal care program.

C. ESSENTIAL COMPONENTS OF THE VETERINARY CARE PROGRAM

APHIS has established the following as essential components of a veterinary program that should be assessed at least once a year:

- 1. Appropriate facilities, personnel, equipment, and services to provide adequate veterinary care.
- 2. Use of appropriate methods to prevent, control, diagnose, and treat diseases and injuries.
- 3. Availability of emergency, weekend, and holiday care for animals.
- 4. Daily observation of all animals by employees or trained technicians to assess the animals' health and well-being.
- 5. Direct and frequent communication between the facility and attending veterinarian on any veterinary care concerns.
- 6. Adequate guidance and training of personnel who care for animals regarding handling, immobilization, anesthesia, analgesia, tranquilization, and euthanasia.
- 7. Provisions for adequate preprocedural and postprocedural care in accordance with established veterinary medical and nursing procedures.
- 8. Other related topics that may arise.

Section 13

DISASTER PLAN FOR ANIMAL CARE AND FACILITIES Science and Psychology Buildings

A. INTRODUCTION

The Guide for the Care and Use of Laboratory Animals (8th edition) states that animal facilities must have a disaster plan. This plan is to protect the welfare of the animals and CWU personnel during natural or human-caused disasters. Most of these animals are dependent on humans to provide their basic needs, some on a daily basis, and are vulnerable to significant changes in their environment. A small number of these animals also pose a health risk to personnel. This plan provides guidance on how to (1) prepare for potential disasters and (2) respond to these situations. The facilities covered in this plan include the Aquatics Facility and Vivarium in the Science Building (Rooms 129 and 132, respectively), the animals on display in cases in the

lobby of the Science Building and the Animal Facility in the Psychology Building (Room 317, as of 2/20/21 there are no animals in the Psychology Building).

B. RESPONDING TO DISASTERS

Emergencies may occur unexpectedly both during and outside of normal work hours. Clear lines of communication are critical for a coordinated response to such emergencies. The following describes communication guidelines during an emergency that may impact animals housed in these areas.

1. Notification of an Emergency Situation

The first point of contact in any emergency potentially affecting human health or safety is Police Services (PH. 509.963.2959, or 911 after hours). Depending on the emergency, Environmental Health & Safety and/or Facilities Management personnel should also be contacted.

If the emergency has any potential to affect the welfare any of the animals housed in a CWU facility, the next point of contact should be the facility staff who will contact investigators and IACUC Attending Veterinarian to develop an action plan for disaster response.

A full list of contacts, including after-hours phone numbers, is available on the final page of this document. In addition, a list of relevant contacts should be clearly posted in each animal facility, and the contact information for each principal investigator should be clearly posted with the approved protocol where their research animals are housed within the facility.

In the event that the facility animal caretakers or the principal investigator(s) are not available an and/or IACUC Chair should be contacted.

The IACUC and Institutional Official shall decide whether the emergency should be reported to NIH's Office of Laboratory Animal Welfare (OLAW), the US Department of Agriculture's Animal Care Regional Office (USDA), or other outside agencies as appropriate.

Records documenting animals' daily care will be maintained during emergencies. If the animals remain in place, the usual procedure of entering records using the Science building computer and backing up to the N drive can be followed. If servers are down, daily records will still be maintained and uploaded to the OneDrive cloud. Barring electronic possibilities, handwritten records will be kept and digitized or scanned at the earliest opportunity.

2. Entering an Animal Facility after an Emergency

It is essential that any hazards within the animal facility (e.g., venomous snakes, infectious animals or materials) are always clearly labeled to protect first responders during a disaster response.

When a disaster occurs, damage may occur that poses a risk to human health and safety. In such instances animal care personnel must not enter the facility until Police Services or other first responders have identified the area as safe. If an animal facility is affected or potentially affected

by a disaster, animal care personnel should identify themselves to the first responders to provide any information they may need.

Once an affected facility has been declared safe, the facility animal caretakers and/or principal investigator(s) should evaluate conditions inside the facility and develop a response to any concerns regarding animal health and safety. Actions to be taken include:

- Inspect the entire facility;
- Evaluate hazards to personnel and animal health;
- Prioritize the response to meet the most urgent needs, particularly to alleviate pain and suffering of animals;
- Contact anyone who has the primary responsibility for the affected animals and involve them in any proposed actions concerning animals under their care;
- Identify animals that are of exceptional value and have highest priority to be saved:
- Determine what additional help may be needed and make the appropriate contacts (including the Attending Veterinarian);
- Delegate tasks to available personnel;

Ultimately, if the health and welfare of animals has been affected, the IACUC Chair must be notified.

3. Labeling of Animals and Animal Handling Instructions

The key to safe and successful handling of animals during a disaster, is the appropriate labelling. The IACUC already requires that the species, responsible party, and protocol number to be identified for animals in CWU facilities.

The following should be clearly labelled in the area where animals are stored:

- Any infectious or other risk the animals might present (for example, do the animals carry any known pathogen? Are they toxic, poisonous or venomous?) and specific handling instructions associated with these risks
- Specific instructions on animal handling in case of emergency including:
 - whether animals should be euthanized or all efforts should be made to protect them
 - if transfer to another facility should/can be made
 - what type of personal protective equipment is required when handling the animals
 - emergency contact information for those responsible for the animals

4. Transfer of Animals Between Facilities

In some cases, transferring animals between the animal care facilities on campus may allow valuable animals to be saved during a disaster. Animals that are potentially infectious or otherwise dangerous (e.g., rattlesnakes) should not be transferred except under exceptional circumstances and only with adequate safety measures in place. Any transfers require full agreement from those responsible for both facilities that the transfer will not impose a risk to the animals and personnel of either facility. [add language here about PIs establishing criteria for when movement should occur]

Transfers must be done with great care to prevent escape or injury to the animals. At a minimum, the animals should be placed into a securely locking container or cage and then into a vehicle with adequate climate control to prevent discomfort. The animals must be appropriately labeled at all times. Animals must not be transferred without prior permission of the investigator with primary responsibility for their care and/or the Attending Veterinarian. In the event that animals need to be moved off campus, Attending Veterinarian Dr. Mike Fuller has agreed that Ellensburg Animal Hospital can serve as a holding site until other arrangements can be made.

5. Disposal of Waste and Carcasses

If conditions make cage-washing unfeasible, dirty cage substrate or bedding can be simply removed and replaced with fresh substrate. Dirty bedding can be stored in bags until it can be removed according to the normal procedures.

If the disaster warrants euthanasia of animals, consideration must be made of how the carcasses can be disposed of. For example, storage of carcasses in a freezer may not be possible during a long-term electrical outage. In that case, arrangements might be made with a local veterinary facility to assist with carcass disposal.

6. Responding to Specific Disaster

Fire:

Fire is a distinct possibility in an animal facility, as well as other adjacent locations in a research building. In accordance with the CWU Emergency Operation Plan each staff member should be oriented to the locations of fire alarms, fire extinguishers, evacuation plans, and emergency exits in their respective building. Should a fire occur, a fire alarm should be activated and/or 911 called, all personnel should evacuate the building and meet at a pre-arranged location outside of the building. Any personnel with animal care responsibilities should identify themselves to first responders if the animal facilities are potentially affected.

Localized flooding:

Flooding may occur by breakage of water or sewer pipe, or by overflowing of nearby streams and irrigation canals. In the case of pipe breakage, Police Services (509.963.2959) or Facilities Management (509.963.3000) should be contacted to have the water turned off. The animal facilities in the Science building are more susceptible to flooding because of their location on the ground floor. In case of flooding, animals may be able to be moved to an unaffected area within the facility or, if there is no infection risk, animals could be moved to another facility.

Chemical spill:

Should a hazardous materials spill occur staff should leave the area immediately, seal off the room and call Environmental Health and Safety (509.963.2252) during working hours or 911. Once the situation is safe for personnel, the health of the animals in the area can be addressed with the personnel responsible for the animals in affected areas.

The material safety data sheet for hazardous chemicals, the record of hazardous chemical safety training, and the list of hazardous chemicals in the Science building are located in every laboratory in the chemical hygiene notebook (section in binder in each laboratory addresses this). All new CWU employees are required to complete online training available here, and continuing CWU employees complete this training annually. Additional training detailing the use of

hazardous chemicals as part of an experimental protocol is the responsibility of the faculty member conducting the research (the Principal Investigator [PI]). The PI will maintain records of personnel training, and these will be posted with IACUC approval documents at the location where procedures are carried out.

Loss of electrical power and/or HVAC:

The loss of electrical power from severe weather, flooding, etc., would disable lighting, refrigerators, freezers, cage washers, autoclaves, ventilation, and limit cooling and heating capabilities. Similarly, mechanical failures can cause a loss of heating and/or cooling to animal facilities. Those responsible for animal care must consider, depending on the severity of event, how long the power might be out and the degree of discomfort of the animals. Animals likely to suffer or die from the heat/cold stress (e.g., trout without a water chiller) should be relocated or humanely euthanized by qualified personnel. Animals in the psychology building vivarium require electricity for proper ventilation in the isolation rack (with filter top cages). In the event of a power outage expected to be over an hour, cages should be removed from the rack and stored on a table until power is restored.

Protests by activists:

Animal rights activism can manifest itself in many ways: picketing outside an animal facility or research lab, infiltration of animal facility or research staff, sabotage of research activities, etc. It is important that all research staff be on alert for possible demonstrations or suspicious people within the facilities, as well as potential sabotage of research activities. Any activity of this sort should be reported to Police Services who will share this information with the animal facility managers, relevant department, and others that may be affected by the activity.

If a peaceful demonstration is underway on the campus, avoid confrontation by walking a different route to your destination. If unable to avoid the disturbance, remain calm, be courteous, and steer clear of provoking an incident. If a demonstration is going on inside a building, stay in your office or work area and request an escort, if needed, to leave the building. Under no circumstances should animal care personnel engage the protesters. If the protesters are limiting access or preventing animal care, Police Services should be asked to intervene to protect personnel and prevent any suffering of the animals.

Sudden severe weather (e.g., winter storms, tornado):

Severe weather, although infrequent, can cause significant disruption to animal care routines, especially when animal care personnel are prevented from reaching the facilities. Severe weather may also disrupt utility services (see sections above).

Usually there is adequate advance of winter storms, which allows animals to be attended to prior to the event. Also, enough supplies to care for the facility's animals for 1-2 weeks should be kept on hand to prevent shortages during sudden severe weather events.

To verify if the campus has been closed or delayed due to winter weather, call the CWU snow line at 509.963.2345 or check the CWU webpage.

Even during closures, animals may need to have their needs addressed. Individual investigators are required to have a prior plan to ensure that there are no disruptions in providing the required

care for the animals. In an emergency, the Attending Veterinarian and/or the IACUC Chair can be contacted for assistance in finding adequate care for the animals.

Other natural disasters (e.g., wildfire, flood, earthquake, volcanic eruption)

In the event of serious natural disasters, the facility must be made safe before personnel enter to care for the animals. If the facilities are damaged in a way that may affect safety or welfare of the animals (including many of the cases outlined above), then consideration must be given to whether the animals can remain in place without significant pain and suffering, should be relocated to an unaffected location (see the section on relocating animals), or euthanized by approved means. These decisions must be made by the investigator with primary responsibility for the animals, usually in consultation with the Attending Veterinarian, Facilities Management, Environmental Health & Safety, and others as necessary.

7. Emergency Contacts

CWU Emergency Service Contacts

- Police Services
 - EMERGENCY 911
 - Non-Emergency: CWU Police (8am-5pm) 509.963.2959
 - Non-Emergency: Kittcom 509.925.8534
- Facilities Management 509.963.3000
- Environmental Health and Safety Office 509.963.2252
- Student Medical Clinic / Occupational Health and Safety Program 509.963.1881

Building Personnel (Contact All Listed for that Building)

Science Building

- Mr. Mark Young, 509.306.1624 (Animal Care Technician)
- Dr. Holly Pinkart, (509.945.4878 (Biology Department Chair)
- Dr. Paul James, 509.859.3082 (Director, Aquatic Facility)
- Dr. Dan Beck, 509.607.9977 (Director, Vivarium)

Psychology Building NOTE AS OF 2/20/21 THERE ARE NO ANIMALS IN PSYCHOLOGY BUILDING

- Dr. Stephanie Stein, 509.963.1653 (Department Chair)
- Dr. Kara Gabriel, 503.310.1946

Institutional Animal Care and Use Committee Contacts

- IACUC Institutional Officer Dr. Kevin Archer, 509.963.3100
- IACUC Chair Dr. April Binder, 919.695.2237
- IACUC Program Coordinator Leslie Hunter, 509.963.3111
- Attending Veterinarian Dr. Mike Fuller, 509.929.0054

Appendix A

GLOSSARY OF ACRONYMS AND ABBREVIATIONS

AAALAC American Association for the Accreditation of Laboratory Animal Care

AALAS American Association for Laboratory Animal Science

ACLAM American College of Laboratory Animal Medicine

AGRI-GUIDE Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching

APHIS Animal and Plant Health Inspection Service

ARENA Applied Research Ethics National Association

Assurance PHS Institutional Animal Welfare Assurance

AV Attending Veterinarian

AVMA American Veterinary Medical Association

AWA Animal Welfare Act

AWIC Animal Welfare Information Center

AWR Animal Welfare Regulations

CITES Convention on International Trade in Endangered Species

FBR Foundation for Biomedical Research

FOIA Freedom of Information Act

GLP Good Laboratory Practice

GUIDE The Guide for the Care and Use of Laboratory Animals

HREA Health Research Extension Act of 1985

IACUC Institutional Animal Care and Use Committee

ILAR Institute of Laboratory Animal Resources

IO Institutional Official (At CWU: Dean of Graduate Studies and Research)

LACEY Lacey Act Amendments of 1981 (re: import and export of wildlife)

MANUAL Institutional Administrator's Manual for Laboratory Animal Care and Use

NABR National Association for Biomedical Research

NAL National Agricultural Library

NAS National Academy of Science

NIH National Institutes of Health

NLM National Library of Medicine

NRC National Research Council

OLAW Office of Laboratory Animal Welfare, NIH

OPRR Office for Protection from Research Risks (replaced by OLAW)

PHS Public Health Service

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

PI Principal Investigator

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

USDA United Stated Department of Agriculture

Appendix B

THE REGULATIONS

PHS Policy on Humane Care and Use of Laboratory Animals (includes:)

- 1. Health Research Extension Act of 1985, P.L. 99-158 "Animals in Research"
- 2. U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research and Training.

Animal Welfare Act-P.L. 89-544 as amended

Animal Welfare Regulations (USDA) 9 CFR

Appendix C

GUIDANCE DOCUMENTS FOR RESEARCH WITH ANIMALS

- A. Guide for the Care and Use of Laboratory Animals
- B. ARENA/OLAW Institutional Animal Care and Use Committee Guidebook (2002)
- C. Institutional Administrator's Guide for Animal Care and Use: Listed under Resources at http://grants.nih.gov/grants/olaw/IAMLACUbooklet.doc

Appendix D

ANIMAL CARE PROGRAM

ATTENDING VETERINARIAN'S PRIMARY RESPONSIBILITIES (BASED ON ACLAM):

A. DISEASE DETECTION AND SURVEILLANCE, PREVENTION, DIAGNOSIS, TREATMENT AND RESOLUTION

- 1. The isolation, quarantine and stabilization programs for newly arrived animals are necessary to provide time to assess their health status, allow them to recover from the stress of shipment and an opportunity to adapt to their new environment. The extent of these programs depends on several factors, including species and source of the animals as well as their intended use. For some animals, such as rodents obtained from reliable sources for which health status is known, visual inspection on arrival may suffice. For species such as nonhuman primates, farm animals, wild animals, random source dogs and cats, and non-specific pathogen free rabbits and rodents, appropriate quarantine and isolation procedures must be employed.
- 2. Preventive medicine programs such as vaccinations, ecto- and endoparasite treatments and other disease control measures will be initiated according to currently acceptable veterinary medical practices appropriate to the particular species and source. Only animals of defined health status should be used in research and testing unless a specific, naturally occurring or induced disease state is being studied. Systems should be established to protect animals within the institution from exposure to diseases. Transgenic and mutant animals may be particularly susceptible to diseases and may require special protection to ensure their health. Systems to prevent spread of disease may include facility design features, containment/isolation equipment, and use of standard operating procedures. Training of animal care and research staff is essential to prevent spread of animal diseases.
- 3. Daily observation of all animals by a person or persons qualified to verify their well-being is required. It is not necessary for a veterinarian to personally make this assessment each day. However, at a minimum, a trained paraprofessional or technician must observe and document the care of each animal every day and there must be a timely and accurate method for conveying information regarding animal health, behavior, and well-being to the veterinarian.
- 4. Disease surveillance is a major responsibility of the veterinarian and includes routine monitoring of colony animals for the presence of parasitic, bacterial and viral agents that may cause overt or inapparent disease. Additionally, cells, tissues, fluids, and transplantable tumors that are to be used in animals should be monitored for infectious or parasitic agents that may cause disease in animals. The type and intensity of monitoring necessary will depend upon professional veterinary judgment and the species, source, use and number of animals housed and used in the facility.

- 5. Diagnostic laboratory services can be located for use as appropriate. This should be discussed with veterinarian and principal investigator as necessary.
- 6. Animals with infectious disease must be isolated from others by placing them in isolation units or separate rooms appropriate for the containment of the agents of concern. In certain circumstances, when an entire group of animals is known or thought to be exposed or infected, it may be appropriate to keep the group intact during the time necessary for diagnosis and treatment, for taking other control measures, or for completion of a project.
- 7. The veterinarian has authority to use appropriate treatment or control measures, including euthanasia if indicated, following diagnosis of an animal disease or injury. If possible, the veterinarian will discuss the situation with the principal investigator to determine a course of action consistent with experimental goals. However, if the principal investigator is not available, or if agreement cannot be reached, the veterinarian has authority to act to protect the health and well-being of the institutional animal colony. The veterinarian's authority is exercised with the concurrence of the IACUC and the Institutional Official.

B. HANDLING AND RESTRAINT; ANESTHETICS, ANALGESICS AND TRANQUILIZER DRUGS; AND METHODS OF EUTHANASIA

Veterinary care includes providing guidance to animal users and monitoring animal use to assure that appropriate methods of handling and restraint are being used and to ensure proper use of anesthetics, analgesics, tranquilizers, and methods of euthanasia.

The veterinarian has the responsibility and authority to assure that handling, restraint, anesthesia, analgesia and euthanasia are administered as required to relieve pain and such suffering in research animals, provided such intervention is not specifically precluded in protocols reviewed and approved by the IACUC. The veterinarian will exercise professional judgment to select the most appropriate pharmacologic agent(s) and methods to relieve animal pain or distress in order to assure humane treatment, while avoiding undue interference with goals of the experiment.

C. SURGICAL AND POSTSURGICAL CARE

Veterinary care includes the review and approval of all preoperative, surgical and postoperative procedures. The institution bears responsibility and assures, through authority explicitly delegated to the veterinarian or to the IACUC, that only facilities with programs appropriate for the intended surgical procedures are utilized and that personnel are adequately trained and competent to perform the procedures. The veterinarian's inherent responsibility includes monitoring and providing recommendations concerning preoperative procedures, surgical techniques, the qualifications of institutional staff to perform surgery and the provision of postoperative care.

D. ANIMAL WELL-BEING

Veterinary care includes responsibility for the promotion and monitoring of an animal's well-being before, during and after experimentation or testing. Animal well-being includes both

physical and psychological aspects of an animal's condition evaluated in terms of environmental comfort, freedom from pain and distress and appropriate social interactions, both with conspecifics and with man. The veterinarian has the authority and responsibility for making determinations concerning animal well-being and assuring that animal well-being is adequately monitored and promoted. The veterinarian exercises this responsibility in review of animal care and use protocols, and has the authority to remove an animal from an experiment which is adversely affecting its well-being beyond a level reviewed and approved by the IACUC. The following examples represent how this responsibility can be met:

- Ensuring the adequacy of the physical plant, caging and ancillary equipment.
- Developing, implementing, and monitoring sound animal care (husbandry) programs including such areas as sanitation, nutrition, genetics and breeding and vermin control.
- Establishing an acclimatization program to adapt animals to either short-term or long-term restraint procedures.
- Improving and enriching an animal's environment to minimize the development of physical or behavioral abnormalities.
- Providing appropriate opportunities for human-animal socialization and acclimatization to the research environment or procedures.
- Performing periodic physical and clinical evaluations appropriate for the species and the experimental situation.
- Providing pre-procedural and post-procedural care in accordance with current established veterinary procedures.

Appendix E

SAMPLE DOCUMENTS USED BY IACUC OFFICE

Sample Checklist for Semiannual Program Review

Sample Checklists for Semiannual Facilities Review

Appendix F

RESOURCES FOR INVESTIGATORS AND IACUC MEMBERS

Staying Connected: Internet Resources for the Institutional Animal Care & Use Committee

A. SEARCH STRATEGIES

There are a wide variety of search engines available for tracking down information on the world wide web (e.g., www.google.com or www.bing.com). Remember, though, that no search engine covers all of the total indexed pages, and the drawback to using search engines is that it takes technique and time to get relevant results.

B. WHERE TO BEGIN

The fastest method when you're looking for information and don't have a good address is often to start from a focused database such as <u>NetVet</u>, or from another highly relevant site. This also has the advantage of letting the site maintain the various critical links, so you don't have to do it!

- 1. <u>IACUC.ORG</u> is an information resource for IACUC members and staff, developed with funding from AALAS. It was developed as on organizing tool to quickly point to a topic of interest, helping IACUC members manage the overwhelming amount of information available on the web.
- **2.** The <u>Animal Welfare Information Center</u> is another great starting point, linking you to everything an IACUC member could ever need or want.
- 3. NetVet covers a huge array of topics and hot links and can get you to almost anything that is animal-related, However, the down side is that because there is so much information, it can still take a little while to track things down.
- **4.** The <u>Canadian Council on Animal Care</u> site contains a wealth of information on animal care and use. They have policies and guidelines on every aspect of animal welfare and much of this information is applicable in the US as well.

C. TRAINING

- 1. The <u>CITI Courses</u> required by CWU includes a complete list, although you are only responsible for those training modules that apply to your protocol.
- 2. This <u>IACUC tutorial</u> is not flashy, but it is a good orientation to the Animal Welfare Regulations and PHS policy for new IACUC members.
- 3. This 2002 version of the ARENA/OLAW <u>IACUC Guidebook</u> is an excellent resource for training or reference.
- 4. The <u>Laboratory Animal Welfare Training Exchange (LAWTE)</u> aims to promote an information exchange among laboratory animal welfare trainers on training programs, systems, materials and services for the purpose of promoting the highest standards of laboratory animal care and use.