



## UNIVERSITY POLICY

### Animal Welfare Policy Governing the Use of Animals in Research, Teaching, Testing, and Production

#### 1. Policy Statement

This policy applies to all research, teaching, testing, or production activities involving vertebrate animals conducted under the auspices of William Paterson University, at all University locations.

The policy provides the following assurances for all procedures using live vertebrate animals:

- Procedures involving animals should be conducted only when they will contribute to the advancement of knowledge that is likely to lead to improvement of the health and welfare of animals or human beings, provide a better understanding of the animals themselves, or for the good of society.
- Animals involved in any research, teaching, testing, or production procedures receive humane care and treatment.
- Animal research is conducted in a well-controlled research environment.
- Concerns regarding the care and use of animals at the University are addressed in a professional and responsible manner.
- Research involving the use of live animals is performed in an ethical manner designed to minimize pain and distress and comply with applicable regulations.

#### 2. Reason for Policy

This policy allows the University to fulfill its ethical obligations to the community at large and its legal obligations to regulatory agencies. It is not intended to limit the freedom of faculty, staff, or students, but to assist in the conduction of research and training at the highest caliber, while adhering to the highest professional standards of their disciplines and regulatory authorities.

#### 3. Who Should Read This Policy

Faculty, staff, and students who use live vertebrate animals for research, teaching, or testing purposes are required to conform to this policy. They should also be familiar with administrative procedures adopted by the University to ensure compliance with the principles of humane animal care and use, and with pertinent laws and regulations.

To ensure compliance, faculty, staff, and students utilizing live vertebrate animals are required to obtain the approval of their respective Institutional Animal Care and Use Committee (IACUC) prior to such utilization. They are further required to comply with such conditions as may be made by the Committee.

## 4. Resources

The University embraces the [United States Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training](#).

The University shall adhere to the Animal Welfare Act of August 24, 1966 (PL 89-544), as amended by the Act of December 24, 1970 (PL 91-579), the Act of April 22, 1976 (PL 94-279) December 23, 1985 (PL99-198), and to all subsequent revisions thereto.

Additionally, the University shall adhere to [The National Research Council's Guide for the Care and Use of Laboratory Animals](#) (most current edition) and to the [Public Health Service Policy on Humane Care and Use of Laboratory Animals](#).

The University will adhere to the [American Veterinary Medical Association's Guidelines for the Euthanasia of Animals](#) for methods of euthanasia of research animals (most current edition).

## 5. Definitions

**The Guide:** Refers to the National Research Council's Guide for the Care and Use of Laboratory Animals

**PHS policy:** Public Health Service Policy on the Humane Care and Use of Laboratory Animals

**Animal Welfare Act:** Refers to the [Animal Welfare Act](#) administered by the United States Department of Agriculture Animal and Plant Health Inspection Service (USDA APHIS)  
**Attending Veterinarian:** The role of the Attending Veterinarian (AV) is defined in the National Research Council's Guide for the Care and Use of Laboratory Animals as the "veterinarian responsible for the health and well-being of all laboratory animals used at the institution"

**United States Government Principles:** Refers to the United States Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training

**IACUC:** [Institutional Animal Care and Use Committee](#)

## 6. The Policy

### A. Introduction

Through its use of animals in research, teaching, testing, or production purposes, William Paterson University incurs certain ethical and legal responsibilities for the humane care and use of those animals. These ethical responsibilities require that faculty, staff, and students use care, wisdom, and humane considerations when deciding on the need for animals, the choice of species, and the number of animals, for research, teaching, testing, or production purposes. In order to promote the humane care and use of animals, the University Institutional Animal Care and Use Committees (IACUCs) are charged with the responsibility for ensuring adherence to appropriate University and Federal policies and regulations, and State and local laws. The University contends that well-conducted research with animals has provided, and continues to provide, information, ideas, and applications that can be obtained in no other way. Medical research produces clear benefits for human health care: Medical advances have contributed substantially to decreased infant mortality and increased life expectancy. In addition, medical and related research also contributes to the

quality and length of life for many animals such as pets, zoo animals, and wildlife, including endangered species.

Before any work with animals commences, all procedures using live vertebrate animals, whether new, on-going, or proposed for funding, and irrespective of the source or presence of funding, must be reviewed and approved by a William Paterson University IACUC. This shall include use of animals for research, teaching, testing, or production purposes. In some circumstances, the work may be reviewed and approved by another institution's IACUC. Any sub-awards that are given to William Paterson faculty for animal studies will need William Paterson IACUC approval and oversight. IACUCs are permitted to make determinations of whether a protocol is required for an activity not clearly involving animal research, testing, or teaching.

## **B. Principles Regarding the Use of Animals**

The University embraces the United States Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training. These include:

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. (The use of statistical models and proper experimental design can help determine the numbers of subjects needed to produce required statistical power. Following such good scientific practice might actually increase the total number of animals used in a project.) Non-animal methods such as mathematical models, computer simulation, and in vitro biological systems should be considered.

IV. Proper use of animals, including the avoidance or minimizing 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 shall be provided as indicated.

VIII. Investigators and other personnel shall be appropriately qualified and experienced for conducting procedures on living animals. Adequate arrangements shall be made for their in-service training, including the proper and humane care and use of laboratory animals. In consultation with the dean, the IACUC chair will determine what animal training courses are required. OSP will monitor training compliance.

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

### C. Mechanisms for Compliance

To ensure consistent policies and procedures across the University, an IACUC Advisory Committee has been established to draft, revise, review, and approve animal care and use policies, guidelines, and Standard Operating Procedures (SOP). Advisory Committee membership must include representatives from administration (the Institutional Official (IO) and/or Research Compliance leadership), the veterinary staff (the Attending Veterinarian or designees), IACUC staff (administrators, IACUC chairs, IACUC members), along with ad hoc members as determined by the Advisory Committee.

The members of the IACUC committee, either the IO or IACUC chair, shall be responsible for monitoring compliance with this policy and with the requirements of applicable laws and regulations. The IACUC Committee is authorized to:

1. Review at least every six months the University's program for humane care and use of animals, using the Guide as a basis for evaluation;
2. Inspect at least every six months all of the University's animal facilities, including satellite facilities, using the Guide as a basis for evaluation;
3. Prepare reports of IACUCs' evaluations and submit the reports to the IO;
4. Review concerns involving the care and use of animals at the University;
5. Make recommendations to the IO regarding any aspect of the University's animal care program, facilities, or personnel training; and
6. Review and approve, require modifications in (to secure approval), or withhold approval of those sections of proposed research or instructional protocols related to the care and use of animals according to the following Public Health Service Policy requirements, and consistent with the United States Government Principles:

#### Implementation of the United States Government Principles:

- a. Procedures with animals will avoid or minimize discomfort, distress, and pain to the animals, consistent with solid 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 sacrificed 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 non-medical 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 most recent edition of the American Veterinary Medical Association's euthanasia guidelines unless a deviation is justified for scientific reasons in writing by the investigator.
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.
  8. Suspend any activity involving animals if it determines that it is not conducted in accordance with the specifications set forth in the Animal Welfare Act, the Guide, or the William Paterson University Animal Welfare Assurance filed with the National Institute of Health's Office of Laboratory Animal Welfare. A suspension may occur only after review of the matter at a convened meeting of a quorum of the responsible IACUC, and with the suspension vote of a majority of the quorum present.
  9. The Attending Veterinarian or designee has the authority to stop any animal study that is not being conducted in compliance with the regulations or this policy, or is not described in an approved IACUC protocol, until such time as an IACUC investigation can be conducted as set out in 6.C.8.

## Roles and Responsibilities of a Veterinarian in a Vivarium

### 1. Animal Health and Welfare Oversight

- Monitor animal health status and prevent disease outbreaks.
- Diagnose and treat illnesses or injuries.
- Establish preventive medicine programs (vaccination, quarantine, sentinel programs).
- Ensure animals are housed and handled according to welfare standards.

### 2. Clinical Care and Medical Management

- Perform medical examinations, surgeries, and treatments.
- Oversee anesthesia, analgesia, and euthanasia protocols.
- Ensure proper pain management and humane endpoints.

### 3. Protocol Review and Scientific Support

- Work with the Institutional Animal Care and Use Committee (IACUC).
- Review animal use protocols for:
  - Humane procedures
  - Proper anesthesia/analgesia
  - Appropriate species selection
- Provide consultations for researchers on experimental design involving animals.

### 4. Regulatory Compliance

- Ensure the vivarium follows:
  - Animal Welfare Act regulations
  - Public Health Service Policy on Humane Care and Use of Laboratory Animals
  - Standards in the Guide for the Care and Use of Laboratory Animals
- Maintain veterinary medical records.

### 5. Training and Education

- Provide supplemental reference for trained research and animal care staff on:
  - Animal handling
  - Surgical procedures
  - Recognition of pain/distress
  - Proper euthanasia techniques.

### 6. Biosecurity and Disease Control

- Implement quarantine and pathogen monitoring programs.
- Investigate abnormal morbidity or mortality.
- Control zoonotic disease risks.

### 7. Facility and Husbandry Oversight

- Evaluate environmental conditions:
  - temperature
  - humidity
  - ventilation
  - cage sanitation
- Ensure enrichment and species-appropriate housing.

## FAQ

### How a Vivarium Veterinarian Evaluates Compliance?

The veterinarian uses systematic oversight methods to ensure the facility meets regulatory standards.

#### 1. Facility Inspections

- Participate in semiannual inspections with the IACUC.
- Evaluate:
  - housing conditions
  - cage density
  - sanitation
  - equipment maintenance.

#### 2. Protocol Compliance Monitoring

- Review active research protocols.
- Verify procedures performed match what was approved by the IACUC.
- Observe surgeries or procedures when needed.

#### 3. Clinical and Health Monitoring Records

- Review:
  - animal health records
  - mortality reports
  - treatment logs
- Identify trends indicating welfare or husbandry problems.

#### 4. Sentinel and Health Surveillance Programs

- Use sentinel animals to monitor pathogens in colonies.
- Analyze diagnostic results from lab testing.

#### 5. Training Verification

- Confirm personnel performing procedures are properly trained and certified.
- Maintain documentation of competency.

#### 6. Audits and Documentation Review

- Review:
  - SOPs
  - drug logs
  - anesthesia records
  - euthanasia logs
- Ensure documentation meets regulatory standards.

#### 7. Post-Approval Monitoring (PAM)

- Observe ongoing studies to ensure:
  - humane endpoints are followed
  - approved methods are used
  - animals are not experiencing unapproved distress.

In summary:

A vivarium veterinarian acts as the clinical care provider, welfare advocate, regulatory authority,

and scientific advisor. Compliance is evaluated through inspections, protocol review, health monitoring, record audits, and direct observation of animal research activities.

Below is a structured overview of vivarium oversight, covering the major regulatory bodies, common audit findings, and typical interview questions for vivarium veterinarians or laboratory animal veterinarians.

## 1. Key Vivarium Regulations and Inspections

In the U.S., vivariums are regulated and assessed by three main oversight systems: federal regulation, federal policy for funded research, and voluntary accreditation.

### Office of Laboratory Animal Welfare (OLAW)

Authority:

Enforces the Public Health Service Policy on Humane Care and Use of Laboratory Animals.

Scope

- Applies to institutions receiving NIH or PHS funding.
- Covers all vertebrate animals, including:
  - mice
  - rats
  - fish
  - amphibians.

### Oversight Method

Unlike USDA, OLAW does not perform routine inspections.

Instead, it relies on:

- Institutional Animal Welfare Assurance
- IACUC oversight
- Institutional reporting of noncompliance.

### Key Requirements

- Compliance with the Guide for the Care and Use of Laboratory Animals
- Semiannual IACUC inspections
- Program reviews
- Reporting serious noncompliance.

Investigations occur when

- Noncompliance is reported
- Whistleblower complaints arise

## 2. Common Compliance Findings During Vivarium Audits

Auditors often identify recurring issues during inspections.

### Animal Health and Veterinary Care

- Delayed veterinary treatment
- Inadequate monitoring of sick animals
- Missing clinical records
- Poor post-operative monitoring.

### Husbandry and Housing

- Cage overcrowding
- Dirty cages or bedding

- Incorrect temperature/humidity
- Poor environmental enrichment.

#### Protocol Compliance

- Procedures performed outside approved protocols
- Incorrect anesthesia or analgesia
- Failure to follow humane endpoints.

#### Training Issues

- Personnel performing procedures without documented training
- Lack of competency evaluation.

#### Recordkeeping Problems

- Missing anesthesia logs
- Incomplete drug logs
- Controlled substance documentation issues.

#### Surgical Compliance

- Improper aseptic technique
- Lack of sterile instruments
- Inadequate recovery monitoring.

#### Occupational Health and Safety

- Missing PPE compliance
- Lack of worker health monitoring.