



UNCW

Care and Use of Animals at University of North Carolina Wilmington

For both humanitarian and scientific reasons, the University of North Carolina Wilmington is committed to assuring that animals involved in research receive proper care. Virtually every major advance in biomedical science has been predicated on knowledge gained through research involving animals. Important knowledge, however, cannot be obtained from experiments involving poorly maintained animals. The University of North Carolina Wilmington therefore is concerned about how and why animals are used in all of its research programs.

The purpose of this publication is to address some of the most frequently asked questions about research involving the use of animals and to clarify the essential role of animals in the search for knowledge.

Does UNCW use animals in research?

Yes. The university maintains, annually, approximately 500 rodents in colonies for research projects. In addition, research is also conducted using turtles, crabs and fish. When birds and loggerhead turtles are captured for research purposes, they are later released alive at or near the point of capture.

Does UNCW use animals in teaching?

Yes. Animals are used in courses which require supervised laboratory studies and demonstrations or observation of animal behavior. For example, both rats and fish are used in psychology courses to demonstrate and practice research techniques. In marine biology and other courses devoted to the study of specific species, most of the animals used for observation are later released alive.

Why are animals used?

The use of experimental animals is essential to develop an understanding of many biomedical, physiological, behavioral and disease processes. Many factors that affect animals (including humans) can only be studied in intact animal systems through the systematic alteration of specific conditions or variables (e.g., diet, environmental factors, physiological parameters). In fact, most biomedical advances would not have been possible without animal research.

Why not use alternatives such as computers and/or cell cultures?

When feasible and appropriate, such alternatives are used. In some cases, alternatives have indeed reduced the need for animal subjects, but they do not totally eliminate it.

How are the animals obtained?

UNCW purchases rodents used in the research and instructional programs from commercial animal breeding companies. No pound animals are used at UNCW.

Who takes care of animals at UNCW?

In every case of instructional or research use of animals, a faculty member is responsible for the care and use of the animals. These faculty members supervise students who are trained in the care of animals, ensuring that all animals receive proper care. In addition, a veterinarian is contracted by the university to routinely inspect the facilities and assist faculty with health-related issues involving the animals.

How are laboratory animals housed?

Animals are housed in environmentally controlled facilities located in individual departments and research areas. Each species is provided with appropriate tanks or cages. The animals are provided with food and water, and their living space is cleaned regularly.

In order to protect the animals from stress and disease, the university animal facilities are not routinely open to the public. Those with a valid reason may address their request to visit the UNCW animal facilities to the Regulatory Compliance Officer, (910) 962-7774 or pretel@uncw.edu.

How do we know the animals are properly maintained and humanely treated?

Numerous internal and external safeguards exist to assure the humane treatment of animals. Our researchers are committed to assuring that laboratory animals receive proper care for humanitarian reasons, as well as in the interest of scientific quality. Valid knowledge cannot be obtained from studies involving poorly maintained animals.

In addition, the university polices itself through an Institutional Animal Care and Use Committee (IACUC). This body regularly inspects and monitors the total animal care and use program to ensure that all components are in compliance with regulations and guidelines.

What is the Institutional Animal Care and Use Committee (IACUC)?

The Institutional Animal Care and Use Committee is concerned with the procurement, housing, humane care, use and disposition of animals involved in teaching and research activities at UNCW. The committee is comprised of faculty members who are experienced in animal research, a member from a non-scientific discipline, a contracted veterinarian, and at least one member from the community. The IACUC reports to the Provost/Vice Chancellor of Academic Affairs who serves as the chancellor's representative and is charged with the responsibility for oversight of the university animal care and use program.

The IACUC oversees the use of all animals used for research or instructional purposes, inspects the animal facilities, and ensures all proposals involving animal use submitted to external funding agencies have obtained IACUC approval for animal-related activities.

Who is allowed to use animals?

Only faculty members, their trained staff, and students under their supervision who have approved plans (protocols) are allowed to use animals in research and teaching.

What are some of the research projects at UNCW that use animals?

There are many fascinating projects conducted by UNCW researchers that involve animals. Research projects include developing cost-effective and environmentally sound methods for marine food production, collecting data on and assisting in the release of porpoises caught in Canadian fish nets, studying rat behavior in the classroom, and optimizing breeding, culture and growth of marine ornamental fishes.

What are some of the benefits to humans resulting from the use of animals in biomedical research?

Virtually all major advances in medicine have been based on knowledge resulting from basic and applied research on animals. For example:

- Insulin, first isolated from and tested on animals, allows most of the 11 million diabetics in the U.S. to live normal lives.
- The polio vaccine was developed through research on animals. This vaccine has almost eliminated polio, from which approximately 30,000 Americans had suffered each year.
- Successful treatments for cancer using chemotherapeutic drugs were first evaluated in animals.

What are some of the benefits to animals resulting from the use of animals in biomedical research?

Biomedical research has led to major advances in veterinary medicine, such as the following:

- Vaccines that protect pets and agricultural animals from such diseases as distemper, feline leukemia, rabies and parvovirus were developed using research animals.
- Treatment for parasites such as tapeworm, heartworm and hookworm, as well as fleas and ticks, have been developed based on animal testing.
- Animals in research have been used to determine the proper nutritional needs of different species of animals.

What university protocols are used in the review and approval of animal use plans?

When a faculty member plans to initiate a research project or teaching activity involving animals, the responsible faculty member must prepare a study plan (protocol) application. This document defines all the particulars including the type and number of animals required and details concerning procedures involved such as anesthesia, surgery, etc. The protocol application is then reviewed by the Institutional Animal Care and Use Committee (IACUC). The purpose of this comprehensive review is to ensure that animal subjects are humanely treated and that the protocol is in strict compliance with government regulations and university standards. If the protocol is approved, the faculty member is permitted to apply for extramural or internal funding support.

The IACUC notifies investigators in writing of its decision to approve or withhold approval of the plans for the care and use of animals, or of modifications required to secure approval. When the IACUC withholds approval, the notification includes a statement of the reasons for its decision and gives the investigator an opportunity to respond.

Who Should People Call?

Persons having questions regarding the use of animals at UNCW should contact the Regulatory Compliance Officer, Office of Research Svcs and Sponsored Programs, (910) 962-7774 or pretel@uncw.edu.