

## Animals in Research

*Veterinarian's Presentation*



The instruction in this module includes:  
**Presentation on *Animals in Reserach***  
**Follow-up lessons on:**  
*Pros and Cons of Animal Research*  
*Animal Research: Case Study*  
*Care of Lab Animals*

### The Veterinary Black Bag Program

Project Goals:

- Develop Veterinarian's Black Bags (VBBs) of instructional items and pamphlets for middle school teachers to support classroom visits by local veterinarians.
- Provide professional development for veterinarians and teachers on how to use items in the VBBs
- Promote inquiry-based thinking about health-related subjects while emphasizing the value of biomedical research and promoting careers in science.



**PEER**

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<http://peer.tamu.edu/VBB/Summary.asp>

## SHOULD WE USE ANIMALS FOR RESEARCH?

Discovery requires research



Do YOU want to be the "guinea pig?"

# Why do we use animals in research?

Scientists have developed many valuable non-animal models (i.e., cell culture, computer) that are useful for medical research, but these models cannot imitate the complicated processes that occur in a living system.

Animals are similar to humans and are good models when humans can't be used.

Animal life is based on the same genetic, biochemical, and physiological principles as human life.



## HUMAN RESPONSIBILITY

Ethical treatment of animals means that those animals used in testing should be treated well.

Treatment of research animals is monitored by Institutional Animal Care and Use Committees.

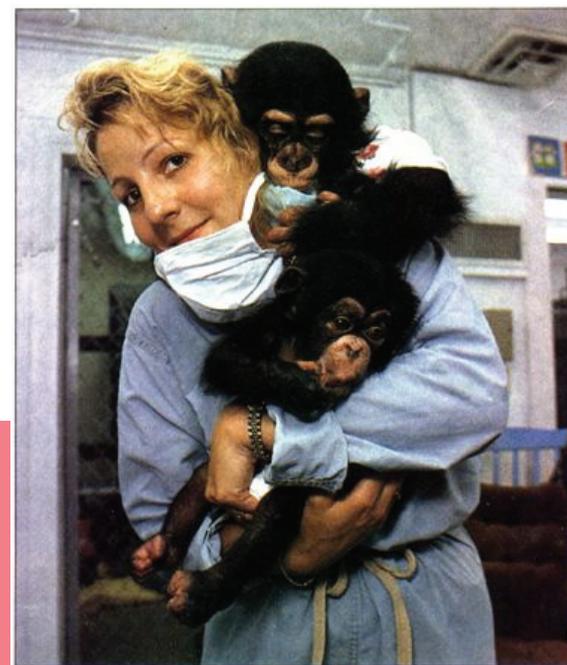


Ethical treatment of animals includes:

- Providing a comfortable living environment
- Minimizing discomfort from testing
- Humanely euthanizing animals

## FEDERAL REGULATIONS FOR ANIMAL CARE

- Derived from the Animal Welfare Act, with numerous amendments
- Enforced by U.S. Dept. of Agriculture inspectors
- Each research entity must have protocols approved by an independent panel of reviewers.



How has animal research benefited both people and animals?

Animals have been used to develop multiple vaccines for use in humans.  
Anthrax: sheep (1880's)  
Cholera: various animals (1885)  
Rabies: various animals (1885)  
Polio: monkeys (1949)(earlier attempts with humans failed & even caused polio)

There is only one way to ensure that a vaccine, drug, medical device, or surgical procedure is safe and effective: test it!