Animals in Research: Myth versus Fact

MYTH: Animals are not required for biomedical research. Most medical advancements can be made with non-animal models.

FACT: Biomedical research involving lab animals has been necessary in almost every significant medical breakthrough of the last century. All present-day protocols for the prevention, control, and cure of disease, as well as relief of pain, is due to knowledge attained directly or indirectly through research with animals. Non-animal models, such as epidemiological studies computers, and cell cultures, are needed in conjunction with animals to advance medicine.

MYTH: Animal research is the exploitation of one species for the sole benefit of another.

FACT: Nearly all biomedical research with lab animals advances veterinary medicine as well as human medicine. These advances help animals live longer, happier, and healthier lives. Dozens of diseases affecting both humans and animals are prevented through the administration of vaccines. Many other conditions are successfully treated, in both humans and animals, with antibiotics, chemotherapeutics, and other drugs developed with the help of animals.

MYTH: Research on animals is not relevant to people because animals are different from people.

FACT: Humans are biologically similar to other mammals. All mammals, including humans, have the same organs that work in the same way and are controlled by the bloodstream and nervous system. Although there are minor differences, these are far outweighed by the significant similarities. These differences can also lead to innovative breakthroughs about diseases and how they might be treated.

MYTH: Dogs, cats, and monkeys are the most widely used research animals.

FACT: The majority of animals used in research in the U.S. (over 95%) are rats and mice obtained from scientific breeding facilities. Dogs, cats, and non-human primates together account for less than 1% and their use has significantly declined over the last 25 years.

MYTH: There are no laws or regulations to protect research animals.

FACT: The USDA has created federal regulations overseeing the care and use of animals in biomedical research. The Animal Welfare Act sets high standards of care for research animals with regard to their housing, feeding, cleanliness, ventilation, and medical needs. Additionally, it requires the use of anesthesia and analgesia for potentially painful procedures and during post-operative care.

MYTH: Scientists are not concerned about the welfare of research animals.

FACT: Good science and good animal care are inseparable. Poor welfare results in unreliable data, and for results to be valid, research animals must be in good condition and appropriately healthy. Additionally, pain and distress can have a negative impact on the immune system. Scientists care about the animals needed for their studies and always strive to protect them from undue stress.