



Common Myths About Animal Research

Myth: Animal research is about testing make-up and cosmetics.

Fact: Biomedical research with animal models is about disease research, finding treatments and cures, and about improving the health of humans and animals. It is about discovery and testing new drugs for safety, refining surgical techniques, and creating medical devices. It about care and cure. It does not involve lipstick or mascara, or testing new shampoos or lotions.

Myth: Cats, dogs, and primates are the animals most used in research.

Fact: Approximately 95% of the total number of animals needed for medical and scientific inquiry in the U.S. are rodents – rats, mice, etc. – specifically bred for this purpose. Dogs, cats, and nonhuman primates *together* account for ***less than 1 %*** of ***all*** animals necessary for medical research. A wide variety of other species make up the remaining 4% from eels to armadillos, zebrafish to frogs, and from sheep to naked mole rats!

Myth: Animal research is scientific fraud, since animals and humans are different.

Fact: There are many similarities between humans and animals. For example, chimpanzees share more than 99% of DNA with humans, and mice share more than 98%! Animals also are susceptible to many of the same health problems as humans – cancer, diabetes, heart disease, etc. Research with animal species has provided much of what we know about disease progressions, care, treatment, and cure. For example, mice have significantly contributed to the advances in the treatment and survival of breast cancer; zebrafish are excellent models for the study hemophilia; and cats have helped us know more about disorders such as Sudden Infant Death Syndrome (SIDS), sleep apnea, and epilepsy.

California Biomedical Research Association

Advancing human and animal health through biomedical research

Myth: Research animals are abused and mistreated

Fact: Good science and good animal care are inseparable. If animals are not well-treated, the science and knowledge from their studies will not be trustworthy and cannot be replicated, an important hallmark of the Scientific Method. Our researchers are strong supporters of animal welfare, and view their work with animals as a privilege. They are legally, and morally, obligated to ensure the health and well-being of all animals in their care in strict adherence to federal and state regulatory guidelines and humane principles, and that our animals are involved only in productive and meaningful studies.

Myth: Animal research is no longer necessary because there are non-animal alternatives to animal experiments.

Fact: Researchers are committed to the search for alternatives to animal use whenever possible for ethical, humane, and economical reasons, and a wide-variety of alternative techniques are actively utilized. For example, cell culture techniques, animal or human serum (a derivative of blood), and computer modeling, among other non-animal techniques. All together, these alternative research methodologies play an important and *growing* role in biomedical research. They cannot, however, reproduce the interactions of an intact whole-living biological system provided by laboratory animals, nor can they reveal potential complications from a drug designed to treat one condition on other organs and systems.

Legally, animal use is a required part of drug development. Current U.S. federal laws and regulations require proof of safety and effectiveness through testing in animal models before any human studies (clinical trials) are allowed to be begin. No new drug may be prescribed in the United States without successful completion of human clinical trials and approval by the FDA. With all the promise and information alternatives to animal-based research offers, it cannot yet fully replace whole animal models in any comprehensive fashion in the foreseeable future.

Myth: Animal experiments are needlessly duplicated.

Fact: Researchers are committed to preventing any unnecessary duplication of experiments, and the rigorous scientific peer review of research proposals, extensive literature searches, and the study of previous experiments helps them

in prevent this. Beyond the obviously ethical consideration in avoiding duplications, there are economic incentives as well. Animal research is expensive and the avoidance of duplicating work is cost-effective as well as ethically sound. Competition for funding also assures that redundant experiments are unlikely to be approved, that projects have been evaluated to determine that animals are even necessary, and that the absolute minimum number of animals is used.

Myth: Millions of stolen pets are sold for research.

Fact: While an active urban legend, animals needed for research do not come from random animal dealers who steal dogs and cats for research. In California, dogs and cats needed for medical research are obtained from specialty laboratory animal breeders, who are registered with the USDA. These specially-bred animals are chosen for their genetic make-up, health conditions, and breeds, something that could not be achieved from the use of animals from pounds or shelters, or from individuals with non-laboratory-bred animals. All dogs and cats must have paperwork that clearly “traces back” to their point of origin to ensure and prove that these animals have never been pets.