



2013 PSBR High School Essay Contest
Grand Essayist

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Why are Animals used in Biomedical Research?

We very often do not consider how much our daily lives depend on the benefits we have received, and continue to receive, because of animal research. Throughout history, scientists have been saving peoples lives by solving medical problems, developing new techniques, treatments, and curing diseases by using animals in biomedical research. Animal research has played a major role in the past one hundred years by improving the lives of humans and animals. Even though the topic of animals used in biomedical research is very controversial to some people or groups, the outcome of using animals in testing facilities, has lead to almost every medical advance in the past decade.

Animals and humans have very similar living systems that can be easily compared to one another making it easy to practice procedures and create vaccines on animals before it is practiced on humans. Not only are animals used to find cures, but they are also used to help test other everyday products we use for ourselves, before we can use them, to know that they are safe for us to use. Three main reasons why animals are used in biomedical research are to: advance scientific understanding, develop solutions to medical problems, and protect the safety of people, animals, and the environment. Animals are used in research when there is a need to find out what happens in the living body of an organism. Animals and humans can have the same diseases. This same research can also be beneficial to the lives of animals that can then help livestock, pets, and animals in zoos live longer, healthier lives because veterinarians can now treat diseases that once killed millions of animals every year. Vaccines for rabies, distemper, and leukemia are all available because of animal research. Biomedical research is not only enhancing the lives of beloved pets, it has also advanced in techniques that are helping to preserve and protect threatened and endangered species.

Many diseases that once killed millions of people every year are now either preventable, treatable, or have been eradicated altogether. Back in the 1900s, the average life expectancy was about 47 years old. The life expectancy has increased over the years for humans due to the progress in medicines and the use of animal research. There are several tragedies that have demonstrated the value of having biomedical research to test the safety of new products. One unfortunate tragedy happened in 1927, when an antibacterial sulfa drug was released in the United States market. At that time, about two manufacturers did not have to carry through any drug testing safety requirements. As a result, 107 people died from this. Today, most Americans can now live in good health for at least seventy years. Without animal research the life expectancy and the quality of life would drop drastically.

People against the use of animals in biomedical research may not be aware that there are laws and regulations that protect the animals. If anyone fails to follow laws or regulations it can

then carry penalties that range from small fines to "cease and desist" orders that can suspend all research using animals at the offending institution and all funding for research.

There have been many contributions from animal medical research such as: antibiotics, artificial joints, organ transplants, open-heart surgeries, diagnostic techniques, and many more contributions to the society of man saving people's lives. The world would be nothing like it is today if it were not for the use of animals in biomedical research.