

**2012 PSBR 7<sup>th</sup> & 8<sup>th</sup> Grade Essay Contest  
First Place**

**Nikki S.**  
Muncy Jr/Sr High School  
Muncy, PA

Bioscience research is a big deal to me and should be to everyone. I think it has had a very positive impact on all life and needs to be continued in the humane and caring manner researchers' use (FBR, "Fact vs. Myth"). People I love have had their lives saved or simply the quality of their lives improved and both they and I are very glad for Bioscience Research. Why wouldn't we want bioscience research?

Most animal research (90%) uses mice/rats. These are bred especially for research and most are not sacrificed. Mice and rats have been and continue to be important contributors in medical advances: development of vaccines for diphtheria, hepatitis, measles, polio, whooping cough and vaccines for use with animals like anthrax, distemper for both our dogs and cats, heartworm, hookworm and other parasites and horse vaccines and treatments for allergies, and improving pet food nutrition (*Who Benefits from Animal Research?* [www.psbr.org](http://www.psbr.org)).

Animal research is also used in research into Alzheimer's disease, Heart Disease, Muscular Dystrophy, Parkinson's disease and the discovery and treatment of HIV. This research helped childless couples become parents since with development in embryo transfer techniques and artificial insemination research (*Who Benefits from Animal Research?* [www.psbr.org](http://www.psbr.org)).

It's not just mice and rats; other animals are used to help us and them. Pigs, cattle, and sheep continue to help with cancer research new surgical procedures and antibiotic and vaccine development for both humans and animals. You see, ALL animals benefit (*Who Benefits from Animal Research?* [www.psbr.org](http://www.psbr.org)).

People ask if these animals can be replaced. Many have been over the years. Some alternatives to animal testing are providing faster results at lower costs. These include bacteria and cell cultures, chemical tests, computer models, and advanced statistical methods. Researchers stay away from the use of animals when they can and they continue to search for alternative methods. New drugs, vaccines, and surgical procedures will still be evaluated in animals before they can be used on humans.

When people ask about benefits from animal research, they need to stop and think. For the most part every major medical advance in the past century has depended on studies involving lab animals. It is important to remember that animals have benefited from the research along with us. In addition to these already mentioned, I could add prevention and treatment of cancer, increased success for organ transplants, medications for high blood pressure, allergy medications, diabetes treatment, stroke recovery and the list could go on and on. But does it really need to? When we just consider all the suffering and the lives saved for both humans and animals because of biomedical research; if we just stop to look at all the positives; if we just stop and think than you will have to agree with this 8<sup>th</sup> grader – we need biomedical research (*What Benefits Have Come From Medical Research Using Animals?*, [www.aalas.org](http://www.aalas.org)).

These are some reasons and facts dealing with bioscience research that make it so important to me, as it should be to everyone around the world.

#### Sources

*Animal Roles in Medical Discoveries*, 2010, American Association for Laboratory Animal Science, [www.Kids4research.org](http://www.Kids4research.org)

*Fact vs. Myth, About the Essential Need for Animals in Medical Research.*  
Foundation for Biomedical Research, [www.fbrresearch.org](http://www.fbrresearch.org)

*What Benefits Have Come From Medical Research Using Animals?* American Association for Laboratory Animal Science, [www.aalas.org](http://www.aalas.org)

*Who Benefits from Animal Research*, [www.psbr.org](http://www.psbr.org)