



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

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The point of Bioscience research is that it's the study of living organisms. This is important subject. It's important because it might help up cure diseases, enhance our senses, or even repair birth defects. Here are a few ways we could improve the human race by Bioscience research.

First, we could use it to cure diseases. We could do this by observing the effects the diseases have on similar organisms. Once we do this, we can find the source of protection. We can find this by tracing the virus (or bacteria) through the organism's body, until it reaches the antibody. When this happens, we will have to observe the effects the antibodies have on the pathogen and find out if the antibody can be used for human gain. If this is impossible, we'll be forced to mutate the antibody, or discard the possibility of using it as a cure completely. We could also use this theory to create livestock resistant to diseases that we are resistant to.

Also, we could use the theory to enhance a species senses, including human's. This could be done by using an organism's body part, such as an eye, and then finding a way to splice it into our system. We could do this by studying the DNA of the body part, and then looking at human DNA. After we did this, we could see the major differences in the DNA, and then to splice them together. We could also take an organism's extremity, compare it to a human's, and then create an artificial synthesis of the two. A third way we could do this is by comparing an organism's DNA to ours, but instead of making an artificial copy, we would try to create an organic copy. The upside to this would be that the copy would be more likely to be accepted by our body. The downside to this would be that it would be expensive and that it might not even work.

Furthermore, we could use it to repair birth defects. We could do this in a number of ways. One way, is that we could study human and animal nerves, and use a combination or the two to repair damaged nerves such as the ones in the arms of babies, so that they would be able to grow normally. A second way, would be to take human (or animal) donor body parts, and to replace the damaged human limb with those. There could be upsides or downsides to this. An upside would be that it would be less expensive than replacing the nerves, but a downside would be that it wouldn't be as natural as the patient's actual growth, which would make it more likely to be rejected by the patient's body.

As you can see, the point of bioscience research is that it is the study of human bodies. This study can help us with many things, ranging from the repair of birth defects, to the improvement of the human senses.