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In many ways, science is what drives human success. Without science, humans would not be as culturally rich or technologically advanced as we are today; we would still be cavemen hunting and gathering food. In addition to this, without science, there would not be the environmental issues such as global warming and food contamination that have been amplified through human actions. More recent science is more ethically concerned; subjects such as pollution, environmental hazards, and the ethical treatment of animals are in constant debate. At this point in science, an almost environmental renaissance is occurring, where a rebirth of ideas centered on environmental harmony is popular and flourishing. Science can be used to improve our world today by cleaning up the pollution we have added to it so that the human population can thrive longer on this Earth.

One way science can improve our world that I have been fascinated by recently is called Enzymatic Bioremediation. As complicated as it sounds, it is very simple and brilliant. What happens is certain enzymes act as a catalyst for the degradation of pesticides and toxins that can harm the environment and food supply. This could effectively eliminate harmful agents from our food and water supply, leading to longer, healthier lives for the human population. This is just one of the many aspects of science that interests me.

I have always known that I would go into the field of science. First it was marine biology, to help conserve the failing reef systems around the world. And then it was biotechnology, in order to possibly alter the genetic make up of organisms so they could adapt to the rapidly changing environments that few animals can keep up with. As I

pondered my possible career choices, I found the commonality in all of them, environmental sustainability. My goals as an environmental scientist are similar to most I'm sure; lower the carbon dioxide levels in the environment to provide for cooler earth temperatures and cleaner air, and fast.

This year, instead of taking the primarily textbook based AP biology class, I am taking biotechnology, which is largely sponsored by Bio-Rad in Benicia. I did this because instead of reading about how restriction enzymes cut DNA in different places, I actually use restriction enzymes to cut DNA in different places. The hands on experience I've had in my biotechnology class has given me enough experience to at least fulfill an entry level research job at the university I attend. I am grateful that I can experience things such as PCR at a young age instead of just reading about them. Now I can detect mutations, recombine, find out who the daddy is, and solve a crime.

As our world changes and science progresses, we need people who are able to clean up our planet and change the old ways of being to new, more environmentally conscious ways of living. This is what I want to do in my life. This is the kind of person I am.