

2024 PLTW Experience Essay Scholarship Winner

***2024 had a word limit of 500 words**

I am envious of people my age who know exactly what they want to do. But, I also know that very few truly do. I have always had an array of interests, and anxiously await the time that one of those interests becomes a passion. I believe that the only way to discover passion is through opportunity. It is important to take full advantage of every opportunity. If I didn't do that, I would be asking myself, "What if?" for the rest of my career.

This said, Project Lead the Way, specifically BI, has created more opportunities than I could have ever imagined. It has shown me that I am capable of difficult things. Working on a semester-long independent research project certainly scared me. I doubted my creativity, perseverance, and overall drive. At first, it seemed to be a huge undertaking. But, as I chipped away, I realized that it was all about the experience, not the outcome. I faced many problems throughout my research, and learning to improvise ultimately led me to better understanding my project.

For example, part of my procedure consisted of an Aloe vera extraction. Nothing went to plan, and after multiple attempts, I produced less than 5% of my expected yield. Instead of quitting, I moved on. I ordered Aloe capsules to finish my experiment. Through this experience, I came to realize that many of the critical antimicrobial compounds found in Aloe vera were filtered out for consumption, which proves that I understand the process.

Not many teenagers have the privilege of working on independent research, and even fewer have access to the mentorship and grant funding that I was fortunate to receive. Over the past few months, I learned to network, ask questions, and display confidence in my work. I will use these skills, both directly and indirectly related to research, far into my future.

Approaching college, I have already faced challenges. But, the excitement for what is to come is overpowering. I am majoring in biochemistry through the Mizzou honors college this fall, and I am so excited. I am anxious to study difficult topics, but ready for the new opportunities. As an undergrad, one of my aspirations is to work in a lab. I plan on reaching out to professors early on- the worst they can say is no! In college, I hope to find my passions from observing others, and put that to good use in a field where I help others. I believe that every aspect of STEM will help our society in the future. Medicine, as an application of science, provides so many intriguing solutions to some of the world's biggest problems. Specifically, I am interested in virology, microbiology, and the contributions of these fields to vaccine development. Additionally, I would love to either be a pediatrician or

study childhood disease. I hope to explore all of these topics and more to determine where I can make my greatest contribution.