

Transforming Public High School Students Into College Graduates

September 30, 2016

Mr. Mark Gunther Eva Leah Gunther Foundation 1660 Bush St., Suite 300 San Francisco, CA 94109

Dear Mr. Gunther,

Thank you for providing me with the opportunity to explore my interest in scientific research through the Summer at Brown Pre-College Program. In addition to working in a science lab, I had the opportunity to grow personally as well. My experience at Brown University exposed me to college life and instilled in me a newfound sense of independence. From completing research assignments to budgeting for groceries, I was responsible for managing my time and responsibilities. I bonded with international classmates and had fascinating discussions about the differences between our countries' societal norms and Disney's indoctrination of gender roles and stereotypes in young children.

For three weeks, I took a course titled "Techniques in DNA-Based Biotechnology." My experience in this class increased my interest in pursuing biotechnology research and taught me the foundational lab skills I'll need in college. I worked in a biosafety level two lab, complete with goggles, lab coats and gloves—equipment that is not always available in my high school science lab. I learned the proper ways to use lab equipment, including centrifuges, a nanodrop concentrator and a gel electrophoresis apparatus. Additionally, I completed experiments independently, learned how enzymes and methylation affect DNA by breaking bonds or "turning off" genes, and created agarose gels that determine the sizes of DNA base pair lengths.

Additionally, I now have a better understanding of how DNA manipulation can be used to create genetically modified organisms.

My experience through the Summer at Brown Pre-College Program has increased my interest in pursuing a career in biotechnology. I have become more confident in my ability to use lab tools and technology. Moreover, I now know for certain that I want to attend a college that offers scientific research opportunities for undergraduate students. Having had a taste of the college experience and a better understanding of the course of study I wish to pursue, I now feel more confident that I will be able to achieve my goals through college and beyond.

Sincerely,

Esmee Morales

Esmee Mordes