

Though it was a childhood curiosity about the human body that developed into my passion for bioengineering, my decision to pursue this passion through graduate studies has been largely influenced by personal experiences. These personal experiences have led me to believe in the value of science and engineering and the importance of reaching out to meet the physical needs of others. Through graduate studies, I hope to incorporate these personal interests into a career of bioengineering research.

One of the strongest influences on my decision to pursue graduate studies is my belief that science and engineering are empowering and can change and improve lives. Science and engineering have led to technologies that have vastly enhanced society. Recognizing these impacts has fostered my curiosity for new knowledge and passion for using this knowledge for development. As the first person in my family to pursue a four year college degree, I have found that education in science is personally empowering and will enable me to pursue my passion as a career. During high school, I dedicated much time and effort to my studies and I was offered a full scholarship to a university. This path would not have been possible without financial support. This scholarship has also funded me to pursue research experiences as an undergraduate. I am thankful for this opportunity, have thoroughly enjoyed my experiences, and feel that these experiences have prepared me for a career in research. In addition, I have felt fortunate to receive a scholarship which is enabling me to pursue additional coursework through a study abroad program. As I will be traveling to Costa Rica this winter, I am enthused to learn about lifestyles different from my own to share my experiences with others.

With gratitude for the opportunities I have been given, I have aimed to give back to the community and increase educational opportunities for others. For example, as a volunteer with an Honor's program, I provided a gifted and motivated elementary-age student with weekly science enrichment activities. After my student graduated from elementary school, I sought another mentoring opportunity and volunteered with a literacy program. I was paired with a student in a low-income school district who was struggling with basic literacy skills, and each week I designed lessons to help my student gain confidence. By the end of the year, my student had improved by two grade levels in reading. Currently, I am a volunteer with a science theater, a group of college students that performs science demonstrations for children across the state to spark scientific interest. I have also served as an "ambassador" for undergraduate research, sharing my experience with prospective students and incoming freshman and encouraging them to pursue research opportunities. I have stood on several student panels to speak with prospective and new students to answer questions about college and undergraduate research. Participating in these outreach opportunities has confirmed my belief in the importance of education and my decision to pursue graduate studies.

In addition to my belief in the power of science and engineering, my motivation to pursue graduate studies has been influenced by my aspiration to improve the quality of life for others. I helped to found my university's chapter of an anti-trafficking organization which is dedicated to ending human trafficking by raising awareness and support to change legal systems. As secretary and public relations officer of this group, I have assisted in raising several hundred dollars each semester to help construct shelters for women at risk. Additionally, I led an Alternative Spring Break program in which I organized a week-long construction project for 30 fellow student volunteers, rebuilding homes destroyed by tornadoes in Alabama. I am also a student leader of an organization designed to help international students adjust to the challenges of living in a new culture. I help organize gatherings where international and American students can share cultures, build friendships, and find mutual support. Outreach

opportunities such as these have strengthened my determination to improve the quality of life for others, and I pursue this desire both on volunteer basis and as part of my work. Through bioengineering research, I will be able to meet this goal by advancing healthcare.

My decision to pursue graduate studies in bioengineering was also motivated by the unexpected loss of my research advisor. He was instrumental in teaching me basic chemical principles, fostering my curiosity for chemistry research, and setting an example of collaboration, outreach, and genuine concern for his students. It was through him that I was introduced to the concept of biomaterials and tissue engineering, and I have continued to pursue these interests by actively seeking and joining a bioengineering lab with a focus in these areas. In the same way that he was able to inspire and teach many students throughout his lifetime, I hope that my work can influence future generations. I aim to have direct influence on future students by pursuing a career in academia in which I can teach and research in the field of bioengineering.

In sum, my decision to pursue graduate studies has been motivated by both my scientific and personal interests. My undergraduate experiences have shown me the value of science, engineering, and education, and of pursuing a career in which I can work to enhance healthcare. In addition to graduate research, I plan to remain active in both scientific and community outreach to continue promoting educational opportunities and improving the quality of life for others.