My past four years at Bridgewater State University have been transformative. I have discovered a love for learning through majoring in chemistry. Every time I consider the next step in my career, my mind arrives at academia. I want to experience long term research projects and lend my growing skill set as I collaborate with professionals in and outside the field of chemistry. I am passionate to educate not only myself as a researcher, but to educate others as a teacher. I know myself as someone who thrives on challenge and discovery. My aim is to reach new limits to what I can understand and apply in chemistry. I am incredibly eager to continue my learning in a new environment.

I've become more certain of my interest in academia due to my active learning and my time spent tutoring. As a student, I struggle to accept things without a full explanation. This interrogative nature has benefited me as I navigate new concepts frequently. I'm excited to reach a higher level of understanding, and share that attitude with the students I tutor. I see tremendous value in being personable as working alongside others is a joy of mine. While answering students' questions, I am always curious why the right answer *is* the right answer. It is my own coursework and helping others that has built my love for understanding how our world works in the context of chemistry. These qualities help me to adapt and enjoy the research setting.

The research I've conducted has been in organic synthesis. I am investigating new and sustainable methods to brominate organic molecules, specifically indoles. Much of my work centers on changing reaction parameters, studying and understanding mechanisms, and using Green Chemistry principles to assess overall efficiency. This past summer I was awarded an Adrian Tinsley Program Summer Grant, which allowed me to work full time on this project. I focused on running reactions simultaneously, and deciding what reaction variables should be further studied. While at times I felt overwhelmed with potential routes that may answer my questions; I manage to become energized by that realization. I am eager to pursue new ideas, even if the answers I'm looking for become increasingly elaborate. It's the complexity that I find so exciting, that there is meaning and so much potential in the challenge I've accepted. Regardless of the failures and dead-ends I have encountered, I always feel as though I have learned and made discoveries.

In my own research, I have discovered a growing passion for design and sustainability. Additionally, I attended the Green Chemistry & Engineering Conference this past summer, and participated in their student workshop that focused on design concepts. The community I engaged has sparked my interest for improving the world through chemistry. I am interested in studying synthetic pathways and deepening my understanding for chemical mechanisms. Dr. xxxx xxxxx's group is of great interest to me as the projects center around developing new organic reactions. Similarly, I am intrigued by Dr. xxx xxxxx's group. My goals to design sustainable methods draw me specifically to their work on non-toxic organic catalysts. Renewable energy has also been an interest of mine. Dr. xxxxx xxxx's study of light harvesting materials seems to be a fascinating contribution to the field of renewable energies. These projects would prepare me to become the growing academic I wish to be. To tackle any of these design challenges at the University of xxxxxx would be an extremely rewarding experience for me.