## **RESEARCH REFLECTION**

Initially, I wanted to perform my research on patents and patent-related documents because the process of patent writing fascinated me after I learned about it in my introduction to bioengineering class, Bioengineering 10. Our professor gave a lecture on patent applications and patents and mentioned to the class that he had been on a team of engineers working with patent applications. This lecture truly incited my interest and inspired me to learn more about the patent application process.

When I first received the prompt for this research project, my mind immediately leaped to patent applications, and I truly believed that this was the perfect opportunity to explore my interest in patents and investigate how they work.

Hearing about research experiences from other students in my major that made it sound like research was very stressful, I began feeling nervous about embarking on my first experience into the world of research. I did not know what to expect from the experience; I did not know whether or not it would go well or not, and having heard stories from others about research gone wrong, I was afraid to fail on my first attempt, and I hadn't even begun yet.

However, despite what other people said about the research process, I began to find what I was researching to be very interesting, especially since it had a direct correlation to my intended major of bioengineering. As I continued to perform research and learn more about patent applications, I began to feel like I was beginning to become a practitioner in the field of bioengineering.

The biggest hurdle I experienced arrived after I completed my first interview. Having a strong knowledge of what I wanted to research and what questions I wanted to ask my first interviewee, my Bioengineering 10 professor, I came out feeling very anxious. My professor had directly altered the problem I was addressing, completely changing the purpose of the majority of the research I had performed in the process. I had originally planned to see how the education system at the University of California, Berkeley could be improved to incorporate patent applications and technical writing for bioengineers. Leaving my professor's room, I came to realize that bioengineers aren't even directly working with patent applications; there was an entire group of people that I had left out of my analysis: the patent lawyer.

I began to fear failure again, especially considering I had been so proud of all the work that I had accomplished up to that point, but after discussing my options for my research with Professor Cole, I was reassured that research is an exciting prospect that is sometimes full of unavoidable pitfalls, such as my experience with having to completely re-evaluate what I was researching in the first place. I performed more interviews, gathered more data, and eventually synthesized a research report that I could appreciate.

As a result of the research that I have performed throughout this research project, my views on research have shifted from believing it is a daunting task to realizing that it is a great experience full of risky decisions and difficult situations. This project has truly helped me learn more about the process of research and how to discover more about my major as a whole.

Furthermore, although there were many surprises that I had to adapt to throughout the research process, I feel like I have grown as a researcher and as a student, despite the fact that I am still only a freshman bioengineer.

One aspect of the research process that surprised me as I progressed throughout the assignment was that once the research began and my creativity began to flow, it became progressively easier to perform the research. With the seemingly endless amount of access to articles and databases through the University of California, Berkeley, I found the research to become less difficult as I performed more of it, which was one aspect of the process that surprised me overall.

I hope that my experience in research for College Writing R4B, along with my research experiences in Bioengineering 10, will continue to provide the foundation for my research endeavors in the future, both near and far. I am particularly proud of the confidence that I possessed when performing my interviews, despite how stressed and anxious I might have felt while performing them. I am also proud of all the work that I have accomplished this semester and on this project, and I hope I can maintain this confidence throughout all my research endeavors and investigations in the future.