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I originally started my college career in the field of Biomedical Engineering, and that was a mistake. After my first semester in the major, I knew it was not right for me. It was hard to decide to go into Biological Sciences, knowing my career prospects would be greatly affected, and that I would have to load on extra courses each semester in order to graduate on time. There is also a stigma here at the University of Cincinnati, where if you drop out of engineering, it is because you were not a good enough or smart enough student to make it. My situation is unique in this way, as I was one of very few students who maintained a 4.0 GPA through both semesters of freshmen year engineering while taking the dreaded “weed-out” courses. Knowing I was doing so well in the engineering courses and having the thoughts of money and career options in the back of my head, I still decided to pursue happiness and sanity over presumed success.

Once I chose Biological Sciences, there was no doubt in my mind that I was in my nerd paradise. Excluding a few courses here and there, (does anyone actually enjoy organic chemistry?), I found myself no longer dreading going to class. I loved what I was learning, and the majority of my professors loved what they were teaching. By joining the college of Arts and Sciences, I now had time built into my schedule to take electives and broaden my knowledge in an array of subjects. I was allowed to pursue multiple interests in my learning, even if those interests were not in a field I planned on pursuing as a career.

To me, the purpose of college is to learn, prepare, and challenge. Learn as much as we can in as many subjects as we desire. Too often, I feel that certain majors, such as engineering, no longer allow students to explore fleeting interests or would-be passions. I believe this type of funnel-learning is a hindrance to students in the long run. It has the same impact as surrounding oneself with only people of similar backgrounds and interests. Where is the challenge, the push-back of different perspectives? By limiting ourselves to becoming an expert in one subject, we deprive ourselves of the ability to analyze from a different angle. There is a reason the phrase is “a Jack of all trades,” and not “a Jack of one trade.” I love my college and my major for so many reasons, but most of all because of one thing: we all love learning. Where else will you find a butterfly researcher asking about the morphology of mosses?

I knew that I wanted to pursue a career in Biology research, but I originally planned on going into genetics and microbiology. I completed a 12-week long research position through the WISE Fellowship program in a cancer biology lab doing genetic research. After that experience, I actually decided I would be much happier working in ecology and environmental field work rather than at a bench working with DNA every day. I then reached out to Dr. Michael Booth to see if he had any available positions to work in his lab, whose research interests are primarily in fish and freshwater science.

Through his mentorship and help, I was able to obtain a STEM Fellowship to work in his lab for 12 weeks the following summer. I gained immeasurable hands-on experience working in freshwater streams and rivers, and it was then that I decided I could truly work in this field for the rest of my life. I was able to gain experience in many projects, including electrofishing,

sampling techniques and practice identifying multiple freshwater species, pit-tagging fish and using telemetry to track their movements, a mussel-host fish test, and a benthic sediment bioturbation experiment to look at the production of greenhouse gases, which then became my capstone project.

Working on my capstone project has been eye opening in many ways. It became an 8-month long experiment, and I had to learn to juggle full-time classes along with an inflexible experiment schedule. I also had to manage other students who were assisting me in the experiment, and I learned a hard lesson in management skills and ensuring other students follow protocol. In addition to designing and performing the experiment, I also had the opportunity to work with and analyze my own data in Excel. While time-consuming, I learned many tricks and tips along the way that will pave the road for data management when I go on to Graduate School.

My last hurrah in my capstone experience was designing, creating, and presenting a poster of my hard work. This experience was my first in presenting a poster, so I had many questions going in. Due to the unique situation students are in with the COVID-19 virus, I had to work independently to create my poster. Although it was not ideal and caused some stress, it gave me a great deal of pride to look at my final project knowing that I created something professional and clear even with the odds against me. I was able to present my poster to our lab meeting, and it was great to receive feedback from other advisors and students, both undergraduate and graduate. I am looking forward to representing my advisor's lab with my poster hung up on the walls of Rieveschl Hall. I am proud to have worked on something considered worthy enough to be immortalized on campus.

As early as I can remember in life, I have held massive amounts of anxiety towards the degrading state of habitats, species diversity, and climate. While I know I could have been successful in any career that I decided to pursue, I do not believe I would be satisfied or fulfilled in any other field beside biology and environmental work. I love knowing that the work I do has the potential to bring about real change. I am beyond excited at the idea of publishing my research to garner public attention. I am not naïve enough to think that any one paper or scientist can make a difference, but any inch of ground we gain could become that last piece that allows it all to come together. I am not a person that can sit by and do nothing, even if the work may be futile.