

The Transformation

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One midnight two weeks ago, I stood on the roof of A.W. Smith gazing up at dark stormy clouds, hoping desperately that they would not break into even a sprinkling of rain as I held on to one side of an expansive Fresnel lens. There were five of us there--all of us students belonging to the High Energy Astrophysics research group on campus--to help a senior student complete her Senior Project that night before the rain could ruin the data gathering. That night, as we rushed to collect enough suitable data, I felt a sense of identity and realized the striking difference between where I was two years ago and where I am now.

Exactly two years ago, I graduated as a valedictorian from Kenton Senior High School, a small school located in rural Ohio. While I remember my high school years fondly, I remember them to be rather intellectually unchallenging and somewhat socially terrifying. Research, rigorous mathematics, and high-tech laboratory equipment had not been a part of my schooling, and I entered Case Western Reserve University as a music-enthusiast, a writer, and a “humanities person” somewhat pushed into an engineering curriculum by pressure from family members.

Even while I was excited for university life, I was apprehensive about my lack of a technical background. My first few months at Case consisted of studying and worrying: Studying insanely to play “catch up” to other students who had been able to take rigorous courses in Chemistry and Calculus in high school and worrying about potentially losing my scholarships in the case I failed attain the high grades needed to keep them. While my interest in the humanities--in history, in music, in writing--never waned, I had less time for them outside the one humanities course I was taking at the time and marching band.

It sounds like an awful, forced first semester of college--and I won't deny that it was somewhat of a forced march through the scholarly end of it--but through slowly struggling through my coursework, I made wonderful friends who were caught in similar situations (and many others who weren't in my situation at all). In high school, I had been socially awkward--but here at Case...everyone had something friendly or interesting to say.

The first year set down the soil.

Eventually, I declared a major in Engineering Physics--which combined one of my existing passions, physics, with my family's desire of me working towards an engineering degree. I was lucky. Soon after I declared my major, I was looking for summer opportunities, hoping to build up my resume. I sent an e-mail to Dr. Robert Brown--and before I knew it, I got a summer position to help him reshape the introductory physics course currently offered to Case students. One week later, a conversation with my advisor, Dr. Corbin Covault, landed me with *another* summer opportunity, which led me to join the High Energy Astrophysics group.

I was thrilled. I had come to CWRU on the promise that it would provide me with opportunities--but I had never realized the full extent of those opportunities and how easily an unexperienced student such as myself could attain them. It was at that moment that I felt the beginnings of a transformation.

I won't go into the fine details of how I juggled the two jobs over the summer. I *will* say that by the end of the summer, I had stopped stressing about myself and my future and started thinking about my *contributions* to the Case community. After working with Dr. Brown, I came to the realization that I could make a difference in future generations of Case students. In addition, working with the HEA research group had given me a sense of purpose and direction.

The summer planted the seeds.

My second year at Case was a departure from the old. I continued to take rigorous courses, but I made it an effort to seize the opportunities I found. I began working as a grader for PHYS 121 as a way to stay connected to the work I did over the summer and I have remained in the HEA group--but I also joined the social sorority, Phi Sigma Rho, and the student executive board for CREATE (Case's Rising Engineers and Technological Entrepreneurs), which provides Case students the opportunity to design a practical applications to be used in the local community. Furthermore, through my involvement, I have come to realize the full passion I have for physics *and* engineering. Throughout my second year, I found myself building a solid bridge into the second half of my undergraduate career.

The second year grew the roots.

My vision for the future is simple: Continue contributing to the Case community in new and interesting ways while maintaining my focus on my academic and social growth. I hope that I can continue to contribute--no matter how trivially--to the undergraduate physics curriculum. I hope that I can finish my current project in the HEA research group (and that we can someday help build that telescope!). I hope that someday, many Case students will know about the opportunities presented to them by CREATE and that I can help those students find that opportunity. I hope that I can meet new people, make more friends, and strengthen the friendships I have gained throughout the past two years.

At the beginning of my freshman year, I was uncertain of what I could do, but at CWRU, I found a sense of purpose (at least for now). It's a lot I have planned--and I know it will take work for me to realize my goals throughout the next two years of my undergraduate career, but hopefully, by the end of my senior year, I will look back at my college career and see a tree of deep roots, it's many branches still reaching high into the sky.