I have been involved in research since my junior year of high school, as a student in the International Baccalaureate program. Required to write a research paper, I ventured to the North Carolina State University library to determine if anyone had done what I wanted to do – namely, research empirically the effects of road networks on snake populations. The vast amount of available material made my quest seem daunting, but I happened upon a few articles, mostly popular websites about other road-impact-on-wildlife projects and studies. These, unfortunately, contained almost no information about how the projects had been designed, what hypotheses had been tested and most importantly, what data actually had to be gathered.

In retrospect, my IB question was too broad, and consequently I was never able to design a truly testable hypothesis about the effects of roads on snakes. Because my field work consisted mostly of driving roads and recording locality data for living and dead snakes encountered, by the end of the project I didn't have the data necessary to ask realistic questions. This highlighted the importance of having an idea of the scope of your project before you start. New to the research process, it was difficult for me to imagine how anyone must go about asking such broad questions about natural systems, which in all their complexity seemed literally impossible to figure out. My advisor, a high school teacher and not a published research scientist, had little to offer me in the way of actual advice. It wasn't until I took my project to one of my co-workers at the NC Museum of Natural Sciences that it really began to take shape. As my friend and driver (I was only 15 years old at the time), he and I began a dialogue about theoretical approaches to ecology which opened my eyes to the inadequacy of science as a tool to explore natural systems. It seemed incredible to me at the time, a firm believer in the sanctity of data and experiments and observations, that there were some questions too large to answer, even with a lifetime of work. I gathered what data I could, analyzed it using the rudimentary statistical techniques I knew at the time, and submitted my results, knowing I had done little more than lay a framework for future studies and had said next to nothing about the state of the system in which I had worked. I received a B. Most importantly, I knew what I would do better next time, how I would change my design to incorporate the most important aspects of what I wanted to study.

College opened my eyes to literature searching. Able for the first time to access the work that had been done by others before me, I was surprised to see how many of my original ideas were not unique. I was equally surprised by the amount of time and energy that obviously went into these projects, often with very little in the way of tangible results. The summer after my freshman year, I received an REU from the NSF to work under 2 highly-motivated, successful Ph.D. students at the Savannah River Ecology Lab. This experience is characterized in my mind by arduous field work, rigorous & frequent peer review of my writing, and newfound access to myriad resources, both print and interpersonal. The ability to communicate daily with actual researchers, people who had published projects and spent much more time in the field than I, was eye-opening in the extreme. I met people incredibly happy with their lives and those who were incredibly discontent as well. I realized, foremost, that it takes a certain kind of person to become a researcher, and that not everyone fit that mold. For the first time in my life, though I loved the field work, I found myself considering other careers.

When I got back to UGA in the fall, I found myself far more able to plan, execute and finish a research project. While I had spent the previous year of my CURO apprenticeship trying to decide on a realistic project, reading up on ideas that interested me, talking to my mentor about possibilities and curiosities, and generally putzing around waiting for something to happen, I was now able to undertake a serious project. There was still the omnipresent difficulty of coming up with a research question, as well as issues with budgets – my grant of $1000 was too small for the original molecular genetics project I wanted, but too large for the field project currently underway. I needed more manageable field work, to balance with my classes. I was beginning to see the reasons for the structure of the Ph.D. program – coursework first, then lots of time to focus on your research. Helpful in the entire process was the fact that my resources continue to expand, as I took more classes, found more great websites and built on my previous bibliography using EndNote. Now my CURO project is nearing a close and I can honestly say that, while I may have learned something about salamanders and snakes by doing the research, I learned far more about research and about myself.