

You probably have not heard of my hometown—Ludlow, Mississippi. It is a small place, with small opportunities and small success stories. People's lives there are stunted and weighed down by so much: lack of employment opportunities, underfunded and poorly staffed schools, inadequate healthcare, and more. My life was no different. Neither of my parents graduated with college degrees. In my community, the biggest role models were people who were good at sports. From that small place, even if I knew what it meant to go to college or graduate school, I had no roadmap to get there. What I did have was a family who supported and believed in me. They believed that, despite coming from a place that was so small, I could be big. And, for as long as I can remember, that has been my foremost goal and aspiration: to be big, to dream big, and to try and be a model for others like me to be big too.

Believing that the odds were against me, I attended vocational school to obtain a carpentry license. During the University of Mississippi APEX Leadership Summit, I realized I had the ability to pursue a degree from the University of Mississippi. Due to receiving numerous amounts of scholarships, my admission into the University of Mississippi started my journey as a young black male first generation college student attending a predominantly white university to pursue a bachelor's degree. My admission and scholarships were landmark accomplishments from someone with a Morton High School Diploma and a native of Ludlow.

Before attending college, I was not exposed to science disciplines nor the degrees and endless opportunities that could be offered through STEM. I would say the first encounter that started me on the journey of pursuing a PhD was applying for a work study job as a research assistant in a Pharmacology research lab. Although I began with simple tasks, my PI, Dr. Nicole Ashpole, and lab technician, Jessica Marshall, soon began to teach me surgical techniques and how to manage the rodent colony. My duties expanded to include organizing and maintaining lab materials, creating various molecular solutions, performing cell culture and molecular biology techniques. My position in her lab has developed my knowledge in chemistry, biology, behavioral analysis, and pharmacy. My first college job as a research assistant developed my love for science and research, which led to my interest in pursuing a PhD.

The following summer after sophomore year, I applied for the NSF-funded International Research Experience (IRES) in Poland. The internship was only awarded to four students who were allowed to travel to Poland for six weeks performing research involving extraction of chemical compounds from mushrooms and plants in one of the most untouched forests in the world, the Bialowieza forest. I was surprised to receive notification that I was one of the final four chosen out of a pool of more than thirty. Along with being chosen as a student for the IRES internship, I applied for the Excellence in Cardiovascular Sciences program at Wake Forest School of Medicine. With great surprise, I was chosen as one of the 11 students to participate in the program. Being accepted into two exceptional research programs, I had to make a choice between cardiovascular or pharmacognosy research. Ultimately, I chose IRES.

With a year of completed research and a summer of international research, I started my junior year of college working in Dr. Ashpole's Pharmacology lab for the second year. The completion of my first solo project earned me a spot to compete at the Mississippi Academy of Sciences Conference. Competing, I gave an oral presentation and a poster presentation. Of the oral presentations, I received 2nd place in the Cell and Molecular Biology Division. I also received 5th place overall for my poster presentation from over 200 presenters. I was featured in the Mississippi Today Paper for participation in the IRES program in Poland which was distributed all throughout Northern Mississippi. My second semester working in the research lab I was awarded a Distinguished Research Citation by the School of Pharmacy. Furthermore, I

received second place at the Chemistry Department's first annual Speed Networking/Research Event. I participated in Posters in the Rotunda event at the Mississippi State Capitol building which allowed me to share our research with our state and local representatives. I was also honored to give a presentation on campus to visitors who work in the government in Washington D.C. One of my biggest accomplishments was being chosen as one of the fifty students out of over a thousand submissions to give an oral presentation at the Annual Biomedical Research Conference for Minority Students (ABRCMS) in Indianapolis and was chosen for a travel award. Being a participant of this national conference allows me to get back to my roots of creating a broader impact to encourage young minority scientist who come from similar backgrounds as me. My undergraduate research career has been fast paced; nevertheless, I have made the most of it and am still striving to do even greater things.

Although it may seem like my undergraduate life has only consisted of science, I have many other accomplishments. The summer before sophomore year I studied abroad for four weeks in Italy. When I returned from Italy, I participated in the New Salem Cemetery Excavation Project, an archeological digging of unmarked graves from the 1800s and early 1900s. Additionally, I was invited to Greece to study classical objects with my advisor. Junior year, I studied abroad in the Caribbean Islands to study the biodiversity and formation of islands. Being a leader is essential and I have had opportunities to show my leadership skills. In 2016, I chose to help charter a national organization here at the University of Mississippi called Minority Association of PreMedical Students. I have also served as the secretary and the president of a historically African American fraternity. From honor societies, joining organizations and studying abroad, my college experience has been defined from inside and outside the classroom.

There are a few things that I am not proud of when assessing my academic record, but I make up for it with the determination to overcome any obstacle that is placed in my path. I have attempted to maintain a strong academic record, maintain campus involvement and continue gaining valuable research experience, yet I have excelled beyond what I sought to do when I first came to the university. Personally, I do not see myself as being an adequate student by only looking at my transcript. Coming from a small town and a high school that did not prepare me to directly attend a university, I struggled with the transition especially academics. Although I had a hard time starting out and transitioning into college I have been able to succeed in Organic, Physics and other upper level Biology classes I have taken. My senior year is filled with biology classes (Introduction to Neuroscience, Immunology, Ecology, Genetics and Physiology) that I am certain I will succeed in.

Through my years of undergraduate research and participation in various types of class laboratories, I have truly found my craft. I am best skilled at handling rodent colonies and performing surgical techniques. Visiting and being a participant of various types of research, I have decided that Neuroscience and Pharmacology are what I am interested in the most. I have always been fascinated by cognitive disorders and cancer; nevertheless, I find the brain very intriguing and that is what draws me to Pharmacology. Studying the brain and how neuro-deficits occur are what I hope to accomplish with the program I am accepted into and chose to become a member of. With hopes of entering graduate school, I am very enthused about the possibility of using optogenetics and studying the effects that astrocytes have on neurons, anion flux, cation flux, but overall, the effects of anion and cation flux on learning and memory. Although my interests seem set, I am very open minded and interested in learning and doing rotations in numerous labs to become confident and sure about my final choice of lab to participate in.

Everything that I have accomplished is completely rare and exceptional coming from my community. Malala Yousafzai said, "One child, one teacher, one book, one pen can change the world." With each class and each professor I met, of course I became closer to many of them. I have created relationships that will benefit me for the years to come. I have become even more persistent and determined to overcome the stereotypical lifestyle of someone with the same background as me. From a freshman with no path to a confident senior with a plan for success, I have only one goal in mind and that is to receive a Ph.D. in Pharmacology. Although I came to the University wanting to be a physician, I decided midway through that I was destined for research. With a Ph.D. in Pharmacology, my options and career choices are endless which is the way that I would like to live my life versus being confined to one career path. Although I wanted to become a physician to help people, I believe that I could be more of an asset on the forefront of medicine. Actively searching, spreading scientific awareness, and continuously becoming knowledgeable about scientific topics defines a scientist. I am confident that I will be a healthy and successful asset to the University of Mississippi Pharmacology Program.