

# Final Reflection on My 2024 Summer Enrichment Experience at the University of Chicago Summer Immersion Program

By Ahmik Ahmed

Life in Carbondale is very simple. You wake up, drive to school, come back, do homework, sleep, and repeat. To me, this was a reliable way to function as a student. I still would have ample time to play games, hang out with my friends, and I still had good grades. For all of my life, I never wanted to move to a different part of the country or go to a school that is far from home because it did not make sense to do so. We have Southern Illinois University in our backyard, and it's not a bad school at all. Also, my parents both live in Carbondale, and so I would be close to them. This summer, however, I had the opportunity of a lifetime. Thanks to the Garwin Family Foundation, I was able to attend a three-week summer program at the University of Chicago. I must say, my experience at UChicago was life altering. In fact, after coming back from UChicago, I have realized three main things: First and foremost, I missed out on many great opportunities throughout my high school career, secondly, I have to make huge adjustments if I want to survive four years in a dorm or apartment, and finally, Carbondale is incredibly boring.

I remember that the week before my orientation at UChicago, a couple of my friends who had done the program in the past reached out to ask me if I was excited or nervous about it. Me being me, I would tell them that I am never nervous about anything. In retrospect, I respect myself for being brave. Unfortunately, the first day at UChicago hit me like a freight train going at a hundred miles an hour. A major problem with me is that I have to rely on my parents for many things, like doing my laundry, cooking, etc. As soon as my parents helped me unpack and organize my dorm at UChicago, they left, and I realized that I was going to be all alone for three whole weeks. I had a roommate, but his flight into O'Hare was severely delayed and so for that afternoon and the greater part of the evening, I really was alone. It was not until the start of the first part of orientation that I finally met a lot of people. More on my social life at UChicago later.

The dorm where I stayed was surprisingly splendid. It was maintained extremely well and the rooms and hallways smelled good. The entire dorm was split into the west and east buildings, and then each building was split into different "houses". Each house had about six resident assistants, or RAs, who looked over the students. I had a great time socializing with our own, and the other house's RAs. Many of these RAs were either Computer Science, Politics, or medical students. The dorm food was also very good. I was worried that it would have been like our school lunch. Instead, I was greeted with an upclass Golden Corral style buffet.

My main goal at this program was to get a better understanding of Biology. When I chose the course, I wanted to take at UChicago, I specifically chose something in the field of Biology because as of right now, my career goal is to become a dentist. In addition to being a dentist, I also would like to innovate, for example, create a new cost-efficient tooth crown. Now, the course that I took, *Biology and Its Modern Applications*, was within my vicinity, and I credit this to the fact that I took AP Biology in my junior year. The course hooked me onto the realm of biological studies and I was eager to learn more. At UChicago, my professor's name was Mr. Pliny Smith and his TA's name was Ms. Vivianna De Alba. Both teachers were incredibly knowledgeable and helpful. One strength of taking a college course over the summer is that university teachers, with their access to state-of-the-art lab facilities, are generally better

equipped to teach and create new knowledge compared to high school instructors (no offense to any of my teachers at Carbondale Community High School). Professor Smith and Ms. Vivianna (we used to call her just Vivianna) were able to teach almost all of both basic and advanced concepts of biology in just three weeks. In addition to lectures, we would have a lab every afternoon. These labs were fully hands-on. All of us had a lab partner and we even had our own DuPont branded lab coats.

Two of the most important labs that we conducted, in my opinion, were the CRISPR (clustered regularly interspaced short palindromic repeats) lab and ELISA (enzyme-linked immunosorbent assay) labs. Through CRISPR, one can delete certain segments of DNA and replace it with a “custom” DNA strand. Our primary focus in the CRISPR lab was to modify the DNA of a certain bacteria so that it does not turn blue when exposed to lactose (normally it turns blue when given lactose). CRISPR is relatively new and is only being used in very small experiments, usually with bacteria. However, if the technology can be further enhanced, it can spark a revolution in the medical world, and in my opinion, in dentistry too. All humans have two sets of teeth that are synthesized, the child and adult teeth sets. If one loses an adult tooth, the cost to get a fake tooth is monumentally high. Instead, through CRISPR, it could be possible to temporarily inject a strand of DNA so that the body synthesizes a real tooth to replace a lost one. I found the idea of researching CRISPR to be very fascinating and may pursue this whilst being a dentist. In fact, during one of the lab days, we had a professor from the medical school who gave us a talk about conducting research and doing business all while practicing medicine. So, it would be possible for me to innovate via CRISPR while being a dentist. Alongside the CRISPR lab, we conducted the ELISA lab, which helps with detecting pathogens in the bodies of organisms. Obviously, the technology behind ELISA was crucial back when the COVID-19 pandemic was creating havoc, but just because the pandemic is over does not mean that ELISA is obsolete. It can still very well be used in basic checkups to ensure the maximum health of patients. Although ELISA is a bit out of the topic of dentistry, I still found the lab that we did over it to be interesting.

My class specifically (there were two classes taught by different instructors) had seventeen students in it. While most of us were from the United States, a handful of the students were from foreign countries, mainly China and Türkiye. An observation that I made was that despite the class being taught at an American university with American standards, all of the international students were easily able to stay on track. This indicates that these students were most certainly the cream of the crops of their respective countries. I had an amazing time working with the international students in my class. Not only did we have a great time, but I also learned many things about their cultures and education systems. I learned that almost all countries offer an Americanized school system, where students can take AP classes just like here. This shows how great of an influence the USA has on the world.

One major obstacle that I had to overcome, and fast, was the fact that I had to walk a total of nearly four miles a day walking to class, back for lunch, back to class, and then finally back to my dorm every day. Outside of class, I had to walk wherever I wanted to go. UChicago is no SIU. Unlike SIU, UChicago is located smack-dab in the middle of Chicago, the third largest city in the USA. Naturally, this means that everything is crowded, and there are zero places to park a vehicle. In Carbondale, I am used to driving my car or being driven around in pure comfort, but that was most definitely not the experience I got for the first few days at UChicago. In fact, only on my second day of class, I remember calling my parents and asking about the possibility of them buying me a car for college. However, after taking some rest that day, I realized that the

people who were seamlessly walking were raised in an urban setting, and that it was going to take me some time to get used to walking. This is sort of ironic because back home, I play lots of basketball. Thanks to a friend, I learned a trick to walk for a long distance, and that was to drink a huge amount of water. I started carrying two thermoses and sure enough, that solved my walking issues. From then on, wherever I went, I took a large water bottle with me. In addition, I took the train for the first time in my life while going downtown in Chicago. I will say though, I did not enjoy it. The metro goes well over, I believe, a hundred miles per hour, and sitting sideways brews motion sickness. Besides all the negatives of non-car travel, these experiences helped me to get a glimpse of the transportation situation in large colleges.

Another challenge that I had to face at UChicago was managing money. At home, if I ask my parents for something and they say no, it usually sticks as that, but at UChicago, I was alone with a copious amount of money. Now, for the life of me, I cannot manage money. To keep things short, I caused a serious amount of damage to my wallet. Luckily for me, I have very nice parents. I realized that this cannot happen in college, and so as soon as I came back home, I started to learn some basic tips on how to purchase wisely. In addition to that, I am taking personal finance my next school year (senior year). My friends at UChicago would see my spending habits and they would advise me to double-think and see if I really needed something. This was very surprising to me because just about everyone at UChicago came from families like mine: either middle- or upper-class households. I assumed that they would be dropping money at whatever chance they had, but I was incredibly wrong. From this, I learned a valuable lesson, and that is the fact that materialistic things are not everything. Sure, someone can be incredibly rich, but that does not mean that they will spend thousands of dollars on designer clothes or cars. One must first focus on their “needs”, and later their “wants”. Additionally, I learned that you should purchase what you like, not what society expects you to buy.

At my high school, I am a fairly popular student, but what I am popular for are two very polar things. Depending on who you ask, I am either a great friend or a not-so-nice person. I will admit that I made some fairly poor decisions in my freshman year, and some people still remember that stuff. Of course, I turned over a new leaf and now I am a nicer person. What did I learn from this: *kindness is king*. Using this knowledge, at the first day’s orientation at UChicago, whoever I met, I would treat them with kindness and respect from the get-go, and that made me incredibly popular. It also helped that I can pop jokes at a moment’s notice about anything. My friend group easily consisted of well over fifty people and [literally] hundreds of people knew my name. Before I go off topic and onto a tangent about my popularity, I must say that I enjoyed having a diverse group of friends. Many of my friends there were from Türkiye, various European countries, China, Thailand, Taiwan, Mexico, Brazil, and many other places. You may think that I was culturally enhanced, but you would be wrong. I feel that in the US, there is a misconception that just because someone is from a different country, their cultures will be completely different, but that was nowhere near the case at UChicago. Everyone fit in just fine and had I not known where everyone was from, I would have safely bet that everyone there was raised in America. Outside of a large friend group, I had a smaller “super” friend group who I hung out with quite a lot. For the sake of their privacy, I will not be listing their names out. Together, we went downtown, to the Field Museum, and a whole list of other places. I had a great time with them and for sure will miss them a lot. On the upside, we all have each other’s points of contact, so we still talk to this day.

Overall, my UChicago experience is one that I will never forget. I strongly recommend the Summer Immersion program to students because of multiple reasons. First of all, the Summer

Immersion program now allows students to apply even earlier to UChicago than regular early decision, which can help with boosting admission chances. Secondly, there is a class for every student in Summer Immersion. The Summer Immersion program offers numerous courses in different STEM and non-STEM fields, like discrete mathematics, physics of stars, biology and its modern applications, Greek philosophy, etc. The program is not too long, nor is it too short. In my opinion, three weeks was ample for social activities and academic enrichment. Outside of academics, this program will teach you self-discipline and will encourage you to pay close attention to your health and money, which are two incredibly important life skills.

Thank you, Garwin Family Foundation.