

UIUC student shares journey to his way to the STEM field

May 1st college decision day has passed us yet another year. Many prospective future freshmen are waiting to send in their determinations of what school they will be attending in the fall to start their young adulthood lives. School rankings, cost of attendance, school location, major specification, class sizes, extracurriculars and campus life are what many future students consider before choosing a school. Salifu Habib a student at the University of Illinois at Urbana Champaign recalls going through the admissions process and choosing to be a STEM major where just 9% of African Americans make up the total representation of the STEM field.

Habib grew up on the south side of Chicago and attended Morgan park high school and Gwendolyn Brooks College prep high school. His Junior year he was apart of the track and field team where he participated in sprints and the field event shot put. Halfway through his senior year he decided it would be best to drop track and field, so that he could stay focused on getting into college along with having a smooth transition from high school to a university.

Similar to other students Habib recalls applying to several schools before making his final decision. He states that “I think one big factor was definitely the cost of tuition. It was very beneficial for me to go to University of Illinois since I would be getting the in-state tuition.”

When choosing a major Habib had no question on what he wanted to study at the University of Illinois for his future career path. Following in his aunt footsteps she was his biggest inspiration in pursuing molecular cellular biology. She has been working at Abbott for a decade and is now a director. When him and his siblings would visit her in California for summer vacations Habib recalls his aunt taking them to the lab where they would see petri dishes with different types of microorganisms on them being incubated. “Abbott was always a part of the family basically.” he states.

High school science was another inspiration for him to picking molecular cellular biology. He had the opportunity to take AP biology which is not a common class for students who went through Chicago public schools in the city.” A lot of students especially in Chicago; a lot of city students don’t get the opportunity to take specific classes to really give them a variety of options basically, students don’t really get that.” Habib states. Taking AP biology is what had him set to pursuing looking at microorganisms.

To understand molecular cellular biology, you must understand the smaller things in life quit literally. “We didn’t just start off as just a huge and complex organism we were always a smaller unit.” Habib states.

Right now, Habib wants to research bacterial resistance because of viruses and bacteria that are constantly harming humans. Like covid (things going on in the world today) their will always be a constant need to research and develop medications that would be able to combat these viruses and bacteria. Habib mentioned “As our technology is improving, they (viruses and bacteria) are also improving genetically.”

As Habib’s passion grew for molecular cellular biology, he understood his true purpose in wanting to research and learn about structure, cells, bacteria, and viruses. From his own

experience he had [gastrointestinal](#) (GI) which is a stomach issues from a bacterium that was proliferating on his stomach. This was causing the production of acid and the acid led to his stomach line deuterating because of this bacterium. “Learning about that made me more fascinated with in microbiology because it’s just like how could something naked to the eye basically cause something this big.” He said. He was able to relate his incident back to covid and the pandemic. You can not see covid floating around in the air because it is naked to the eye, but covid has caused a lot of damage within the last two years “We often overlook things like bacteria, but we overlook it and not understand how serious things like that can get. And that is what made me want to get into the subject.” Habib stated.

Habib is more interested in the conceptual science route for research to learn more about the subject matter. He feels health is also an important matter and is something that is needed, and he isn’t completely ruling it out just yet, but he feels right now that there are many unanswered questions that scientist do not know yet furthermore why continuing research is a very important matter because it is required in order to see how bacteria fairs on a disk. All of this is the hands-on approach to seeing which medicines can fight which bacteria’s off through trial and error. He definitely sees himself in a lab conducting experiments.

When it comes to diversity within the field of STEM Habib talks about how he does have to come over adversities because there are not a lot of people that look like him in his classrooms, in big lecture halls with hundreds of students he would count out 10 or less people of color. Habib states “I could say yea me pursuing this and possibly getting my degree and facing all that adversity would be for to serve as an inspiration for other students that come on this campus and even in other campuses that look just like me to tell them that hey you can do this to.” Habib continues on to say that his major is not easy and is probably one of the hardest time-consuming majors at the University of Illinois, but when you are in fields like health and STEM these majors have to be difficult, so that when you are applying the real life concepts the room for error is gown.

When asked if he believes that the University of Illinois is truly preparing him for this field of work he said “I trust the university because the University of Illinois at Urbana Champaign isn’t one of the like the top twenty schools for no reason, there is obviously a reason for that and getting a degree here holds a lot of weight.” He does believe some things are questionable such as the amount of time the students have to put into work and having to find time to complete it, but he completely understands because the higher your grade level and classes you take the harder, you’ll start getting into actual work. In all he does believe the University is accurately preparing him for the work field, but he stated he also has to prepare himself as well.

Habib hopes to get an internship, so that he can get hands on experience working in a lab, preforming different procedures, and working with DNA molecules. He is actively looking for an internship during the school year while also trying to continue to keep his gpa up. Although he is trying to keep his gpa up he believes that it is not always about your gpa because having experience can be just as important. Habib stated “A gpa doesn’t say everything it says you were working hard through school, but having experience is just as important and so definitely an internship is where I want to be at.” He would like to try and get one either next semester or the

summer, so that he can get the hands on experience that is required to complete for becoming an analyst.

Moving forward he recalled a pharmacy technician job that he had gotten when he was a senior in high school. This also sparked his curiosity into wanting to be involved with the stem field because of medicine. “Even with medication that can be tied with molecular and cellular biology because as you ingest certain tablets or pills there are certain molecular processes that go on in your body as it is digested and that is what would make the medication work.” He said.

He would possibly one day would like to build his own practice based on if he has enough research. Ten years from now he sees himself working in a lab even though he is fixated in the present. Within ten years of graduating he would also like to find a cure to a disease or discovering something that has never been discovered before “I don’t, but something big” he said.

While being at the University of Illinois he has learned that no matter what people look like your peers are your peers. When in a major you will start to notice familiar faces in your classrooms, and you should become familiar with them. “So, I would say don’t count people out just because they don’t necessarily look like you. Even in general in life like you’re not always going to get the opportunity to work with people you’re comfortable with.” In the end stepping out of your comfort zone can be beneficial because people can surprise you. Give help when needed and you will get help back because other people within your major can be struggling with the same common problems.

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