

Final Reflection on My Summer 2023 Enrichment Experience at Michigan Science and Math Scholars Program

By Kaleb Yoast

This summer I had the opportunity to attend a program called Michigan Math and Science Scholars (MMSS) at the University of Michigan to take a two-week program in organic chemistry with the support of the Garwin Family Foundation. On Monday-Friday we spent six hours per day in class, we were either in an auditorium for lectures or in the labs working on hands-on activities. This class has shown me that I am able to do anything that I put my mind towards. This program showed me what going to college would actually be like, having a roommate for an extended period of time, walking to and from class, and having to basically fend for yourself.

In the first week we covered the basics in organic chemistry just to make sure all of the students started the program with the same baseline information. In the first week we were able to have two labs, one basic TLC lab and an IR and NMR lab. These labs were very fun because they tested our ability to problem solve, they also showed us how to use common machines used for organic chemistry. Everyday was an adventure, our instructor would take us for walks around the campus and she also took us to a couple museums to help break up and make six hours of class more enjoyable. While this was not the easiest class I still had an amazing time. On Saturday I stayed in my dorm for the majority of the day aside from when the counselors took some of us to a local farmers market which was a very fun trip because it showed me what life was like in Ann Arbor. On Sunday the program gave us the opportunity to go to the Detroit Institute of Art, which was an amazing experience. I saw many amazing and intriguing pieces that made the trip so memorable. We were able to do some of our homework in little groups. My greatest accomplishment from this program was learning how to believe that I could do the work.

As for the second week we mainly had long lectures but we were able to get into the lab twice. The labs required us to perform Liquid-Liquid Extractions (LLE). These labs were a little more stressful than the first labs mainly because we were required to perform more tasks while handling more dangerous chemicals. On Monday for the afternoon portion of the class our instructor took us to the Michigan Stadium (The Big House). We were able to get a tour of the suites in the building, the locker room, and we were able to go out onto the field. The trip to the stadium is one of my favorite moments while being at UMICH. I would not have made it through this program without an amazing instructor as well as all three of the assistant instructors, they were able to help me understand how certain things worked. Another amazing part of this trip was being able to meet such amazing people, I became such good friends with my peers in the class. I will hold all of the memories that I made with my friends with me for the rest of my life. This program has helped me realize that I want to have a science-based career.

Outside of our classes MMSS, held events every day, trips to local shops, restaurants, games, and sports. I took two tours, one of the central campus, because that's where we were staying and one of the North campus mainly because it has all of the engineering buildings and I am striving to acquire a double major in aerospace and chemical engineering. Another trip that stood out to me was a trip to the Huron River, where we were able to watch the sunset next to a river with our friends. I was absolutely stunned by the number of cool buildings and activities that were at UMICH.

Overall, this has been the most amazing experience. At first, I didn't even know if I was interested in something like this but I am so glad that I pushed through because I had a lot of personal growth. I was able to find out that I definitely want to go to college and be able to do what I love. As for what was learned, common structures of organic molecules, geometric

organic structures, and how stereoisomers work. I would like to thank Ms. Amanda Hickman for her continuous support, she has helped me realize how to achieve greatness. I am so thankful to my instructor Dr. Kathleen Nolta, for everything that she taught me during the past two weeks and I am so indescribably grateful to the Garwin Family Foundation for their support and their ability in helping me to expand my knowledge in the field of science. I will remember and carry this summer experience with me for the rest of my life.