

UChicago PI: Margaret Gardel

Program duration: June 16, 2025 – August 31, 2025

UCTS

Josephine Liang 梁佳羚

I truly enjoyed my time at the University of Chicago this summer. The season itself made everything even better—long days, great weather, and many activities around campus and the city.



Coming from a physics background, I joined a biophysics lab and was mentored by a PhD student with a biology background. This meant there was a lot for me to learn and to adapt to. Over two and a half months, I started by reading papers to gain a deeper understanding of cell size regulation: what questions interest researchers in this field, how they approach these problems, and the conventional methods they use. At the same time, I learned basic biological techniques such as splitting cells, preparing and changing media, making PDMS gels, and coating collagen on coverslips.



Lab members — Liquid nitrogen ice cream event

Later, I carried out simple experiments to get familiar with the lab's custom Python scripts and built my own analysis pipeline. At first, we didn't have a fixed project plan, but through these early experiments and discussions with my mentor, we discovered new questions we were curious about. Together, we designed new experiments to explore them. The process was complicated and time-consuming, and our first attempt even failed. But I



realized that such challenges are part of scientific research—the setbacks make eventual progress even more meaningful.

Collecting data was just the beginning. The real challenge was learning how to process and interpret large amounts of information. Through many discussions, we figured out the best ways to extract meaningful results and what those results could tell us. Finally, we worked on presenting our findings—organizing the data into a clear, logical story that others could easily follow.

Lunch with grad students in UChicago

Beyond research, I truly appreciated the University of Chicago's world-class resources and collaborative environment. I enjoyed both the scientific discussions and the personal connections—whether during lab meetings, casual chats, lunch picnics, dinners in town, or even home gatherings. These experiences not only improved my English but also helped me build lasting relationships. Outside the lab, I also had the chance to explore the city of Chicago itself. From museums and lakefront walks to food, music, and summer events, I had a lot of fun discovering what the city has to offer.

I am very grateful to the UCTS program for giving me this wonderful opportunity. This summer has been both academically enriching and personally rewarding, and I believe the lessons I learned here will stay with me throughout my future research journey.



Home meeting with Chinese speaking saints



Kayaking on Lake Michigan