

インターンシップ体験記 (海外インターンシップの場合は英語で記入)

I had an opportunity to visit the LIU Lab at Yale University for one month. I am grateful to HWIP and Professor Liu for providing me with this opportunity to do this internship. And I would like to share my experiences in this report.

➤ The preparation for this internship

1. Contact(In April)

To decide on a suitable internship location, I searched for laboratories specializing in protein structure analysis using Cryo-ET. After discussing with friends, I chose the LIU Lab at Yale University. I reached out to Professor Liu through my supervisor and had an interview. Eventually, Professor Liu kindly allowed me to learn Cryo-ET in his lab.

2. Documents(From April to September)

Preparing the required documents was a lengthy process. Due to time differences and holidays, I received my DS-2019 just a month and a half before the internship began and promptly applied for my visa. This experience highlighted the importance of allowing sufficient time for document preparation and maintaining frequent communication with the host lab during this period.

3. Housing

I found shared housing through a foreign student group. Some students temporarily rent out their homes, providing a short-term solution for those in need. Additionally, there are many rental apps and websites available in the U.S., such as Airbnb and Facebook.

4. Phone card

Since I was traveling to an unfamiliar place, having a local phone number and a mobile data plan was essential for contacting the lab and navigating. I purchased a phone card on Amazon before departure.

➤ The purpose and what I learned during this internship

The primary purpose of this internship was to deepen my understanding of Cryo-ET. Having familiarized myself with the basics through the *Handbook of Cryo-Electron Microscopy*, I recognized its potential as a valuable technology for my future research projects.

On the first day, I had a long talk with Professor Liu in his office. He shared some advice for me: "Work hard, think, and build a community." And I have been thinking a lot about his suggestion.

As a researcher, burning your passion and working hard towards your goal is essential. If you don't work hard, no one else will do it for you and you will risk being left behind. And if you do research without passion, you're going to make it especially miserable. Next thinking, researchers are not machines, you can't expect to get perfect results by simply repeating the work, you need to keep thinking and improve your own way of research from the experimental results you get. Finally, Community, it is very difficult to try to complete research alone. You need to build a researcher network in the same field and keep talking and exchanging ideas with them.

インターンシップ体験記 (続き)

➤ Growth points and unachieved points

1. Growth points

This internship has been a transformative experience for me. One of the most significant lessons I have learned is how to conduct research effectively. Working with researchers from diverse cultural and educational backgrounds has broadened my approach to problem-solving.

2. Unachieved points

Although my confidence in speaking English has improved significantly, I often struggle to express complex ideas fluently, particularly during academic discussions and presentations. This has limited my ability to fully communicate with other researchers and professors. I have realized the importance of dedicating more time to enhancing my language skills.

➤ The daily life

1. Price

The price should be fine for locals, but for international students, they are much higher than in China and Japan. Additionally, tipping is customary, with a tip of around 10-20% of the bill expected when dining at restaurants.

2. Food

As we know, people in the U.S. enjoy eating pizza, fried chicken, and hamburgers. These meals are often paired with salads, which complement them well. In New Haven, pizza is particularly famous. Although it is expensive, I treated myself to it about once a week.

3. Transportation

I'm thankful that Yale has a comprehensive shuttle system, which allows me to take the shuttle to university every day for free. And rail transportation in New Haven is also very convenient. I traveled from Union Station to New York City by metro in just 2 hours.

4. Security

During my internship, I did not encounter any danger or hear any gunshots, and I personally think it is still relatively safe. However, it is still advisable to go home early at night. The University sometimes sends out alerts about incidents occurring near the campus.



My room



Yale campus



New Haven pizza