

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)

● 準備期間中に学んだこと、遭遇した課題

My first visa interview was rejected. When interviewer asked me "Do you need this student intern as a requirement for your Ph.D.?", I answered "This is not requirement for my Ph.D.". I just said truth thing to him because humanware innovation leading program is not essential to get Ph.D. It's additional degree for us. However, getting J-1 visa as student intern was prohibited by U.S. law, if it's not requirement for Ph.D. So, I have to prepare some of documents to get J-1 visa such as invitation letter from Prof. Koffas and dean's letter. I think this point is a problem in our student internship.

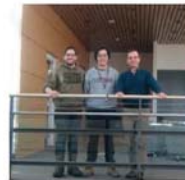
● インターンシップの目的や得た知識。例えば、研究開発の進め方や方針の決め方など

This research project was a challenging for me because my visiting date was only 70 days. So, I had to make plan and carry out it as soon as possible. I realized that planning is important thing in conducting research project.

I also learned about novel genome manipulation method such as CRISPR, CRISPRi and genome integration method which were developed by Koffas lab.

● 同僚・上司・教員とのコミュニケーションについて学んだ点

When I have a problem, I asked someone soon. On the other hand, when they have a problem to use analytical equipment, I possibly helped them because I have a good knowledge in manipulation of it. They really like discussion because it enforce the research project. I thought positiveness is a most important thing to communicate with international researchers. Fortunately, my personality is positiveness and sociable, and so this point was not difficult for me.



Dr. Cress & Prof. Koffas

● 成長したポイントや達成できなかった課題、それらを今後どう生かすか

Research discussion with them in English was actually not so difficult. However, daily conversation was sometimes difficult for me, especially with native language speaker. I can understand what they said, but I didn't know what I should say in English.

I didn't have enough time to conduct the research project with other researchers. So, I will start a new collaborative project with keeping touch them.

● 研究室とは異なる分野、業界で働いたことで得た体験。(良かったことや大変だったこと)

The experience with study in different laboratory was good opportunity for me, because I have never changed belonging laboratory. The labs rule or equipment was totally different. Especially, the view point and concerns for their research was totally different compared with of my laboratory. These experiences are useful to broaden my horizon for science and engineering.

● 週末の活動を含め、宿泊、食事、治安、物価などの現地での日々の生活について

It was really cold in Albany city where I lived in. I was always wearing GORE-TEX clothing, neck gaiter and boots. Especially, it was crazy heavy snow in February. My return flight was canceled by it at first. Fortunately, I left there only 1 day behind.



My return flight was canceled by crazy heavy snow.

インターンシップ体験記 (続き)

There were few Japanese people around Rensselaer Polytechnic Institute. However, I didn't concern to live there because people around me was so friendly and helpful person.

I went to NY city several times. There were often protest demonstrations for new president Donald J. Trump. I think people living in U.S. have a strong concern for their politics than of Japanese people.



Protest demonstrations in New York city.

Public order was so fine around Rensselaer Polytechnic Institute. Dr Trevor John Simmons, who is owner of my housing said me that downtown have bad public order and dangerous for visiting student. So, I have never been there alone. Even TJ is always having a knife in his pocket and a pistol in his car to protect him and his family. He actually encountered crime accident several years ago. After that, he always having them. I've never forget what he said to me, "I don't kill someone with my pistol. Important thing is that if you encounter the accident, you can stop them with your pistol. Don't kill them, but stop them to protect you and your family."

Prices in U.S. were higher than in Japan. I have almost made something to eat by myself and rarely went to the restaurant. Fortunately, TJ and roommate usually take me to a grocery stores and TJ's house have a rice cooker. So, I often made Japanese food in there.



BBQ restaurant

● その他、インターンシップの体験から学んだ重要だと思われること。例えば、インターンシップにおける積極的な活動から博士人材として自らが成長できたと思うこと

U.S. people really like to do everything effectively and conveniently. I felt it not only in daily life but also in conducting research. For example, they usually eat apple without peeling because we can eat apple's skin and peeling wastes a lot of time. Our laboratory didn't have enough experimental equipment (compared with Shimizu-lab) but we can rent it in next door laboratories. We usually share the experimental equipment with them. I think it was convenient approach because they can employ more researchers instead of spending a lot of money the experimental equipment. I also really thought that it's easy to make collaborative project in U.S. They don't hesitate the collaborative project. I think it's more difficult to make it in Japan. If I make the project in Japan, I must complete complicated process and need permissions. We shouldn't hesitate the collaboration, because our objective isn't conducting it by ourselves. Collaboration enforce the speed of the research project and make it better with discussion from the view point of different scientific field.

I'm not good to speak and listen English, but I didn't hesitate to communicate with international researchers. When the first time I met TJ, he said "if you couldn't understand the English conversation, don't you say Yes or No but you should ask again until you completely understand." This became a basic idea of my English communication.



The Center for Biotechnology and Interdisciplinary Studies, the inside, my office

With lab members