

FIELD REPORT

GENERAL IMPRESSION

I think the best way to describe how I felt when I arrived in Boston/Cambridge is impressed. The area is a real melting pot for biomedical research and people from all over the world go there for internships, education or work. One reason for that are the prestigious universities, including Harvard university and Massachusetts Institute of Technology (MIT) located there, but also many pharmaceutical and biotechnology companies have established around the area. Due to this the place is filled with scientists of all levels and ages and when you meet new people one of the first questions will be where they are from and most likely they will work in research too.

In general, Boston and Cambridge are nice cities for living and there is a lot to do. It is easy to get around by foot or by bike, which is convenient since public transport is not really reliable. Located on the east coast Boston is the perfect starting point for weekend trips, for example to New York, Canada or the neighboring New England states. Unfortunately, I was not able to do as many trips as I would have wanted to do due to the COVID-19 pandemic, but I still managed to do some (Niagara Falls, New York City and hiking trips in New England) and to discover the surroundings of Boston.

Winters in Boston are supposed to be pretty cold, with a lot of snow and regular snow storms. However, during my time there the winter was rather mild and I only had two days of snow. Spring and the first days of autumn were very pleasant, in contrast to the summer which can be exhausting due to high temperatures and humidity.

HOST INSTITUTION

I did my internship at the Whitehead Institute for Biomedical Research (MIT) in the lab of Dr. David M. Sabatini. Together with my supervisor Dr. Evgeni Frenkel I was focusing on mitochondrial protein biosynthesis and proteins involved in this process. The Whitehead Institute is a well-established institute in the Cambridge area and home of several research groups working on different topics in fundamental research as well as in more applied fields. Through their collaboration with the MIT they enable members of the institute to use all core facilities of the MIT and thereby enlarge available equipment and methods for their employees.

From day one, I was warmly welcomed to the institute and the Sabatini lab. With around 30 active members the Sabatini group is rather big. For me, it was the first time to work in a group this big but I have to say it is definitely a benefit to have more people with different expertise in the lab. Whenever I was trying new methods, there was somebody around that had at least done something similar before and everybody was happy to help and share their knowledge. In general, the Sabatini lab is a really social lab. There were a lot of social events ranging from journal clubs over beer hours to parties and outdoor activities. Those events really improved the interaction between post-docs and students at all levels (undergraduate, master's, graduate). The Sabatini lab hosted a lot of students while I was there, including many master's students from Europe, which made it really easy for me to find friends.

In addition to lab internal events the Whitehead Institute organized weekly floor meetings and forums to improve the communication between the different research groups. It was always nice to attend

those meetings and see what other people in the building were working on and usually those meetings included free food, coffee and cookies.

In March the Whitehead Institute closed due to the rapid spread of COVID-19 in Massachusetts and stayed closed until June, when they slowly started to reopen with corresponding restrictions. I was impressed how quickly the Sabatini lab and the whole institute adapted to this situation, all meetings were switched to virtual ones, including the social events like coffee and beer hours. Through this lab members were able to stay in touch with each other and keep up to date on new publications and current achievement in biomedical research.

Besides the social aspects, research in the US is really focused on publishing, especially being the first to publish and to publish in high-quality journals. To achieve this, scientists work really hard and long hours. The Sabatini lab might be an extreme example but spending 12 hours a day, 7 days a week in the lab was standard. However, the environment in the lab was really motivating and you were never alone there, which was why I did not really mind the long working hours.

CONTACT WITH HOST INSTITUTION

My contact with the Sabatini lab started with my application and the following Skype interview with my supervisor Dr. Frenkel, which took place one year before I arrived in Boston. From that time on I had regular contact with people there and I can not complain about anything. My supervisor as well as the administrative staff of the lab always replied quickly to my e-mails and helped me to organize everything for my stay in the US, including all the required documents for the Marshallplan scholarship application. Moreover, the immigration office of the Whitehead Institute was really helpful in all visa issues.

RECOMMENDATIONS

Looking back at my internship in the Sabatini lab I can say I do not regret anything. It was one of the best decisions I made so far to go to the US. It was hard to spend three months of quarantine in a foreign country but I am still happy I stayed in the US, because of that I was able to go back to the lab afterwards and the extension of my internship gave me time to perform some crucial experiments and get great data for my master's thesis and the project I was working on.

I would recommend doing an internship in the US to every student that seriously considers working in science and research later on in their career. For me it was an enormously precious experience to work in a lab like the Sabatini lab and to learn from all the passionate scientists that work there.

Nevertheless, students applying for internships in the US should be aware of the work mentality there and the fact that costs of living are definitely higher than in Austria, especially in the Boston area. In this concern, the Marshallplan scholarship was really helpful.