

On January 8th 2022 I departed by plane to Boston to perform my final internship in a lab at the Harvard Medical School, Dana-Farber Cancer Institute. Before I would officially start I had a week to acclimatize to the weather and the time difference, get to know the neighborhood and especially the very confusing lay-out of the different supermarkets. Beforehand, I knew everything in the USA was more expensive, but I was flabbergasted by the prices for vegetables and fruits! They were 3-times more expensive as in the Netherlands. Three peppers (paprika's) were almost 5\$! So, make sure to budget enough money for your living expenses, especially in expensive cities like Boston, New York and Chicago.

I found my place via Facebook Market place. Luckily it was fairly easy to obtain a nice room (it costed me 1 intense week). I myself decided beforehand that I really did not want to move halfway through my internship and skipped all the rooms and properties that had a shorter lease period than my planned stay. However, in hindsight I would like to tell everybody that it is not that bad to move halfway through. This is actually one of the few things I regret: I was unable to move and I would have liked to move. Only when you live in a certain city, you know the good and the bad neighborhoods. You know how far the stores are. You know where your friends live and you get to know your roommates. Almost every other student in my lab did move at some point during their stay and they had no stress and no trouble to find a new place at all!

When I arrived in the Dougan lab, there were 2 other international students and a young American research technician. I was happy for the presence of other age alike students with whom I could undertake activities. Thus, I would like to recommend everybody to ask their professor if there are other students present while you are staying. However, be aware that you should not rely on those people. In my experience, all the students that came from abroad to a lab from Harvard, were (not surprisingly) hard working students. Some of them almost workaholics. They worked 12 hours or more per day, and also came every day of the weekend. Some of them were too afraid to say "no" if somebody asked for help, or wanted to show their supervisors or the professor certain results before the next weekly meeting or they were just bad at planning. Please, don't be those students! Enjoy your time abroad. Go see a movie, a bar, a club. Organize activities yourself (if other's don't). Go to the happy/social hours even if your labmates are unable to go (there will be tons of other people from other labs with whom you can chat). Get to know new people besides those of your lab. Your internship abroad is not only about the science. In my opinion it is actually mostly about you, your growth both professionally and personally.

When I came to Boston, I told my supervisor and professor that I was happy to come everyday and work from 9 to 5 or 6 (and occasionally longer if the experiments were big), that I also wanted some weeks off and that I was not planning to come in the weekends. And guess what, they were totally fine with that! If my planning was busy already, and somebody wanted my help, I just told them that I had no time to help, but would help another day and everybody was ok with that and this also never backfired. So, please don't be shy and humble, but protect yourself and your leisure time! My time abroad has helped me to become more confident and do the things I really wanted to do. I also could be truly myself, without any prejudices from my long-term friends. I could do stuff which I normally would never do. E.g. I went to potlucks organized by random people on Facebook without knowing anybody. Altogether, I learned a lot about myself and therefore am very grateful for the financial aid of the Nora Baart Stichting which made it possible for me to go (and stay) abroad.

On professional level I became more independent. The last months of my internship I operated like a PhD student. I came up with my own experiments, planned them, found protocols for them and analyzed the results without any help. The aim of my project was to develop a new mouse model to investigate the role of CD8+ T-cells during the establishment of pancreatic metastasis. This was my first

time working with animals and it was an interesting experience to do this in the USA. Prior to my internship I did follow a course on the use of animal models for scientific purposes in the Netherlands, but soon learned that the rules and regulations are completely different in the USA. There, they are much less strict on animal welfare. In addition, Harvard, of course, has a ton of money, so they are willing to buy and breed special mice for experiments. They are also less afraid to “waste” mice. The lab I was in even preferred *in vivo* work over *in vitro* work and often skipped *in vitro* experiments. Together this made me conclude that in any future job or project I did not want to solely work with mice or animals, especially not in the USA.

I also want to voice a less popular opinion. Harvard labs are not perfect. I actually think that the labs I have been to in the Netherlands are better than the lab I was in in Boston. The Dutch labs had a much better organization, they were cleaner and you actually knew what was in the freezer in the fridge. Things were almost never out of stock and people kept up with their detailed lab journals. In contrast, the lab in Boston was very messy. There was no organization in the freezers and the fridges at all. Things had to be ordered by people themselves and they often forgot, resulting in very general things being out of stock. Almost nobody had an up to date lab journal, which made it more difficult to use the same techniques as another experiment performed by somebody else. I was the only one that really kept up with the lab journal, which in the end resulted in fellow students asking me for certain protocols, what the expected yield of certain procedures was, how many days they had to culture their cells, etc. I was told that this mentality might be the cause of the working culture at a Harvard lab. Everything is about publications and thus doing experiments and gathering data. All the time used to keep up with the lab journal could be used to do experiments. Until this day I disagree with this mentality and it also made me question published research; I am not surprised anymore that a great deal of research is not reproducible – if you don’t write down how you did it, how can others replicate it?

With regard to the research I also would like to recommend everybody to only go to a foreign lab if you got assigned to a specific project and a supervisor in advance. I saw several students from abroad in my lab (in the end there were 8 other students – busy!) that did not have a designated project or even a supervisor and therefore were quite lost in the lab and did not know what to do with their time. In addition, if you know for sure that you would like to go into industry don’t bother going to a prestigious lab, but do an internship at a company in the Netherlands, this will open many more doors. Yes, you can network at Harvard, but also due to COVID, many meetings and events are still online or cancelled which limits the opportunities to meet other researchers and professors and go to other places than just your lab. Furthermore, most of the people you’ll meet are from the USA and thus not directly of use for any career in Europe, let alone the Netherlands. So in the end, don’t overestimate what an internship abroad on your CV will mean.

There is much more I would like to tell you guys, but then this story will be never ending. I was actually asked to write a half A4, but that was impossible in my eyes. I hope I shared some valuable information and hope that this piece of text is of use for your decision making or planning. If you have any more questions you can try to contact me on LinkedIn e.g. For now, I wish you the best of luck! And please, enjoy your adventure abroad.

