

Final report

Internship abroad

Subject of studies: Human Biology

Bachelor/Master/State exam: Master

Time of internship: 05/02/2024 - 04/06/2024

Place of internship: Amsterdam, Netherlands

Internship institution: Netherlands Cancer Institute (NKI)

At the end of October of 2023, my plans changed abruptly when I decided to terminate the internship where I was planning to do my master thesis after noticing that this was not the right place for me. I always wanted to do an internship abroad but I never thought I could afford it. Therefore, I was very excited to hear about the experience of a very good friend who was supported by Erasmus+ program. Amsterdam was one of the first options that came to my mind since it's a research epicenter in Europe and it's very well renowned especially in the oncology field.

Thus, I figured that the part that would take me the longest time would be the application to the research institute itself. So I started searching for interesting research groups and I applied directly to them. I was very blessed to get the one and only positive response from the group at the Netherlands Cancer Institute (NKI) that I liked the most and had some interviews with them at the end of November. They had a very interesting although challenging project for me in the immunotherapy field and told me that they would be happy to have me in their team. Since this was a great match for me, I started my application in the middle of December at university to do my master thesis abroad and for Erasmus+. I was very happy to see how smooth and easy the application process was. Everyone at my faculty, at NKI and at the LMU Career Service was really open to help me, everything was very clear and worked out in a couple of weeks. By the middle of January 2024, it was official, I was going to do my master thesis in Amsterdam.

Since I wanted to start in February 2024, I've started looking for an accommodation during the application's waiting time. Although I heard that the housing situation was very difficult in Amsterdam, even more than in Munich, I was shocked to see that a room in a shared apartment

was on average >1000€. So I asked everyone I knew, including my lab at NKI, posted on social media, and looked in Facebook groups to find something more affordable. There was some hope, since the NKI had a couple of cheaper rooms available for workers next to the institute, but they were all occupied at the moment, so I was set on the waiting list without an estimate of when I would be given a spot (if at all).

The accommodation was the most challenging part of the preparation. Most of the offers I found were through Kamernet.nl, a platform similar to Wg-gesucht, although this one is not free. This platform is more secure to avoid scam but there were some suspicious offers too good to be true or simply weird there as well, that one needs to keep an eye on. I was persistent and checked 3 times a day for new offers with my application drafts ready to be paste and send. Approximately I've got a response every 15 applications. Many of them wanted me to be there in person (which I understand and might be better to avoid any scam), but this was simply not an option for me. Luckily, I've got an online call with a couple that gave me a good feeling, who was renting a small 9-square meter room in Amstelveen, one suburb of Amsterdam, 30min away from NKI. They were very nice, showed me the whole house online and were even open to lower the rent price to 850€.

I moved there in the beginning of February, one week before starting my internship and although they were nice and the neighborhood was very lovely, they were almost all day at home doing home-office, so I was missing a bit of privacy. Fortunately, I've got a spot in the NKI housing from April onwards, that costed 550€ per month, was much bigger and next to the institute. Thankfully, the family was very understanding of me moving out, since they understood my financial situation.

My internship at NKI was hard but also very rewarding. From the very beginning I was able to use many techniques such as flow cytometry, 3D cell culture, immune cell isolation and also to work independently, which helped me to organize my time and experiments much better. My project was very challenging since it required a technique which I had not much experience with and neither did my group, so many experiments did not work on the first trial and required many optimizations. Nevertheless, this was a great opportunity for me to apply multiple things I've learned during my studies and come up with exciting ideas that I was able to implement in my project. The institute itself had multiple groups that were working on many interesting topics, that I was able to get to know from the weekly talks and seminars at NKI. Moreover, the collaborative

atmosphere of the Institute also allowed me to get in contact with other groups who helped me overcome some challenges of my project. Altogether, this internship helped me understand much better what is important to know for future projects and I think it was the best preparation for a PhD, which is what I want to do next.

Social life was nice at work but difficult elsewhere. Although my group members were very welcoming from the beginning and there were many nice interns with whom I spent most of my time with, it was difficult for me to hang out with them outside work. Most of them were planned out for weeks (which is a very Dutch thing), so it was very difficult to squeeze plans in their schedule! But the fact that I am a very spontaneous and planning weeks ahead is not one of my fortes did not help. Fortunately, there's a "Borrel" every Friday, a Dutch tradition where colleges meet for drinks and snacks at the end of the week, and it was a great chance to relax and get to know new people.

Even though Amsterdam is rather a small city it feels bigger because it's usually quite crowded and is very colorful. There are many good international restaurants everywhere in the city and it can be quite an experience to get to know different cuisines worldwide. There are many internationals living in the city as well so it's quite handy that you can speak English almost everywhere. Nonetheless, I think it's still nice to learn Dutch if one wants to stay here longterm and/or wants to connect better with people.

Something I love about Amsterdam, and the Netherlands in general, is that I can get anywhere with my bike. Personally I used a service to rent a bike monthly called Swapfiets, which only costs 20€. Here your bike is insured, can be repaired without any additional costs and the subscription can be canceled anytime. There is an impressive infrastructure of bike lanes everywhere in the city, cars are very respectful with bikers and it's super comfortable to ride my bike anywhere, once one gets used to getting passed by e-bikes and scooters. On the other hand, the amount of bikes can be quite overwhelming if one is walking through busy streets.

Another thing to be aware of is the weather in the Netherlands. It is not great and can get quite unpleasant. Especially at the beginning of the year, February and March were very cold, rainy,

windy and gloomy, the sun was almost nowhere to be found. One day the wind was so strong that I almost fell from my bike! From April onwards it starts getting better, yet it can be quite unpredictable. Now in the middle of June I'm still waiting for the nice days to come where I can enjoy the weather outside in the terraces.

The cost of living is also a bit higher than Munich. Public transport is one of the most expensive in Europe, especially for trains. Here one pays for the exact length of the travel. Therefore, one needs to check in and out everytime. Although there are some subscriptions, the best way to get around is with your bike. Don't forget to raise your hand for the bus, otherwise they won't stop (I've lost some buses since I'm so used to them stopping everytime they see pedestrians). Eating out prices are similar. But for groceries, it can vary greatly depending where one goes. For instance there are some supermarkets that are quite more expensive than others. My advice is to go to supermarkets such as Dirk and Lidl, other supermarkets such as Albert Heijn or Jumbo can be up to double as much.

I'm happy that I did my internship abroad in Amsterdam. Especially since I could focus on my master thesis due to the support of Erasmus+. Furthermore, at the NKI I was able to learn so much and develop myself further. My internship here also helped me realize the fields where I want to do my PhD in and also that I would like to go back to Germany to pursue my future plans. Therefore, I can recommend anyone who wants to explore an excellent academic environment to do an internship at NKI in Amsterdam.