

# Final report

(Internships Abroad)

## general information on the internship

Subject of studies:	Course of studies (Bachelor/Master/Staatsex.):
Cell and Molecular Biology	Master
Time of internship:	Place of internship:
01/03/2022 – 30/09/2022	Stockholm, Sweden
„Internship title“ :	
Internship at the Karolinska Institutet in the Neuroscience Department	

### Getting Started:

As the end of my Master studies was approaching, I began my search for research assistant or PhD positions within and outside of Germany. During this time, I contacted a researcher at the Department of Neuroscience in the Karolinska Institutet who was working with the vestibular system in mice. After exchanging a few emails over a week, my position as a student intern for 7 months in his lab was decided and I began my preparations for Sweden.

My decision to go to Stockholm was only based on my interest and motivation to work in this lab. Aside from that I did not know anything about Stockholm or Sweden for that matter. Therefore, I was quickly overwhelmed when I started to list the things I would need for my move. Out of the many things I had to prepare, the visa application was the most stressful. Since I was not an EU citizen, I had to apply for and have a residence permit prior to my move to Sweden. Unfortunately, my application process began in December, so I didn't receive much help from my professor or the migration agency due to the holiday season. Luckily, I was able to successfully receive my permit without too much trouble. I also arranged a temporary place to stay until I could move into a more permanent dorm.

Once the preparations were complete, the move to Sweden went on without a hitch but was nonetheless very hectic.

### First steps in Stockholm:

I started working as an intern the day after I landed in Stockholm, so the first week was very stressful as I tried to balance settling down and working in the lab. The accommodation that I chose was only a 5-minute walk away from my workplace so it was very easy to shuttle back and forth. The dorm was relatively new and centrally located, thus allowing me access to various grocery shops and other amenities. I received a lot of help from my colleagues and PI with regards to finding the accommodations and the actual moving process.

One of the most daunting aspects of living in a new country is building a social circle from the ground up while leaving friends and family back home. Luckily, I made friends quickly in among my lab mates and peers therefore the move wasn't as jarring or lonely as I thought it would be because I didn't know anybody here before. My colleagues had also joined the research groups within the last year and were still in the process of adjusting to the new city. This further pushed a certain sense of camaraderie as we were navigating the ins and outs of the workplace and Stockholm. I was pleasantly surprised to know that the KI offered many opportunities to promote health and wellness through access to a free gym, indoor courts and recreational centers, all of which was very useful to have.

### **Internship Experience:**

The internship itself was a very educational and rewarding experience. My responsibilities as a student intern involved helping my supervisor (a senior postdoctoral researcher) with experiments investigation novel cell types in the vestibular system of the mouse. Throughout the internship I learnt how to work with mice as experimental models in understanding the anatomy of the vestibular system and its function. As such I learnt various immunohistochemistry techniques and advanced immunolabelling techniques such as RNAScope. I also became familiar with the neuroanatomy of the vestibular system through microdissections of the mouse. Initially I felt nervous as to how I would fare in such a research lab, but I quickly became independent and started to plan my own experiments and workday. I also became much more confident in the results I produced and was relatively more comfortable presenting my data during lab meetings or one on one discussions with my PI. Bi-weekly journal clubs were also held, during which prevalent papers in the field were discussed in the context of our own experiments. A typical weekday in the lab would start around 9:30 and end at around 17:00. As such I was able to establish somewhat of a work life balance, spending my evenings on hobbies or going out and about with friends while my

mornings were spent working in the lab. As a part of the Department of neuroscience, I was also able to attend various talks by speakers that are leaders in the field

### **Exploring the city and day to day life:**

Before arriving, I was told my many that Stockholm was a beautiful city with great opportunities, so I had high expectations. I was not disappointed, especially since I had moved just in time for the summer. Summer is one of the best times to live and travel around the Nordics, so my summer months were filled with outdoor activities and concerts. As an extra bonus, many of the museums in Stockholm have free admission, so I was able to see a lot of those too!

The public transport system is good, and the city is well connected. Personally, I did not get a chance to use public transport regularly since I lived close to work but nonetheless it was useful while travelling and sightseeing.

I spent most of my leisure time with my friends that I made in the lab as I mentioned before. Since I lived in the dormitory housing provided by the KI many of the others living there also worked in and around my building so making friends with them was also easy. It wasn't as easy to mingle with the other Swedish people in the institute or outside work settings since they are rather introverted and keep to themselves mostly, so all my friends were international students like me.

The only few inconveniences that I would mention while living here for a short term is the 'Personnummer'. This is an identification number of sorts that you can get only if you live here for a year or more. While it is not necessary to have one, it is required sometimes when receiving a delivery, opening a bank account, getting a phone plan etc. So, it might get annoying in day-to-day life but my friends who were already living here were able to help with these things rather easily.

### **Financing:**

One downside to Stockholm is that it is a very expensive city to live in, probably a little higher than Munich (where I lived previously). While student discounts do help from time to time, living frugally is always a good option. Before moving to Stockholm, I was informed by the Swedish Migration Agency that the minimum living costs that I would need to get a residence permit was approximately 8500 SEK not unlike Munich, but I found that while it may be enough to cover basic needs, one should at least have 10000 SEK. Then it would be

easy to cover necessary expenses while occasionally also relaxing with friends in a nice restaurant, in my opinion. Nevertheless, the Erasmus Traineeship grant plus some of my savings from before hand were able to get me through the internship period with no big issues, so it was very helpful.

99% of the purchases I made in store and online were with card which was very convenient for me since my German bank account only had euros, so my purchases in SEK were made automatically. Surprisingly I had not even seen Swedish currency until a few months of living here!

### **Conclusion:**

Overall, I would say that the 7-month experience in Stockholm at the Karolinska was an amazing experience. Moving between cities and countries is a stressful experience and I was riddled with anxiety wondering if it was the right decision, but it definitely paid off. The internship helped me learn many different molecular biology and image analysis techniques. As a budding researcher, I was also thankful to be able work in different labs during my masters. Being exposed to different scientific approaches helped me mold my own methods of scientific thinking.

Apart from the work experience, living in Stockholm also introduced me to an entirely different culture than what I was used to in Munich or any other country I've lived in. I was also able to make new friends from many different countries and speak to other scientists from different labs. Seeing and exploring Stockholm with my new friends was definitely a very valuable experience.