

CoScan Report - Marta Topor

I am a neuropsychology PhD student primarily based at the University of Surrey, England. I have always wanted to arrange a visit to another country to learn new research skills and meet inspiring scientists in my field of work.

Scandinavian countries were an obvious first choice. My goal was to learn how to use a brain activity measurement method called magnetoencephalography (MEG). MEG records the magnetic brain activity using a large machine located in a magnetically shielded room. Leading manufacturers of MEG technology are based in Finland and Sweden and there are many research groups conducting ground-breaking MEG studies within this region. They meet annually as part of the [MEG NORD](#) initiative to share and discuss the latest advancements in the use of MEG for clinical and neuroscience research.

I reached out to the [National Research Facility for Magnetoencephalography \(NatMEG\)](#) at the Karolinska Institutet in Stockholm, Sweden. Karolinska Institutet is a prestigious medical university and the team at NatMEG investigate a range of health conditions relevant to my own work. I was absolutely thrilled when I found out that they would like to host me as a visiting student for two and half months – I felt that this opportunity could not be more ideal.

Working at NatMEG was a great experience. I have learnt a range of practical neuroscience skills. I assisted with a project that aimed to develop a protocol for the study of movement control in Parkinson's disease. First, I had a brain scan myself and then I assisted with brain scans conducted for the purpose of the project. I received great support from the team at NatMEG and as a result I was also able to learn advanced programming skills and make a lot of progress on my own PhD work. I hope that this short stay will result in high quality research reports published in scientific journals in the near future. It has certainly helped me to become a highly skilled scientist and will help to advance my career after I finish my PhD.

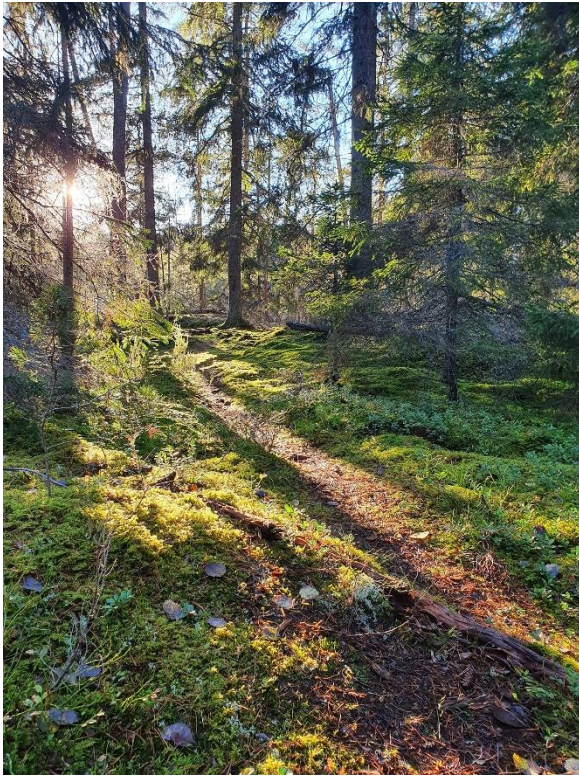


It must also be mentioned that the visit took place during a global pandemic! This has caused a number of complications. Sweden was not on the UK travel corridor list for a very long time and I was informed, that this would prevent me from undertaking my visit. I had lost hope and thought that this great opportunity would have to be cancelled. But in the middle of September, Sweden was unexpectedly added to the list and I arranged my travel right away.

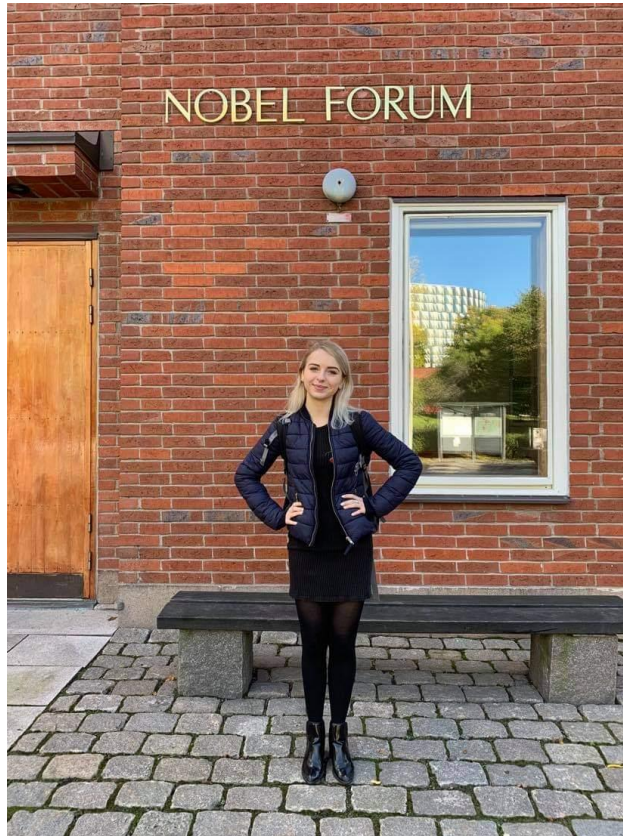
Further pandemic-related complications regarded the fact that most people who are normally based at the Karolinska Institutet worked from home and all in-person meetings were held online. This was challenging for an international visitor as it was harder to integrate within the new environment. However, I joined two online journal clubs and attended regular team meetings with the NatMEG group. I generally tried to network and meet other researchers virtually and I did not feel lonely throughout my stay at all. One of my neighbours was a fellow PhD student who also helped to make my time in Stockholm very special. When working in the MEG lab, we had to wear extra protective equipment and keep the environment sterile clean, but we were lucky to be able to continue working with participants who were keen to have a brain scan taken.



Despite of the challenging circumstances, I also had a chance to explore Stockholm and the surrounding areas. I enjoyed visiting museums before they closed due to the pandemic. I explored the beauty of the local nature when taking walks and jogging. I went on a 20km walking trail around the Tyresta National Park. I also have very fond memories of relaxing in a small wooden sauna hut next to the sea in the town of Tyresö.



I also wanted to experience the culture of Sweden as much as I could during this short period of time. Some highlights include fika (coffee and snack) breaks with colleagues and standing outside of the Nobel Forum as this year's Nobel Prize laureate in medicine was announced. I left Stockholm on the Lucia day, but I did not miss the opportunity to eat many lussekatt buns (sweet saffron bread eaten around the Lucia day). I also tried the julmust (traditional Christmas soda drink) and special glögg with pepparkakor (mulled wine and gingerbread biscuits).



I would like to end this report by expressing sincere gratitude to CoScan for supporting my visit to Sweden; a huge thank you to Mikkel Vinding for being a fantastic teacher and supervisor during my stay and to the whole NatMEG team for the warm welcome I received; and huge thanks to my peers Dominika Radziun and Ada Juraś for introducing me to the Swedish way of life. I certainly hope to be back for longer one day.