

Dear Marshall Plan Committee,

I spent this past summer (May 28<sup>th</sup>, 2018 – August 31<sup>st</sup>, 2018) working on my research project titled: “Differential expression of meiosis genes during different stages of reproduction in *Daphnia pulex*” at the Ecology Department of the University of Innsbruck under the supervision of Dr. Markus Möst and Dr. Birgit Schlick-Steiner.

On my first day in Innsbruck Dr. Möst invited me to attend a meeting in Zurich at the Eawag Aquatic Research Institute. At this meeting I was introduced to other researchers, including their graduate students, from Germany, Austria and Switzerland who are also heading projects involving different species of the aquatic microcrustacean *Daphnia*. During this time every researcher gave an update on the projects that their labs are currently working on, and their graduate students would do a short presentation to show their progress regarding dissertation work. The graduate students would also identify areas in which they were having difficulty, after which the group would then have a discussion and provide new insights and give advice or assistance where needed. During this meeting, not only did I have the opportunity to network and learn more about the work that other researchers are doing in the field, I also had the opportunity to do a presentation regarding my summer research project and future dissertation work. For me this was a very valuable experience because it allowed me to build new contacts, practice my presentation and public speaking skills, and gave me the opportunity to receive new insights into my project and future dissertation plans from the researchers in attendance.

At the university I felt very welcomed. During the first couple of days I was introduced to other faculty in the department and met with current graduate students to learn more about their projects and future plans. I also received access to an office with a computer where I could work during the day and was given a tour and underwent safety training so that I can access and utilize the lab. During the first couple of weeks while I was waiting for my clones to grow, I had the opportunity to learn how the lab maintains their *Daphnia* clones, grow their algae and make the different media needed to keep the cultures healthy. This was very helpful and I definitely plan on implementing some of these practices at my home lab in Arlington. Every Monday morning we would also have a lab meeting to discuss schedules for the week and to make sure that everybody had everything that they needed in order to accomplish their tasks. Dr. Möst would also be available afterwards to discuss individual projects and give advice as needed. From gathering and growing my clones, doing the lab work and then afterwards performing the RNAseq analysis, I felt very supported and there was always somebody around to help or give advice when a problem would arise.

Innsbruck is also a very beautiful city located in the middle of the Alps with spectacular scenery that I took time to enjoy over the weekends. Some of my favorite activities included walking around the “Altstadt”, drinking a coffee in front of the Golden Roof, and visiting the different churches and museums to learn more about the culture and history of the town and surrounding villages. During the weekends I also enjoyed hiking from Hungerburg to Seegrube and exploring the mountain. I found it very relaxing and it was always a nice break from long hours of lab work and research during the week. With Innsbruck being so centrally located it is also close to other

beautiful cities like Munich, Venice, Zurich and Salzburg that I took time to explore over the weekends. These were all very beautiful cities and I really enjoyed immersing myself in the different culture, learning about the history and trying the local cuisine.

I would highly encourage any student researcher to apply for the Marshall Plan scholarship and to take part in this wonderful opportunity to spend some time doing research abroad. Not only do you get the chance to network and build new contacts, but also to learn new lab skills and different lab practices that you can then take back and implement at your home institution. I would also encourage any participating student to stay for as long as possible. Due to commitments at my home institution I could only stay for 3 months, but if I had the chance, I would stay longer because there is still so much more that I wanted to learn. For me, Innsbruck was also the perfect option because of my field of research and shared interests. If future participants are able to find a lab at the University of Innsbruck with shared research interests, I would highly encourage them to complete their stay there. The International office along with the faculty will ensure that you have a smooth and stress-free adjustment period and can start focusing right away on doing your project.

I personally am a big believer in collaboration and feel that it is one of the best ways to make a meaningful and impactful contribution to science. I really value the contacts that I made there and hope that we can work together on more projects in the near future. One of my supervisors at the University of Innsbruck, Dr. Möst, has even agreed to be a member of my doctoral dissertation committee. I am very excited to have him be a part of it and to continue to strengthen the collaboration between our two labs.

Thank you,

Marelize Snyman