

Teodora Stratulat, PhD student

Home lab: Alexandru Babeş's laboratory, Department of Anatomy, Animal Physiology and Biophysics, University of Bucharest

Host lab: Department of Physiology and Biomedical Physics, Medical University of Innsbruck

Period of stay: September–November 2022

I would like to begin by expressing my gratitude for being given this opportunity. I had a very positive experience at the host laboratory at the Medical University of Innsbruck, and I believe I learned a lot during my stay there. During the two months I got to learn multiple molecular biology techniques, as well as how to use a cryostat, prepare samples, prepare presentations, analyze the data I obtained, and accumulated plenty of theoretical information related to molecular biology and neuroscience. All of this was only possible thanks to the NENS exchange program and grant.

Firstly, I learned how to perform RNA extraction protocols, using both DRG and spinal cord tissue samples obtained from sham mice and mice that had suffered spared nerve injury (SNI). I then learned how to perform the reverse transcription and quantitative real-time PCR reactions, how to use the necessary equipment and software, and how to perform the subsequent data analysis.

Secondly, I received training to use a cryostat and obtain DRG and spinal cord tissue sections for RNAscope, and learned how to perform the RNAscope protocol on fresh frozen tissue samples. For this we used the RNAscope Multiplex Fluorescent Reagent Kit v2 Assay (Advanced Cell Diagnostics, Inc., Newark, CA, Cat. No. 323100). The samples were visualized using a confocal microscope.

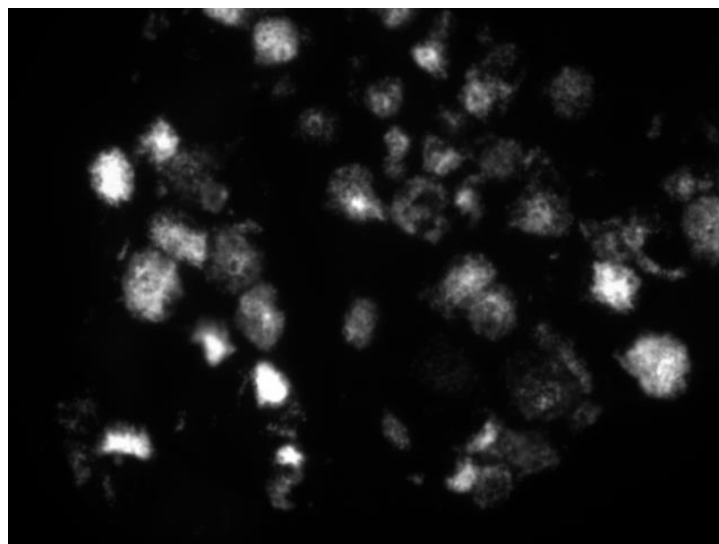


Figure 1. *Scn10a* expression in mouse spinal cord



Being a temporary member of the team also meant that I had access to the lab meetings and seminars that took place every Monday. This gave me the incredible opportunity to listen to and see presentations held by my colleagues about their research on various topics. The presentations I sat in on, the data I saw and the way it was presented inspired me in my own work for my PhD thesis.

Lastly, I had the pleasure of getting to know my colleagues on a personal level and spend some time with them outside of the lab. We all went out for dinner and some of us went hiking and stayed at a cabin in the mountains. I had an incredible time and was very pleased to see that even though we knew each other for such a short time, we could find common ground and become friends.



This experience showed me how important it can be to meet other people in science and to try to forge new connections and relationships. I can honestly say I learned so much from the team in the Innsbruck laboratory. These short two months have been a formative time for me and brought some very interesting people in my life. I am certain the connections I have made while be of great help for my future career.