

DAAD RISE Report

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As I rode the Rurtalbahn for probably the last time, I realized that a once foreign landscape of flat farmland and wind turbines now holds so much significance for me. My home during this three-month internship was the quiet town of Jülich, mostly populated by scientists from its large research centre, Forschungszentrum Jülich.

I knew of eight other RISE interns at the research centre, so someone was always down to get ice cream with me after work. Some of them even became my close friends, and we often travelled together on weekends. While I did have the opportunity to see some amazing places, what truly stands out in my memory is the bonds that we formed over the long train rides (and the infamous Deutsche Bahn delays). These friends, with whom I still maintain contact, not only understood the anxieties of being away from home but also shared a huge passion for science and helping people — what brought us to become RISE interns in the first place.

Through the RISE program, I was paired with PhD student Khadija Boughazi, under the guidance of Dr. Fabio Fiorani, to investigate how elevated carbon dioxide concentrations affects cold-stressed maize seedlings. Maize, also known as corn, is an important staple crop worldwide, but the effects of climate change on global food production continues to be a growing concern. As part of an investigation, I worked closely with Khadija to perform a biochemical assay on maize leaf samples. This assay quantified metabolite concentrations, which are important indicators of plant stress. During the second half of my internship, I learned to convert and analyze data using tools such as Excel and R. From experimental to computational work, I have gained useful skills for my career.

Additionally, I gained unique insights from working abroad in an international research group. The working language was mostly in English, which significantly reduced the communication barriers. Nonetheless, I gradually adapted to the subtle cultural differences, including the straightforward communication style of the Germans, in contrast to the Canadians' generally indirect and more polite approach. I have come to appreciate this efficient communication style and have become more straightforward in my own interactions, even upon returning home.

Overall, this internship has provided me with valuable personal and professional development, as well as a deeper understanding of different cultures. Therefore, I wholeheartedly recommend the RISE program, especially for those who have yet to experience life in a different country. This experience has not only broadened my horizons but has also boosted my self-confidence. Now, I feel more confident in navigating an airport alone (even without sleep) and facing whatever new challenges life may present to me.



My routine bike ride to the Forschungszentrum Jülich research centre.
The research center provided me a bicycle, along with a helmet and a bike lock.

I agree that my report and accompanying pictures may be used by the DAAD in printed materials, presentations, and on websites in order to inform funding organizations, sponsors, and students about the RISE program.