

## Exchange semester at the University of Colorado Boulder

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I performed scientific research at the laboratory of Xuedong Liu during my exchange semester at the University of Colorado, Boulder. My work focused on the enzyme Peroxiredoxin 6 (PRDX6) and its relevance for the PINK1-Parkin pathway. A malfunction within this pathway can cause diseases like Parkinson's disease.

As I never had worked with HeLa cells or any human cell line for that matter, I was able to learn many new methods during my time at the Liu lab. I learned a lot of cell culture techniques like splitting cells, siRNA mediated knockdown or lentiviral transduction but also how to perform live-cell imaging using the Opera Phenix confocal laser scanning microscope. As it is my dream to one day work in medically relevant research and help people with my research, it was a great pleasure for me to be able to work on such a medically relevant topic and greatly increase my knowledge about cell culture which will be essential for the work I plan to do in the future. I am also a big fan of imaging microscopy, and I cherished the opportunity to use such a high-end microscopy tool like the Opera Phenix.

I met a lot of interesting and inspiring people during my exchange semester at the CU Boulder. The interactions with all these new people not only helped me improve my English skills but also helped me learn about my own values. They showed me how much I value collaboration between different laboratories, how beneficial a great work environment can be and how to make scientific research fun instead of only serious. I also gave two presentations during my time at the Liu lab which helped me a lot to improve my presentation skills.

I also took the opportunity to join a few of the many clubs at CU Boulder. I was part of the CU Disc Golf Club and could practice a whole new sport which I had been wanting to try for a while. I was also able to found my own intramural volleyball team with new people I met at the lab and compete against other intramural teams. Moreover, I joined the CU Film buffs and Titan productions which connected me with other people with a neck for movies and gave me the opportunity to be part of student film crews. I also visited the presidential and vice-presidential debate parties. I definitely intend to continue pursuing some of my newfound hobbies now that I am back in Germany.

Moving to a new country and starting research at a completely new facility definitely came with its challenges, but being able to face and overcome them myself increased my confidence in my own abilities.

Besides all the experiences I made at and around CU Boulder, my friends and I used a lot of our free time to travel and experience the amazing nature the National Parks in and around Colorado have to offer. We were amazed by the breathtaking landscapes that are so different from what we are used to from back home.

All in all, the exchange semester at the CU Boulder was an experience that will stay with me for the rest of my life and that I am very grateful for. I learned not only a lot about cell culture but also about myself, my values and the plans for my future. Furthermore, the exchange helped me experience the American culture and helped me reevaluate a few prejudices I had about the US.

Here are some pictures to illustrate all the experiences I made during my exchange semester:



Rocky Mountain National Park:

A chipmunk mistook my bracelet for food

Cell Culture at JSCBB:

Me on my way to examine my HeLa cells



Disc Golf Park in Boulder:

My first time playing Disc Golf as part of the Club

Movie shoot for movie ApeMan:

I got the opportunity to be camera assistant



St. Mary's Glacier in Colorado:

My friends and I enjoyed the view and the impressive interplay of colors right next to the Glacier.