Braunschweig, Germany Rachel Payne



Program: Chemistry Research in Germany, Summer 2018

Major: Chemistry





Work in Germany wasn't easy, particularly in my lab. Expectations were extremely high and staying overtime was normal. Over time, I found myself dragging my feet into work, dreading the monotonous flow of reactions that would absorb my time. Eventually my research postdoc caught my lack of enthusiasm and asked what he could do to help. After a lengthy conversation over lunch, the situation improved. As it turns out, organic

synthesis just isn't my area of interest. I love the process of research, the questions, the analysis, even the experimental writeups: I just don't enjoy the subject itself. Upon returning to the United States I enrolled in entirely new coursework in nuclear engineering. Turns out I love it. Now I am very involved with nuclear research, working my way towards radiochemistry graduate school. Without the experience in my German lab, I likely would not have traveled the same career path.

Earning the Research Experience Badge:



Resiliency is the key to success in science and research. There were many times in my lab when I would put days' worth of work into a synthesis scheme, only to have molecules turn out impure or unusable. For example, I spent an entire week on purification of a single fluorescent target, only to have the analysis data tell me it wasn't even there

to begin with! The entire time I had been isolating one of the impurities. My only option was to go back to the drawing board, reconsider my synthesis plan. and then try a different method. As my postdoc pointed out, there wasn't any use to dwelling on my failure; I should learn from my mistake and move on. In order to succeed, I must be able to fail and move on from that failure. Some problems can't be solved with one swift answer, especially in research.

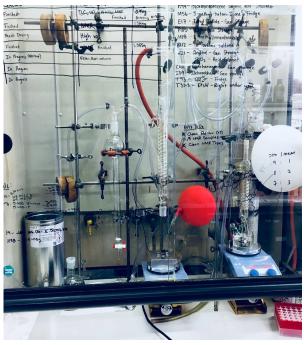
Transferable Skills:



I learned to collaborate with others in the lab. discovering that the wisdom and experience of my coworkers could push my project to the next level. I now use a greater degree of collaboration in my job as a pharmacy technician as well as in my research efforts here at the University of Utah. I have a better tendency to ask others when I experience a complex problem rather than struggling to solve it myself. In

addition, at the end of my experience I wrote up experimentals for the reactions I performed. This write-up increased my technical writing abilities, a skill I use daily in my research work and studies.





"The process of elimination is more about being willing to try something new than being able to reject something outside the scope of your view. I tried something new and I didn't enjoy it. More than being a waste of time, it refined my view of the future."



