Newcastle University's Institute of Neuroscience in Newcastle, England

Tyisha Griffiths, 2019
The Institute of Neuroscience
My Summer Project

- I worked in Jenny Read’s (a professor at the Newcastle University) Vision Lab
- I ran this experiment that was centered on 3D depth vision
- The project was centered around the Mixed Polarity Advantage originally found in Harris & Parker’s 1995 research (showed that people perform better on 3D test that had mixed colored dots)
- I ran trials on myself and my partner in order to collect data.
- The goal was to help my supervisor come with an explanation for this phenomenon

Figure 2. Sample stimuli. (a) Mixed-polarity stimulus (black and white dots). (b) Same-polarity stimulus. Stimulus parameters: $N = 396$ dots, no overlap, binocular correlation $C = 100\%$, disparity step $\Delta = 1.4'$, disparity noise $\sigma = 3.0'$ (when viewed in experimental apparatus). These stimuli can be viewed either with crossed or with divergent fusion; it will simply reverse the sign of the disparity step.
On the left is HW.204. This is the room where we ran our experiments. On the right is a picture of my lab partner running the experiment on a 3D monitor.
On the left is a photo of me in the lab running the experiment. On the right is a photo of my lab partner (also running the experiment).
This is the office space. There are PhD students/master students who work along side us. Pictured here are two PhD students.
Impact: We discovered this cool trend in the data that could possibly alter the way neuroscientist understand the visual system.
Traveling to Rome: I traveled to Rome this summer with some of my friends who were in Europe.
Impact on career:

I really enjoyed the time that I spent doing research in the lab. While working there, I got to conduct an experiment on children. That was one of my favorite moments. I still think I’d like to pursue a M.D PhD program so that I can combine both research and medicine (I need a medical license to work with children).
Concluding Remarks

Newcastle is a fabulous city. Likewise, Newcastle University is an amazing Institute. The people there (especially Professor Jenny Read) are amazing. This internship really has inspired me to pursue a career in research. I recommend anyone thinking about research (neuroscience) to go! You'll have a wonderful time. Thank you 😊