4-1-2019

Neurochet

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Neurochet is a combination of two ways of exploring the world: science and art, or, more specifically, neuroscience and crochet, and they came together for me between the summer of my freshman and sophomore years. I had started working in a laboratory a few months ago, and we had recently been discussing a part of the brain called the cerebellum. The structure is both complicated and simple, and I could not understand it for the life of me... until I crocheted its neurons into a scarf. To put it together, I sifted through diagram after diagram and caption after caption, connecting dots between different cells, different placements in the cerebellum, and different connections between each of those cells. Physically crocheting and drawing crappy little pictures of the cerebellum (to the right) was such an amazing learning process for me.

Before I crocheted the Cerebellar Scarf (to the left), I was one of those people who would never call myself artistic ---science and art seemed very far apart indeed. But art is an incredibly powerful way to both apply and, as I did, to learn science. People who consider themselves artsy may have at their disposal a very powerful tool to understand the world around them, one that I wish high school touched on and used much more often.

The goal of neurochet is to offer more opportunity for people to learn about neuroscience through art, specifically people who would consider themselves unable to learn about it through podcasts or texts.

I knew I wanted this project to explore diverse people in neuroscience and the cutting edge work that they do, so I turned to a set of wonderful graduate students whose involvement and spotlight will show the diversity in the field. I started by discussing with the graduate student his or her work in as much detail as I could understand; this would help me crochet something more accurate to the reality of the project. Then I recorded a video of the student giving a two-minute, public-friendly summary of their work, which I edited with Adobe Premiere. After, I would start the crochet process.

I wanted to make pieces people could use in their daily lives. For example, I studied the part of the brain that processes touch information, the primary somatosensory cortex, and I chose to make it into a hat I could wear around and use as a visual aid when my family or friends asked what I did in the lab. My crochet consultant, the brilliant and lovely Robin Folmer from Iowa City’s HomeEc, helped check over these patterns and gave advice for wording, among other help.
When the pattern was finished, I would compile it, the video of the graduate student, and a small summary of their work into a single document to give to the Editor-in-Chief of the Latham Science Engagement Initiative’s website, Michael Westphal, would upload into the website (to the right). I chose to upload all this there instead of a face-to-face event as it allows more people to access the project and for longer. Timothy Nguyen, the social media director, as well as the Department of Biology and the Iowa Neuroscience Institute shared the website on Facebook. Thanks to that, more than 60 people had viewed the project in under a week.

I intend to continue Neurochet across my last year at the University of Iowa and possibly into graduate schools; it has taught me much about the process of creating crochet patterns, communicating science, and the interconnectedness of art and science.