David St-Amand

University of California at Berkeley

Personal statement

We effortlessly comprehend the world around us, experience feelings, have profound thoughts, and yet we have no clue how our brains do it. I've always been fascinated by this puzzle of how the brain works. As a teenager, I loved to theorize about how we perceive the world and think. hours pondering about how expectations affect our feelings, how irrational our decisions are, and how the mind works. This curiosity of mine eventually turned into a passion, which lead me to pursue a career in psychology and neuroscience. Learning about these topics mesmerized me, and I started to dream of discovering theories that would explain the experimental findings we'd learn of in class. More specifically, I wanted to understand how neurons learn to wire themselves in a way that is computationally efficient. To pursue this goal, I started my Master's in neuroscience and studied the primary visual cortex.

Shortly after starting my MSc, my mother was diagnosed with advanced cancer. The news was devastating and it took me everything I had to keep working as a graduate student. Three years later, and a few months before she passed away, she asked me if there was anything that kept me going in life. To answer her question, I jokingly told her I was going to earn a Nobel Prize and that she had to stay alive so she could be there. I was too embarrassed to tell her this was my dream, but it later became clear she saw right through me and understood my true intentions. While I don't know whether I will be able to earn a Nobel Prize, I want to uphold my word to my mom and become the best researcher I possibly can. I know she wanted me to be happy and pursue my dreams, and the memory of her grants me the motivation to do just that.

My aspiration as a researcher is to become a professor and open my own neuroscience lab. I would like to build computational models based on known neuroplasticity to replicate known experimental findings, such as the receptive fields of neurons in V1 and CA3. To achieve this, I want complete a neuroscience PhD and become an expert in theoretical neuroscience and computational modeling. The University of California at Berkeley is the ideal choice for my graduate research because of the Redwood Center for Theoretical Neuroscience. These researchers are leading experts in theoretical neuroscience and I would love to be granted the opportunity to learn from them. I'm excited to pursue my dream and study neuroscience for my PhD, which I'm sure would make my mother proud.