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What Drives You?

The architecture of the brain—just like the brain itself—is complex. In college, I plan to major in neuroscience. My fascination with how the brain makes decisions has long intrigued me. Witnessing the thought processes of people in various locations made me realize how much I want to solve the complex puzzle called the brain. Specifically, I am fascinated with neurodegenerative disorders. The majority of neurodegenerative disorders are sporadic and have no obvious underlying origin, making it very hard to understand what initiates the diseases. These conditions currently have no cure. The possibility of solving this complex problem excites me.

My passion started when I took a college psychology course in which I created a zombie who lacked dopamine and acetylcholine. Wanting to share my interest with younger kids, I handmade a book introducing them to the different parts of the brain. In 2021, I volunteered with Luv Michael, an organization that strives to educate and employ autistic adults. Wanting to increase my knowledge even further, I began my internship at the Central Utah Public Health Department in August 2022. I was able to observe the epidemiologist work on a potential case for Creutzfeldt-Jakob Disease (CJD). After witnessing the substantial disability and behavioral changes CJD has on an individual, I became certain I wanted to explore the “why” and “how” of human behavior. How do we develop a drug that prevents the onset of symptoms in people at risk of CJD or just neurodegenerative disorders in general? Would focusing on non-neural cells, such as astrocytes and microglia, be helpful in understanding these disorders? There are still so many unanswered questions and pieces of knowledge to unpack. I feel exuberant thinking about how much is yet to be discovered.

Of course, my endeavors will not end here. Neurological disorders rank among the highest causes of death and disability in developing countries. I look forward to putting together a team of volunteers who will travel with me to these countries to administer free neurological examinations. As I travel to these countries, I hope to experience new cultures. I want to see how culture and environment impact a person growing up. I would love to try all the different types of cuisine and traditions each country has to offer. I am excited about the learning and development that comes from traveling!

Neuroscience is an intensive subject to study in medical school. It'll require me to work hard, a skill I developed through high school. Everything I've accomplished in high school has come together to aid in my academic, professional, and personal development. Because of this, I believe interdisciplinary studies is important to understand the world we live in. I will continue to build upon the foundation I've set in high school as I pursue higher education.