**Tell us about something that really sparks your intellectual interest and curiosity and compels you to explore more in the program/area of study that you indicated. It could be an idea, book, project, cultural activity, work of art, start-up, music, movie, research, innovation, question, or other pursuit. (250 words)**

A year ago, at the Harvard Model Congress, I learned how powerful DNA could be. After serving 11 years in prison, Ron Williamson, a convicted criminal due to hair analysis and blood tests, got exonerated. A DNA test proved that his DNA was absent at the crime scene. Unlike non-DNA evidence, everyone’s DNA is unique. There is a one in a trillion chance that our DNA could match with somebody else’s DNA. Yet, DNA analysis isn’t without any flaw. DNA could be easily contaminated through extreme temperatures and dust. I further learned that Williamson's case is not unique. Today, in the United States, 375 people have been exonerated by DNA testing, 21 of which have served time on death row. I would like to help prevent wrongful convictions as a forensic scientist who develops a more accurate method for DNA analysis.

I took my first step into becoming a forensic scientist by studying biology to gain expertise in DNA analysis. I started learning about the basics of genetics, such as: how our chromosomes end with telomeres to prevent the loss of vital information from DNA replication, and how to differentiate pairs of chromosomes by looking at different banding patterns. I wanted to further learn about DNA compositions, so I decided to attend the Medical and Life sciences summer school at University of Cambridge. I worked in their laboratory and compared DNA with other participants. I discovered about our different locus that make us unique and which gene expresses our characteristic traits.

At Washington University St. Louis, I would like to attend the Bio 200/500 Undergraduate Independent Research course where I will be able to conduct research under Girdhar Sharma. His researches on stem cell protection from radioactivity will allow me to learn how DNA responds to radioactivity disturbance and use this knowledge to find out more about their response to different environmental factors. I hope to look for a way to protect DNA samples from environmental changes without disturbing them.

With the opportunity that WUStL offers, I believe that they have the right community to guide me to achieve my dreams of becoming a successful forensic scientist.