

### Personal Statement

My parents' combined income as physicians at state-owned hospitals in Vietnam has been far from sufficient to cover my college tuition. The financial strain is even greater now with their recent retirements. However, I have obtained additional financial aid on top of Colby's generous assistance by consistently staying in the top 5% of my class since entering Colby and, more recently, being the highest-ranking student. Moreover, I have been working as a teaching assistant and tutor for various physics and mathematics courses since freshman year, which has further offset costs and allowed me to discover my interest in teaching and science communication. Through this role, I have also learned about how various students' backgrounds have shaped their respective paths in science and mathematics. As a result, I have been increasingly interested in what I can do to help students from disadvantaged backgrounds to succeed academically.

Most non-Colby REUs are beyond my reach as an international student; however, my interest in physics motivated me to utilize the research opportunities available. I began research as early as my second semester at Colby and worked on my first project before sophomore year. This gave me the experience necessary for research internships where I would further develop my skills despite the hindrances preceding each opportunity. In 2019, my JQI internship was cut short due to a delay in OPT processing. However, it was ultimately successful because I proactively communicated with the research group about my project before starting. This March, the Perimeter Institute postponed their research program indefinitely due to the pandemic. Determined to make the most out of the circumstance, I began my Mathematics Thesis and remained in contact with my advisor at Perimeter. As a result, by the time the program restarted in May, I had done significant work for my thesis and had adequate preparation for my project at Perimeter. Through these adversities, I have learned a great deal about various aspects of obtaining research experience as an international student in the US. This knowledge allows me to advise to international underclassmen at Colby on the process.

From interacting with students at Colby and research peers, I know that even my biggest hurdles are merely inconveniences for others. Moreover, there exist disparities and issues of underrepresentation in academia which make the hardships I have faced seem trivial. I have been incredibly fortunate because Colby, JQI, and Perimeter have provided me with inclusive and encouraging environments in which I could pursue my interest in physics. At MIT and beyond, I would like to do my part as a graduate student to emulate such an environment.

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