520 Butler Farm Road Hampton VA, 23669 June 18, 2023

To Whom It May Concern:

My name is Anna Brady, and I am currently a rising senior at The Governor's School for Science and Technology. For the upcoming school year, I am looking to pursue a year-long mentorship in order to complete a principal component of the Honors Senior Research and Ethics course at The Governor's School. I am especially interested in working at Jefferson Lab because of its work developing new technologies for projects such as the Electron-Ion Collider.

At The Governor's School, I am enrolled in the biological sciences strand, but I plan to pursue a degree in engineering or computer programming in college. In the upcoming school year, I will be taking Advanced Biological Analysis, Honors Senior Research and Ethics, and Linear Algebra/Multivarible Calculus, all dual enrolled. I will also be taking Physics at Kecoughtan High School. Last year, I completed Advanced Chemical Analysis, Calculus, and Research Methodology and Ethics, also all dual enrolled. My DE Chemistry class was very hands-on and involved frequent experiments and laboratory work, which taught me important skills, such as how to develop and follow scientific procedures, contributing as a team member to a scientific experiment, and working safely in a laboratory environment, which I believe would be an asset to this mentorship. In addition to this, I have experience in engineering and computer science through my Research Methodology and Ethics class, which involved lessons and projects in MATLAB and a project that required building a capacitor to fit specific criteria. I also completed a science fair project for The Governor's School that tested the ethical responses displayed by certain artificial intelligences.

I am interested in working with Jefferson Lab because I am fascinated by the variety of projects and scientific advances going on at the lab, such as the Electron-Ion Collider which is expected to contribute to landmark discoveries in nuclear physics. In addition, as the child of a long-term Jefferson Lab employee, I've had the opportunity to go to Jefferson Lab open houses and tour the research facilities, including tours of the Test Lab and the CEBAF accelerator tunnel. I grew up checking drawings and reports and dry running presentations for my mother, so I would be very excited to have an opportunity to contribute to the work being done at the lab.

A mentorship at Jefferson Lab would provide me with more experience in a laboratory setting and crucial skills that can be applied in the future. My goal is to expand my knowledge through participating in this mentorship. Thank you so much for your time and consideration. If you are interested in scheduling an interview with me, please contact Laura Vobrak at <u>laura.vobrak@nhrec.org</u>.

Sincerely, Anna Brady