Wesley Lichtenstein - Rye County Day School

St. Vincent's core values of "respect, integrity, compassion, and excellence" align with who I am and how I live my life. Since I was little, I've been interested in medicine and science research. This stems from a desire to help others – be it improving patient care, contributing to advancements in protocols/treatments, and/or discovering health breakthroughs. A beloved family member passed away too soon from cancer and I don't want other kids to go through what I went through. The American Cancer Society projects that in 2025, "there will be 2,041,910 new cancer cases and 618,120 cancer deaths in the United States." In the U.S. alone, cancer is the second highest cause of death followed by heart disease. Moreover, cancer is a global issue. I want to be part of a team of doctors and researchers that develops new methods to help prevent cancer by detecting cancer cells early. I enjoy brainstorming, problem-solving, and learning from and listening to others. To foster these strong interests, I've been participating in both the Port Chester-Rye-Rye Brook EMS' Explorers Program and The New York Academy of Sciences Junior Science Academy in addition to taking challenging academic classes at school and over breaks.

I started volunteering at the EMS Explorers Program, Post 77 during the summer before 9th grade. I'm Rye Country Day School's youth officer and completed Heartsaver First Aid, Heartsaver Pediatric First Aid, and Basic Life Support training. We assist locally at events where we may be needed like Westchester's Half Marathon and distribute backpacks to students in need. I turned 16 recently and gained ambulance ridership status to respond to 911 calls with the EMS professional crews. The mentorship, knowledge, team atmosphere, and hands-on experiences I've been gaining are amazing. I feel fortunate to be able to help with real-life medical emergencies. I'm excited for all that's to come in the next two years.

In 8th grade, I decided to apply for and was accepted to The Junior Science Academy (JSA). Through JSA, I dedicate my time participating in innovation challenges under mentors to help tackle real-world problems. I'm able to work with other students from all over the world through the Launchpad platform. Last year, we designed a prototype for an app called *NoshKidz* to blend nutrition with technology to address the growing concern over unhealthy snacking. To accomplish this, we examined this issue, collected data through an online research survey for younger children that we developed in both Arabic and English, and reviewed the results. Then, we put our heads together to create an informative and fun app for kids to use. This year, I became team lead where I organized meetings in different time zones, set agendas, and assigned tasks. We worked on the possibility of generating clean water via hydroelectricity. Unfortunately, people who live in low-income countries suffer from having a huge amount of dirty water with no sufficient use of it. We wanted to think about solutions to potentially help use this dirty water in a more efficient way. Transforming dirty water into clean water would not only help these countries have more clean sources of water, but would also help sustain the environment. To gather data, we used various sources including literature review and one-on-one interviews with experts. After this, we came up with a solution model that involved dirty water going downhill to generate energy into a pool. The energy that is generated could be used to clean the dirty water which could then be distributed to people in the nearby area. During both projects, it was really nice getting to know my teammates on a more personal level too. I look forward to upcoming projects such as ethical uses for AI.

I love being a student, peer, learner, doer, and leader. I hope that with smart minds, hard work, and technology, disease elimination and eradication will reach new heights, vastly improving quality of life and public health. Thank you for your consideration.