

Although KEYS this year looks very different from what it looked like traditionally in previous years, I think it will be beneficial in many ways. In recent years with the massive amounts of data that have been collected, science has adapted to utilizing data science to perform analyses on large amounts of data and more effectively produce results. In previous years, KEYS was based on a lab bench style of experimentation. With the current unexpected circumstances all over the world, KEYS has been forced to divert from this style and shift towards a more data science-driven scientific program. This new type of program allows for a more modern method of experimentation and data analysis while not sacrificing the learning of that comes from participating in a lab-based rigorous science program. I prefer this about KEYS 2020 compared to previous years because I believe data science will drive the future of scientific research. Therefore, this unexpected change may prove to be even more beneficial than KEYS traditionally would have been. Although I do look forward to the rigor of the KEYS research program, this year the program may be more convenient, as I do not have to worry about dorm and can also work in other activities such as sports into my schedule along with KEYS. This convenience can prove to be beneficial over KEYS in person.

The human interaction of the KEYS program may be diminished through this new style of KEYS this year. Human interaction is beneficial to promoting a collaborative science experience, which is integral to making huge strides in scientific research. Interaction between the interns, PIs, mentors, and staff promote communication, which is important to effectively achieving results in research. I think this aspect of KEYS will be most missed. The wet lab experience is also a large part of conducting scientific research. In recent years science has focused increasingly on data science and conducting lab-based experiments provide data to be analyzed. In most high schools, students don't experience a real lab setting, which KEYS provided and set up students with an upper hand in conducting research in college. This aspect of KEYS can't be replicated virtually in KEYS this year and I think is another aspect of KEYS in previous years that students will miss out the most on. These factors make KEYS less appealing this year but don't significantly affect the overall experience and knowledge I will benefit from participating this year.

KEYS looks very different this year but is not much less appealing but I do have some questions about the program this year. I know that the lab-bench style experimentation is a loss this year but I don't know how much it will affect my overall experience. I would like to know how much the loss of wet lab will affect my learning experience. With this new style of KEYS, I feel like some of the rigor may diminish. To make sure that this does not happen, I would like to know the best ways to keep ourselves in check and continuously maintain a strong work ethic. Also, is there actually any more experience that joining KEYS next summer can bring apart from lab-bench style research?