



ALUMNI SPOTLIGHT

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ANDREW JSHS & SEAP ALUMNI

A Yale junior pursuing a four-year simultaneous BS/MS in chemistry and a BS in mathematics. Currently conducting inorganic chemistry research.

WORDS OF ADVICE

When searching for your start in research, the most important step is to find a mentor who is both knowledgeable and supportive of your independent efforts. Then, curiosity and a decent work ethic will carry you the rest of the way.

My experience beyond the research lab taught me how to seek out, identify and read papers related to my research questions.

BEST THINGS ABOUT THE PROGRAM

I participated in SEAP as a junior in high school. SEAP allowed me to sample methodology, instrumentation and mathematics from a large range of disciplines. This sort of intellectual buffet was invaluable in guiding my studies and still impacts my course choices to this day. Further, the U.S. Naval Research Lab [NRL] was home to a number of facilities that were readily available to me. In contrast to academic settings where research group sizes are large and contact time with principal investigators [PIs] is low, I had contact with multiple PIs on a daily basis. This different type of student-mentor relationship is the primary reason I would recommend SEAP to both high school and college students.

AS A RESULT OF THE PROGRAM

The most important skill SEAP taught me was how to read the literature using techniques different than what I am used to doing in class. My experience beyond the research lab taught me how to seek out, identify and read papers related to my research questions. To this day, I often find the depth and breadth of a single paper simultaneously awe-inspiring and demoralizing. But, learning how to cope with and read a document where I am not necessarily going to understand every bit of information was a valuable skill I know I will be practicing the rest of my life.

Aside from the academic benefits, my experience at SEAP also likely made a difference in my admission to Yale. Coming from a small school with almost no research opportunities in the area, SEAP provided me the chance I needed to excel and differentiate myself in my college applications.

HOW PARTICIPATING IN AEOP INSPIRED YOU TO ADVANCE IN STEM

Research at the NRL introduced me to my passion, chemistry. From the first moment I stepped into the lab, I knew I was home. That summer introduced me to concepts ranging from inorganic ligand field theory to detailed optical mathematical modeling. I'm amazed, years later, how often something I learned at NRL comes back to assist my learning. For instance, I sat in on a graduate class in spectroscopy, where a significant part of the lecture was devoted to models, which I had modified and published a paper about during my time at NRL. On other occasions, my brief exposure to a topic at NRL drove me to seek a deeper understanding, as it has the quantum in physical chemistry. My experience at NRL fueled the flames of my interest in STEM, providing me with techniques, skills and knowledge I now use on a daily basis.