

What is the Upper School Science Research Program?

- Holton students who have demonstrated strong interest and aptitude in science and meet departmental criteria, such as emotional intelligence, resilience, and the ability to work with a team of both students and adults, have the opportunity to apply for a position to conduct research in a local laboratory under the guidance of professional scientists.
- Students are carefully placed in a laboratory setting under the supervision of a mentor who is a research professional. The student, with the help of the mentor, will formulate a plan for conducting scientific research.
- Previous lab settings include the Uniformed Services University of the Health Sciences, Georgetown University, George Washington University, and the University of Maryland, among others.
- The bulk of the research will occur during the summer in an eight-week period. Students must plan their summers so as to accommodate their commitment to this program, as the Science Research internship often conflicts with Junior Journeys and other school trips.

Is there coursework for this program?

- Science Research students must take either Computer Programming & Robotics plus one other trimester course (Astronomy, Earth Structure, or Environmental Science) or the Microbiology and Molecular Biology trimester electives in their junior year, depending on their interest. They will develop skills in those classes that will prepare them for their future internship and research experience.
- In addition to those electives, students meet as a group five to six times during their junior year to discuss such things as resume-writing for science jobs, the hierarchy in a lab, what to expect from an internship, how to give science talks, and the importance of emotional intelligence.

What happens during the summer and beyond?

- Students spend eight weeks working in their lab during the summer between their junior and senior years. Due to COVID-19 in-person work in labs may not be possible in 2021 and beyond. If possible, students may work remotely with a lab scientist as a mentor. Alternately, students may complete a project supervised by a Holton faculty member.
- Once they return to Holton in the fall of their senior year, they will present a research poster and give a research presentation to the Upper School; this is the capstone for our Science Research program.

How does my child join the program?

- Students apply during the spring of their sophomore year, while completing course selection for junior year.
- The application process consists of a written essay, teacher recommendations, consideration of grades, and an interview with members of the Science Department.

- The entire Science Department meets to decide who will be accepted into the program, and students are typically notified in early May of their sophomore year.

MORE QUESTIONS? Contact Hannah Krug, Science Research Coordinator and Upper School Math & Science Teacher, via email at hannah.krug@holton-arms.edu or via voicemail at 301-365-6032.