**At OES, students learn and practice the foundation of inquiry-based science through the study of physics, followed by chemistry and biology.** In grades 11 and 12, students have the opportunity to select from an array of semester electives in which they can continue to explore their specific interests or discover new ones.

**Recently offered courses include:**

- Advanced Electricity & Magnetism
- Advanced Mechanics
- Anatomy & Physiology
- Organic Chemistry
- Engineering Design
- Genetics
- Marine Ecology
- Biotechnology
- Advanced Chemistry
- Science of Sports

## Beyond the classroom

OES facilitates collaborative inquiry beyond the classroom, and supports faculty and students in their exploration of unique science education initiatives.

**Recent science co-curricular opportunities include:**

- Field studies at the Oregon Zoo
- Greenhouse Activity
- Environmental Citizenship Activity
- Aerospace Team (see photo below)
- Science-based Winterim courses like spelunking, studying wolves in Yellowstone Park, astrophotography, octopus exploration, and marine biology in the Florida Keys.

**The American Rocketry Challenge team (TARC) at OES, which calls itself the Aerospace Team, won the world's largest student rocketry competition in 2021!**

## Ready to learn more?

Oregon Episcopal School

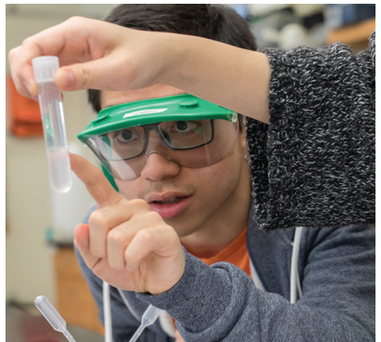
6300 SW Nicol Road · Portland, OR 97223 · 503-768-3115 · **oes.edu/admissions**

Translation available at **oes.edu/science**

# SCIENCE RESEARCH

## AT OREGON EPISCOPAL SCHOOL

ANATOMY & PHYSIOLOGY. ENGINEERING DESIGN. ORGANIC CHEMISTRY. ADVANCED ELECTRICITY AND MAGNETISM. SCIENCE OF SPORTS. BIOTECHNOLOGY. CHEMICAL SYNTHESIS. GENETICS. MARINE ECOLOGY. ADVANCED CHEMISTRY. ADVANCED MECHANICS.

## Our science program challenges students through independent research, and provides opportunities for national and international competition.

**With guidance and support from practicing scientists and mentors, OES students explore interest-driven questions, learn to think like scientists, and deeply engage with the ever-changing world around them.** In all OES science classes, the inquiry-driven approach to research develops students' critical thinking skills. Through intentional exploration of their personal passions, students learn to do science with purpose, practice active collaboration and curiosity, and hone valuable skills and approaches to learning.

For each project, students identify a problem, learn to ask testable questions, design and implement strategies to collect relevant information, and analyze and interpret data to form conclusions. By the time students graduate, they have completed multiple projects that tackle increasingly complicated ideas, require developmentally appropriate skills, and recursively build on each other.

**"Science at OES is more than taking a class; it's a way of using content knowledge to ask appropriate questions and apply understanding of the natural world around us in ever-evolving ways. Students challenge the faculty every year with the impressive questions they ask in their investigations, as much as the faculty challenges students to think critically and communicate their ideas effectively. This—and I know this as both a former student and as the science expo co-director—is a program unlike any other!"**

—Bettina Gregg '92, Upper School Science Teacher

# Annual Aardvark Science Exposition

**The culmination of the Upper School science experience is the Aardvark Science Expo. This annual science, engineering, computer science, and math research competition gives students in grades 10 through 12 the chance to present research on topics of their choice.**

OES engages experts from the Portland area as volunteers to "judge" the Expo so that all students experience what it means to defend their work and communicate their process. Each year, there are an average of 75 judges for a student-judge ratio of 3:1, so that each student has ample time for connection with and feedback from professionals from their field of study. Judges hold either a master or doctoral degree in science, math, or engineering, and often include OES parents and alumni.

**EXAMPLES OF RESEARCH TOPICS**

Animal Sciences • Biochemistry • Computer Science and Robotics • Environmental and Earth Sciences • Medicine and Health Sciences • Plant Science

The Aardvark Science Expo is a preliminary qualifying round for state, regional, and national competitions. Each year, OES sends students to the Regeneron International Science and Engineering Fair (ISEF).