

AMGEN® Biotech Experience

Scientific Discovery for the Classroom

“We constantly have former students come back to tell us that they chose to major in science, biotech or related fields because of this experience.”

– Jim Mauch, High School Science Teacher



Quick Facts

- Each year, ABE reaches approximately **90,000 students** and **1,500 teachers**
- Program curriculum, professional development, and all materials needed are provided free of charge
- The program has impacted nearly **850,000 students to date**
- We expect to surpass **1,000,000 students** reached through ABE by 2023 because of the Amgen Foundation's **more than \$40 million** commitment to the program
- ABE was given the highest designation of effectiveness in [WestEd's STEMworks](#) database of programs that meet high standards for quality and impact
- In partnership with Change the Equation, the Amgen Foundation's survey titled "[Students on STEM: More Hands-on, Real-World Experiences](#)," found that large majorities of teenagers like science and understand its value, but common teaching methods, such as teaching straight from the textbook, do not bring the subject matter to life in the same way hands-on, real-life experiences do
- Independent and rigorous [evaluation data](#) found that students exposed to ABE have significant and substantial learning in biotechnology and increased interest and confidence in doing science and biotechnology

BIOTECHNOLOGY

Biotechnology has brought about the discovery and development of a new generation of human therapeutics. Advancements in both cellular and molecular biology have allowed scientists to identify and develop a host of new medicines for patients with serious illness. Biotechnology provides the tools and techniques for modern pharmaceutical research and drug development, and it is critical that future citizens are knowledgeable about this field.

THE PROGRAM AND CURRICULUM

The ABE program integrates a curriculum that allows students to explore the steps involved in creating biotechnology therapies. Aligned with Next Generation Science Standards and the core biology curriculum, the program supports the larger goal of fostering scientific literacy. In addition to the curriculum and teacher professional development to understand the lab protocols and science, participating teachers receive a loaned kit, free of charge, with research-grade equipment and supplies that allow students to participate in advanced science laboratories.

THE LAB AND MATERIALS

The ABE labs parallel some of the important steps taken by the biotechnology industry to develop medicines to treat a variety of diseases. The labs incorporate core technologies used by scientists in the discovery of human therapeutics, so that students will better understand the role of biotechnology and the potential impact of this industry on our future. In addition, by engaging in this program, students may be more motivated to understand the underlying science concepts and perhaps even pursue careers in science. In collaboration with the Amgen Foundation and ABE teachers, [LabXchange](#) has created a collection of pathways designed to enhance the ABE lab experience. The pathways are modular to allow you to mix and match concepts and practice with lab techniques in the way that best supports your students.

LOCATIONS

ABE is currently available in the following regions: Australia, Canada, France, Germany, Hong Kong SAR, Ireland, Italy, Japan, the Netherlands, Singapore, Turkey, United Kingdom, and the United States (Los Angeles, San Diego, San Francisco, Massachusetts, Rhode Island, Washington D.C., Tampa, and Puerto Rico, with affiliate sites in Washington and Pittsburgh)

[View the ABE Program Site Map](#) and visit the [ABE Newsroom](#) for media resources, including logos, brochures, and photos

Contact Us

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