AMGEN Biotech Experience

Scientific Discovery for the Classroom



QUICK FACTS



90,000

In a typical year, ABE reaches approximately 90,000 students and 1,500 teachers.



\$0

The program curriculum, professional development, and all needed materials are provided free of charge.



990,000+

Globally, the program has impacted more than 990,000 students to date.



1,000,000

By the end of 2024, ABE anticipates reaching 1,000,000 students because of the Amgen Foundation's \$50+ million commitment to the program.



"It is cutting edge to be teaching [these labs] in a secondary school, and the students love it. They excel in it, and they are enthusiastic about science, having been able to do [ABE]. You cannot beat the practical experience in my opinion."

—ABE Teacher, Ireland

Biotechnology

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

The Program and Curriculum

The ABE curriculum allows students to explore the steps involved in creating biotechnology therapies. Aligned with a core biology curriculum, the program supports the larger goal of fostering scientific literacy. In addition to the curriculum and professional development to understand the background science and lab procedures, participating teachers receive, free of charge, loaned research-grade equipment and supplies that allow students to participate in advanced science laboratories. ABE also facilitates connections between students and real-word scientists through the ABE Volunteer Program, which connects Amgen staff with ABE teachers and students through a range of experiences. The program continues to grow, with new program sites joining each year.



Highest Designation of Effectiveness

ABE was given the highest designation of effectiveness in WestEd's STEMworks database of programs that meet high standards for quality and impact.



Interest and Confidence

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.

The Labs 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 and to incorporate core technologies used by scientists in the discovery of human therapeutics. The labs help students better understand the potential impacts that biotechnology as a science and as an industry may have on their futures, thus inspiring them to pursue careers in the sciences. LabXchange has created a collection of pathways designed to enhance the ABE lab experience, including modular resources that teachers can mix and match to best support students.

Teacher Supports

ABE supports teachers around the world through high-quality professional learning experiences, access to a global community of practice, and implementation resources. This support is designed to accomplish the following:

- Increase teacher capacity to implement ABE effectively
- Develop site capacity to support effective ABE implementation within schools
- Develop lifelong engagement and interest in the sciences for ABE students

ABE provides opportunities for teachers to be both learners and leaders within their local programs and internationally.

Locations

ABE is currently available in the following locations: Australia, Brazil, Canada, France, Germany, Hong Kong SAR, Ireland, Italy, Japan, Mainland China, Mexico, Singapore, South Africa, The Netherlands, Türkiye, United Kingdom, and multiple Amgen communities in the United States.

<u>View the ABE Program Site Map</u> and visit the <u>ABE Press Kit</u> for media resources. See the following videos for more information:

- Introduction to ABE
- Then to Now: Teachers
- ABE Teacher Testimonials

AMGEN Foundation

Inspiring the Scientists of Tomorrow

amgenbiotechexperience.com

CONTACT US

Program Inquiries:

Rebecca Lewis
Director, ABE Program Office
617-969-7100 ext. 2935 or rlewis@edc.org

Media Inquiries:

Laoise O'Murchú Amgen Foundation Iomurchu@amgen.com