

# California Life Sciences Industry Supports Students During COVID-19 Pandemic

Amid the COVID-19 pandemic, parents, teachers and students are facing new challenges in their distance learning environment and exploring creative ways to bring education into the home. Life science companies and their partners recognize this challenge. They are providing students with online learning opportunities that aim to help the entire education community stay scientifically engaged. The following initiatives are a snapshot of programs and free resources that teachers, schools, districts, parents and students can access to expand STEM curriculum during this time of at-home learning. All of these programs are available in California.

## Amgen Foundation Offers Online Learning Programs for Students

The Amgen Foundation seeks to advance excellence in science education to inspire the next generation of innovators and invest in strengthening communities worldwide. Amgen has donated over \$300 million to nonprofit organizations that impact the learning community.

### LabXchange



The Amgen Foundation partnered with Harvard University to launch LabXchange, a free online science education platform that provides educators anywhere access to instruction and virtual lab experiences that they can not only personalize but combine and incorporate with their curriculum. By simulating key in-person labs and teaching techniques that were previously only available in the classroom, students can explore a wide range of scientific methods and continue to build their acumen in the sciences as if they were still in the classroom.

Visit: [www.LabXchange.org](http://www.LabXchange.org)

### Khan Academy



The Amgen Foundation is also the founding biology partner of the Khan Academy, a leading, innovative educational technology platform with demonstrated power to shape and transform how students learn science from kindergarten through early college. The Khan Academy's free biology lessons offer more than 300 videos, 80 exercise sets and 195 articles reaching more than three million users each month.

Visit: [www.khanacademy.org](http://www.khanacademy.org)

### Amgen Biotech Experience



This science education program provides research-grade equipment, supplies, curriculum, and professional development to middle and high schools at no cost. On behalf of Amgen, the Biocom Institute partners with the Southern California Biotechnology Center at Miramar College (SCBC) to administer the program.

The Amgen Foundation will be celebrating the 30th Anniversary of the Amgen Biotech Experience (ABE) and announced renewed three year funding for the program of \$16.4 million. To date, the ABE program has reached nearly 850,000 students. With this additional funding, Amgen expects the program to exceed 1 million.

Visit: [www.amgenbiotechexperience.com](http://www.amgenbiotechexperience.com)



## Biocom Institute: From Science Projects to Science Careers

Taking students from science projects to science careers is at the heart of Biocom Institute's vision to inspire, prepare, and diversify the life sciences workforce. Since COVID-19 moved the learning environment online, Biocom Institute is providing life science education and workforce development opportunities to teachers and students with the following:

- **Life ScienceXP** provides online experiences that expose, encourage, and deepen K-12 students' interest and understanding of life science and related careers. Life ScienceXP offers hands-on learning kits for each student, coupled with virtual lessons, and connections to industry professionals.
- **Illumina Genomic Discoveries** empowers teachers and inspires students to unlock the power of genomics through genomics-focused professional development, real-world curriculum and industry connections. Using Illumina's latest technologies, this comprehensive program allows teachers and students the opportunity to learn and connect with the world of genomics. **Teachers can apply for the program HERE: [biocom-institute.smapply.io/prog/genomic\\_discoveries\\_teacher\\_training\\_program/](https://biocom-institute.smapply.io/prog/genomic_discoveries_teacher_training_program/)**
- **Virtual High School Internship Program** increases awareness of life science careers for high school students by providing industry experience, mentorship, and real, meaningful projects. The internships bring new ideas, technologies, and skills to assist students with their education and increase their understanding of career pathways in life science.

**Visit: [www.biocom.org/what-we-offer/biocom-institute](http://www.biocom.org/what-we-offer/biocom-institute)**

## Illumina Foundation Brings Genomics Home

The Illumina Foundation helps educators bring genomics into their classrooms. Since COVID-19 moved the learning environment online, the California-based life science company is bringing the classroom home to students with the following programs:

- ✂ **Genomics 101: At Home** is a YouTube channel developed by the Illumina Foundation that shares a variety of topics like what DNA is, how does DNA make us different, where you can see genomics in the world around us, and hands on experiments that can be done at home. Videos can be used for a wide range of grades.  
**Visit: [www.youtube.com/playlist?list=PLKRu7cmBQIagfwdB8YgDbEJXoW-5qVsZu](https://www.youtube.com/playlist?list=PLKRu7cmBQIagfwdB8YgDbEJXoW-5qVsZu)**
- ✂ **DNA Decoded:** Illumina Foundation partnered with Discovery Education to bring teachers **DNA Decoded**, genomics focused lesson plans aligned with Next Generation Science Standards. These lesson plans are an easy way for teachers to feel supported in bringing the topic of genomics into their classrooms and share the various real-life applications of today's problems. Modifications have been made to accommodate various types of learning environments.  
**Visit: [www.dnadecoded.org](http://www.dnadecoded.org)**
- ✂ **Exploring Careers in Genomics** is a series of career videos highlighting the diverse career opportunities in the field of genomics. These videos and career conversation cards provide a snapshot of in-demand roles at biotechnology companies, including Illumina, with education requirements, average starting salary, and essential job skills teachers can share with their students.

**Discover: [Careers in Genomics at www.illumina.com](http://www.illumina.com)**

## Bayer's Commitment to Students During the COVID-19 Pandemic

In response to the COVID-19 pandemic, Bayer launched **Science at Home**, a weekly series that features STEM educational resources for educators and parents to keep kids learning while staying at home. In addition, **Bayer Magazine** offers engaging science education content that can be used at home. Each weekly issue features articles, videos, activities, and experiments parents and kids can do together. **Search: [Science at Home – Bayer Magazine at www.bayer.com](http://www.bayer.com)**

Bayer is also providing an online high school student internship programs, shifting their annual summer internship program for high school students from an in-person, on-site professional development experience to an all online program that involves collaboration between their educational non-profit partner and Bayer industry experts. **[www.career.bayer.com/en/career/working-at-bayer/students](http://www.career.bayer.com/en/career/working-at-bayer/students)**