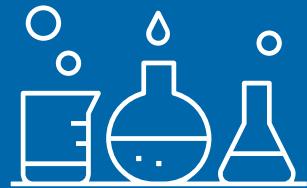


THE INNOVATIVE BIOPHARMACEUTICAL INDUSTRY'S SUPPORT FOR STEM EDUCATION IN: **GEORGIA**



The Biopharmaceutical Industry's Sustained Commitment to Inspiring and Advancing Tomorrow's STEM Workforce

*A high-skilled technical workforce that is proficient in science, technology, engineering, and mathematics (STEM) is increasingly important to sustained economic growth and U.S. global competitiveness. However, as the U.S. continues to lag behind other countries in terms of STEM literacy and expertise, there are legitimate concerns in the nation's ability to produce enough qualified workers to meet the demands of the global knowledge-driven, STEM-intensive economy and to develop workers with the relevant skills needed for the jobs of the future. **Inspiring and developing the next generation of STEM talent is critical to the economic success of Georgia.***

STEM talent is especially important to the success of the nation's biopharmaceutical industry, one of the economy's most innovative sectors employing more than five times the level of STEM workers compared with the overall U.S. economy. In Georgia, the biopharmaceutical industry directly employs 11,611 and has a total economic impact of nearly 57,000 state jobs and \$13.3 billion in total economic output.¹

Georgia will need to fill nearly 290,000 STEM jobs by 2028. However, an analysis of a series of STEM education indicators finds that Georgia students generally rank in the bottom half of states in terms of their proficiency in STEM.

To help inspire and develop the next generation of STEM workers, the innovative biopharmaceutical industry supports 5 programs in Georgia and 10 programs nationwide.

Number of STEM Programs Supported by the Biopharmaceutical Industry in Georgia²

5

Number of National STEM Programs Open to GA Students and Teachers

10

Projected STEM jobs to Fill in GA by 2028³

289,610

National Assessment of Educational Progress State Ranking for GA Students⁴

4th Grade

8th Grade

Math

34

34

Science

33

30

Share of Graduating GA High School Students Interested in STEM Major or Career⁵ (U.S. = 48%)

53%

Biopharmaceutical Industry Economic Footprint in Georgia⁶

11,611

Direct Jobs

\$13.3 B

Total Output

Biopharmaceutical Industry-Supported STEM Education Programs in Georgia

UCB provides financial support and leadership for a wide range of STEM activities throughout Georgia:

- The **Georgia Bio Ed Institute**, which UCB has historically provided with financial and leadership support, offers a number of STEM initiatives in Georgia including teacher programs, school supplies, the BioGENEius awards, and a poster session for students annually. UCB helped create the **Institute's Summer Biotech Immersion Program**, which helps teachers to learn the skills and have the confidence needed to provide meaningful biotech laboratory experiences for students.
- The **Atlanta Science Festival**, an annual two-week festival that celebrates local science and technology, featuring more than 100 events throughout metro Atlanta and reaching 50,000 children and adults annually. UCB hosts a booth at the Atlanta Science Festival staffed by employee volunteers to educate students about the science of medicine. Festival events feature hands-on activities, tours, tastings, and performances from more than 100 community partners.
 - **Chief Science Officers**, a program to develop a cadre of diverse STEM student leaders in middle and high schools across the state. UCB provides financial support for the program, which is operated by the non-profit Science ATL, the engineers of Atlanta Science Festival.
- **STEM programs at Fernbank**, Atlanta's local science and natural history museum, such as the monthly Family Discovery Day Series of special activities for families at the museum, and support for The Secret World Inside You, a special exhibit on the human biome.

Industry-Supported STEM Education Programs Nationwide

With an emphasis on student engagement, teacher development, and dynamic learning opportunities, PhRMA members **Amgen, AstraZeneca, Bayer, Genentech, and Johnson & Johnson** also support 10 STEM education programs nationwide. Read more about these programs [here](#).

- 1 *The Economic Impact of the U.S. Biopharmaceutical Industry: 2017 National and State Estimates*, PhRMA and TEconomy Partners, December 2019.
- 2 PhRMA-TEconomy "The Biopharmaceutical Industry's Sustained Commitment to Inspiring and Advancing Tomorrow's STEM Workforce" 2020.
- 3 TEconomy's Analysis of Projections Managing Partnership Occupational Employment Projections for 2018-2028. Projections data reflect the 2016-26 period for the following states: AL, AZ, CT, KS, KY, MA, NM, OK, TX, VT, WA, WV.
- 4 U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 Mathematics Assessment and 2015 Science Assessment.
- 5 Percentage of ACT-Tested High School Graduates Scoring Expressing Interest in STEM Majors, Occupations, and/or Activities; ACT: *The Condition of STEM 2017 State Profiles*.
- 6 *The Economic Impact of the U.S. Biopharmaceutical Industry: 2017 National and State Estimates*, PhRMA and TEconomy Partners, December 2019.