

## **Carolina Biological Supply Celebrates Winning 4 Best of STEM™ Awards and a Best of STEM™ Finalist!**

**BURLINGTON, NC, August 28, 2024** –This year’s Best of STEM™ Awards winners have been selected by highly qualified, experienced STEM educator judges and votes from more than 250,000 educators. Carolina is pleased to announce its four winners and finalist!

### ***Winner in Best Freebies for STEM, [Carolina Lab Skills](#).***

The goal of Carolina’s Lab Skills initiative is two-fold: 1) To provide instructors with free resources to help students make up lost ground and get comfortable with skills that they are missing and 2) To make sure that instructors are comfortable with specialized skills that are outside their area of expertise. Each Lab Skill is made up of three components. A video, a classroom poster, and a student handout.

The awarding educator judge noted, “[T]he Carolina Lab Skills product is easily accessible, informative, and exceptionally appropriate for various users.” - Educator Judge, Best of STEM 2024

### ***Winner in Best Resources for Analyzing and Interpreting Data, [How Do Polygenic Risk Scores Stack Up? Kit](#)***

This novel classroom activity provides a unique experience that teaches both graphing literacy and genetics codeveloped with the HudsonAlpha Institute for Biotechnology. This kit uses authentic data and graphical representations to address 2 central questions: How are traits, such as disease risk, distributed across a population? And how can identifying an individual's risk shape health care decision-making? This activity employs 3-dimensional boxes to represent normal and skewed population curves, giving learners a visually impactful hands-on experience with the data. Students use these curves to examine polygenic risk scores and assess a person's risk for 2 different complex diseases. In addition to teaching essential data and graphing skills, the activity also highlights a weakness in current genomic research—lack of diversity—with the hope of equipping the next generation of researchers, health care workers, and consumers to address this critical issue.

“The kit walks students through constructing a 3-D histogram, serving as an accessible introduction to understanding how polygenic risk scores are distributed within a population. The kit helps students differentiate between normal and skewed distributions, enhancing their analytical skills.” - Educator Judge, Best of STEM 2024

### ***Winner in Trailblazer Award: Biotechnology, [Taq Polymerase Production and Validation Kit](#)***

With this one-of-a-kind kit, students purify *Taq* polymerase, an enzyme used in polymerase chain reactions, from bacteria engineered to produce it, then test the enzyme's activity by performing PCR with it. As students gain hands-on experience with PCR, they learn the same lab skills used in the biotechnology workplace.

“The Taq Polymerase Production and Validation Kit from Carolina Biological Supply stands out as a true innovation in the field of biotechnology education, making it a deserving contender for the Best of STEM 2024 in the category of Trailblazer: Biotechnology Innovator.” - Educator Judge, Best of STEM 2024

**Winner in CTE Champion: STEM, [BioTechBuilder](#)**

BioTechBuilder is a proven program that prepares students for careers in biotechnology by combining a comprehensive curriculum with industry-recognized certifications and hands-on learning. Designed by BioBuilder Educational Foundation in partnership with Carolina Biological Supply Company.

“BioTechBuilder has truly set a new standard in biotechnology education with its hands-on curriculum focused on skill-building, perfectly aligned with the needs of the biotech industry.” - Educator Judge, Best of STEM 2024

**Finalist in Best of STEM for Biology, [Exploring Selection with Wisconsin Fast Plants and Cotyledons](#)**

This lab kit utilizes an innovative approach to teaching complex biological concepts through hands-on experience. By utilizing Wisconsin Fast Plants, the kit provides a tangible way for students to observe and understand artificial selection, a process analogous to natural selection, which is a fundamental mechanism of evolution. This direct observation of selective pressure and trait prevalence offers an invaluable learning experience, bridging theoretical knowledge with practical application.

This year’s Best of STEM™ Awards saw numerous companies and educational organizations vie for awards in 34 categories. Each entry included a virtual interview and product demonstration before an educator judge. Winners in all categories can be seen at the Best of STEM™ Awards website, <https://www.bestofstemawards.com>.

**Carolina Biological Supply Company**

[carolina.com](http://carolina.com)

From its beginnings in 1927, Carolina ([www.carolina.com](http://www.carolina.com)) has grown to become one of the leading supplier of science teaching materials in the world. Headquartered in Burlington, NC, Carolina serves customers worldwide, including teachers, students, and professionals in science and health-related fields. The company is still privately owned by descendants of the founder, geology and biology professor Dr. Thomas E. Powell Jr.

**Best of STEM™ Awards**

[bestofstemawards.com](http://bestofstemawards.com)

These awards spotlight the innovative products, technologies, and services that are changing the world of STEM education. It is the only awards program created for and by teachers, and the winners are determined by specially selected STEM educator judges and by email from fellow educators.