

# 2023-2024 STEM Industry Briefing















### The CRS Mission

The mission of CRS is to empower teachers and STEM professionals serving schools in historically marginalized communities to activate TK-8 students' curiosity about the world, foster critical thinking, and inspire children to imagine future career pathways. We envision a community of educators, scientists, families and partners working together to build school cultures that equip all children to explore the world around them and build the skills needed to become innovators, problem solvers, environmental stewards, life-long learners and leaders. CRS leads a dynamic network, fostering relationships and collaborations that leverage expertise and resources to transform science teaching and learning toward greater equity, opportunity, and success for all students.

### **STEM Industry Partnerships**

**Our STEM industry partners are a vital part of this** dynamic network, providing CRS with essential funding and by giving back to their community through CRS' science outreach programming. Each year, STEM Industry professionals inspire thousands of students in East Bay schools each year to explore science and engineering, and help foster students' sense of belonging in STEM. Local STEM industry's contributions of time, expertise, and financial support help CRS provide teachers with science workshops and trainings, provide students with hands-on science materials, and make a direct impact on students to imagine their own pathways in STEM.

#### We prepare your team for success



### **How Partnerships Work**



### Expanding our Reach in 2023-24

STEM Industry Partners enabled CRS to broaden our impact for our TK-5 programming, including schools in San Leandro, Hayward, and Milpitas!



You guys are setting the example, you're giving them a pathway. For many of our students who are students of color and speak multiple languages, a career in STEM isn't something that we see happening. This is something they'll never forget. -Principal, San Leandro

**N** Community Resources for Science

#### Richmond 15 Schools/975 Students

Berkeley 8 Schools/400 Students

**Emeryville 1 School/25 Students** 

Oakland 18 Schools/1,600 Students

1 School/ 925 Students San Leandro

> Hayward 1 School/ 350 Students

> > 1 School/ 25 Students Milpitas



### 2023-2024 STEM Industry Highlights

The support CRS received from our STEM Industry Partners this school year made science learning more engaging, accessible, and inspiring to more than 4,500 students from Transitional Kindergarten to 8th grade. Each of these partners supported three of our main goals for students in all of our work: Activate Student Curiosity, Imagine Pathways in STEM, and Foster Student Belonging in STEM.

#### Imagining Pathways in STEM





19 Companies

#### 280+ STEM Professionals



Doing science outreach in the East Bay benefits myself and my team by allowing us to positively represent our company while also spreading our love for science and engineering. Personally, seeing the excitement in the students' eyes from a STEM activity reminded me of why I chose to pursue engineering.

### **Activating Curiosity**

170+ Lessons



**12 45** schools

-Jeff, Amyris



### Fostering Belonging through Science Stories

Storytime with a Scientist is CRS' newest program for students from Transitional Kindergarten to 2nd grade. STEM mentors read stories of curious characters discovering their love of science, and lead the class in a science exploration.





With the support of our partners from Amyris, Bio-Rad, The Clorox Company, Gilead, Grifols, and TranSystems, more than 1,000 students had the opportunity to engage with science stories, make connections with local scientists and engineers, and explore the science of chromatography and engineering behind stormwater drains.





The book was highly engaging, but the hands-on chromatography was FANTASTIC! The kids loved it and many of them tried it again at home. -1st Grade Teacher, Berkeley













**Cytokinetics** 

Welcome to these new industry partners who began volunteering with us this school year to bring science and engineering materials and explorations to students!

BURNS

# TR/NSYSTEMS

#### ••• GILEAD Creating Possible



I'm inspired by the group of kids. They're our futures. It's beautiful to see such bright minds. -Port of Oakland Employee



**Community Resources for Science** 

The students were so engaging and so smart. I love to see children that age wanting to learn. I'm grateful for this opportunity, thank you! -Port of Oakland Employee





Led 28 Storytime with a Scientist lessons for students in Emeryville, Oakland, San Leandro, and West Contra Costa, exploring the chromatography of coloring markers.



650+ Students Reached Provided support to expand the Reverse Science Fair Program to every 8th grade class in the Berkeley Unified School District. Scientists led presentations on their research, introducing students to innovative solutions in STEM.

#### 700+ Students Reached

#### 750+ Students Reached

Port of Oakland

Led a Day of Science in San Leandro, exploring science concepts in flying paper planes, observational sketching, and building aluminum boats!

#### **950+ Students Reached**

Led 2 Days of Science in Hayward and Oakland, teaching students the physics behind building simple circuits and balloon cars, and engineering with solar cars.











It's very exciting to be a STEM role model and hopefully inspire many of these kids to consider a career in the STEM field in the future. -Patrick, Health Advances



Led 2 Storytime with a Scientist lessons for students in San Leandro, exploring the chromatography of coloring markers, and taught 2 summer school science sessions.

GRIFOLS

Led 5 Storytime with a Scientist lessons in Berkeley and Oakland encouraging students to be curious like Ada Twist, and explored the chromatography of coloring markers.

# amyris

Led 6 Storytime with a Scientist lessons in Oakland and Berkeley, with explorations in the chromatography of coloring markers and the engineering of stormwater drains.

**Advances** strawberry DNA.

#### 100 +C The Clorox Company **Students Reached**

## **125+ Students Reached**

### **150+ Students Reached**

#### **350+ Students Reached**

Led a Day of Science in Oakland, exploring engineering with paper towers and toothpick constructions and the biology of







As a woman of color, being a STEM role model in the classroom is especially meaningful to me to be able to be the representation that I was always searching for while I grew up. I want to show all students that everyone is a scientist, they just don't know it yet. Being able to point out their scientific thinking (curiosity, questioning, experimental design, testing) and having students identify as a scientist is ultimately my goal.

-Eva, EBMUD

Led 1 Storytime with a Scientist lesson in San Leandro, exploring the engineering of stormwater drains, and 1 BASIS lesson in Berkeley exploring the engineering of catapults.



Led 2 BASIS lessons in Oakland exploring the physics of light and forming simple circuits.



#### **125+ Students Reached**

Led a Science Ambassador series in West **Contra Costa, sharing research with students** and supporting them in their first scientific presentations.

#### **50+ Students Reached**

Led 2 BASIS lessons in Berkeley, exploring the biology and engineering behind designing robots and robot intelligence.

## TRANSYSTEMS 50+ Students Reached

#### SpikeGadgets 50+ Students Reached













It really went so smoothly! The volunteers were completely prepared, they gave great explanations of the science, and they did a great job engaging the kids. I was so pleased with how it went, and so grateful to the volunteers and this amazing organization. The kids had so much fun, and learned a lot. -5th Grade Teacher, Berkeley

**Cytokinetics** 

Led 2 BASIS lessons in Berkeley, exploring the scientific process and engineering behind designing a pill coating.

LEAD **Creating Possible** Led 1 Storytime with a Scientist lesson in Oakland, encouraging students to be curious like Ada Twist, and explored the chromatography of coloring markers.

Led a BASIS lesson in Berkeley, exploring the CTP different forms of renewable energy and connections between fossil fuels and climate change.

ngmbio

Led and redesigned BASIS lessons in Berkeley about viruses, vaccines and the immune system.

#### **50+ Students Reached**

#### **50+ Students Reached**

#### **25+ Students Reached**

#### **25+ Students Reached**





Community Resources Science Thank You!



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