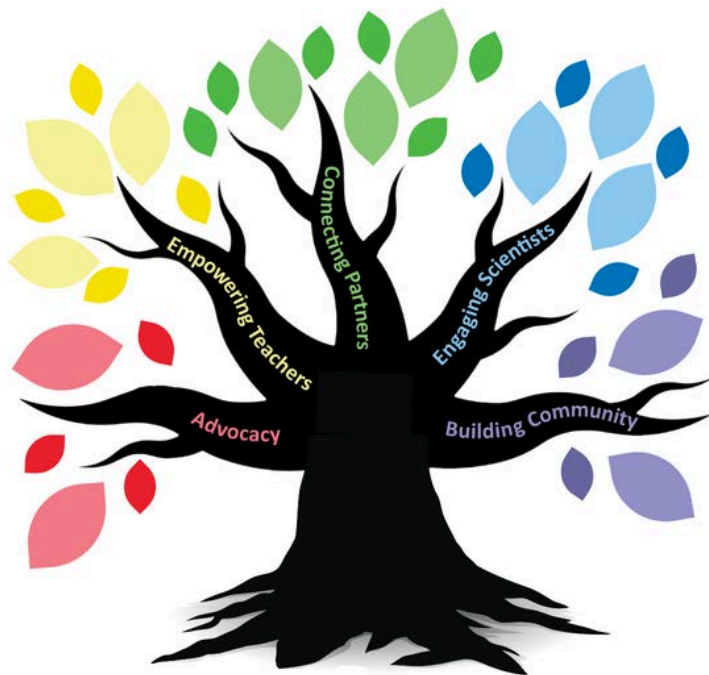


2024 Annual Report

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This tree image serves as a visual representation of our strategic priorities.

"You can't even begin to imagine the impact that CRS has in my classroom here in East Oakland. Without their support, we wouldn't have all the extra resources and scientist visitors for our more than 600 students to explore science."

-OUSD Science Specialist

Our Mission and Vision

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 has encouraged me to do more science in the classroom, but also made me realize how much science we already do. I LOVE teaching science in Spanish and English! Seeing the excitement in my students is the best part."

-1st grade Teacher, Berkeley

Our Core Values



Equity & Access



Representation



Inspiration



Curiosity



Collaboration



Partnership



Letter from CRS Leadership

Illuminate. To shine a light, to explain, to show the way.

Illumination has been our lodestar throughout 2024, as the Community Resources for Science team helped thousands of teachers and scientists to shine new light into the mysteries of how our natural world works, and to highlight pathways into STEM fields that promise bright futures for children in elementary and middle schools in our community.

This Annual Report includes extensive details that illustrate the many ways we've empowered nearly 2,000 teachers to confidently lead lessons exploring phenomena from puddles on schoolyards, to solar energy, to bioengineering and much more. We've prepared and deployed more than 1,000 local scientists

and engineers who have brought exploration and discovery directly into classrooms as STEM mentors and role models, engaging more than 16,000 children. Informed by data, propelled by a sense of urgency for action, and driven to expand opportunity and inspiration, we take heart in the letters that students and educators send us, with stories of how our work has touched their lives.

For example, we trained a UC Berkeley team called Community Catalysts, and provided support for a day-long science festival reaching hundreds of Oakland school children. This recent thank you letter from a teacher illustrates our impact.

Dear Community Resources for Science and Community Catalysts,

On behalf of the Carl B. Munck Elementary School community, I want to extend our heartfelt gratitude for your time, effort, and dedication in bringing the wonders of science to our students. Your visit was not just an event but an unforgettable experience that has left a lasting impression.

The students were truly in awe of your engaging demonstrations and interactive activities. Their wide-eyed curiosity, laughs and excited questions spoke volumes about how inspired they felt. You succeeded in sparking their imaginations and showing them the limitless possibilities that curiosity and learning can bring.

It is organizations like Community Resources for Science, and scientist teams like Community Catalysts, that make a meaningful difference in education. By bridging the gap between students and real world applications of Science, you have ignited a passion that will resonate far beyond the classroom. We deeply appreciate your commitment to empowering young minds and fostering a love for science in our school community.

Thank you once again for your enthusiasm and dedication to our students, and partnering to inspire the next generation of thinkers, creators, and innovators.

—Ami Stair, Elementary Teacher

We look forward to new opportunities in the coming year to illuminate science and Ignite children's joy in making meaning about their world.



Anne Baranger
Board President



Teresa Barnett
Executive Director

2024 at a Glance



January

The CRS team begins the year by fielding requests from teachers requesting support in planning and putting on special science events throughout the Spring. From science fair judges, to Family STEM Night activities, to Climate Fair planning, teachers are dreaming up myriad ways to engage their students and school communities in science explorations. We begin preparing for an action packed semester!

February

Storytime with a Scientist, the newest program for grades TK-2, blossomed this calendar year, with hundreds of the youngest learners getting to meet real-world scientists! Pairing stories that feature diverse STEM protagonists and hands-on experiments, students engage with curiosity and wonder to explore the science of chromatography, engineering and more.



March

The Bay Area Climate Literacy Exchange brought together more than 100 educators, teacher leaders, district administrators and partners to share best practices in adopting climate literacy and environmental justice policies.

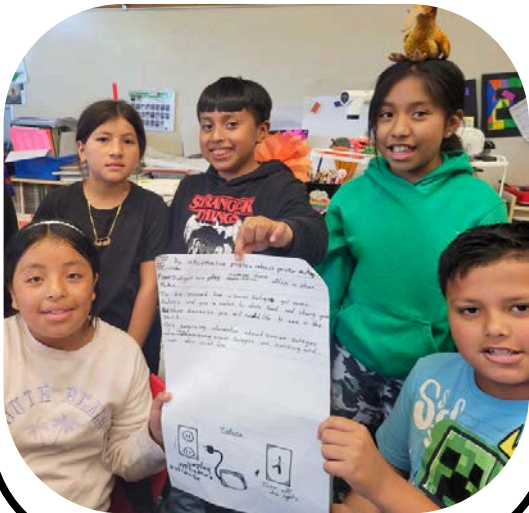
CRS worked in collaboration with partners such as StopWaste, Chabot Space and Science, and local teacher leaders to plan an event for teaching about climate change and environmental justice for every grade.

2024 at a Glance

April

More than a dozen teachers from across California field-tested a new curriculum unit for 4th graders to explore the connections between climate change, power outages, and building energy resilience.

Developed by CRS in partnership with OTACA, the lessons are part of a statewide K-12 curriculum project called Seeds to Solutions that will be available in Spring 2025.



May

STEM role models with Health Advances led the final private industry Day of Science of the academic year for more than 350 Oakland Unified students! Students from Kindergarten through 2nd grade had fun during a science-filled morning meeting scientists, learning about bubbles, and building towers.

June

20 teachers joined the Joyful Math and Science summer workshop to learn how to coach their peers on combining science and math into joyful learning experiences. The Peer Coaches developed their own workshop to meet the needs of teachers in their school districts.

Throughout the school year, the Peer Coaches will train more than 100 teachers, impacting science learning for 3,000 students!



2024 at a Glance



July

More than 50 K-12 East Bay teachers attended two week-long Climate Justice Workshop Series, investigating local air quality and environmental justice topics. Teachers designed climate science learning experiences using data and mapping tools to implement in the 2024-2025 school year.

August

Oakland teachers took part in a series of professional development sessions to prepare for a new school year of excellent science teaching and learning. Teachers mapped out their own science and math belonging stories and learned how to help students begin to tell their own climate change stories, bringing data, role models, and explorations to their classrooms.



September

Berkeley 7th graders started the first Be a Scientist session of the school year! With help from their UC Berkeley mentors, students designed and conducted their own experiments. Students designed investigations to assess consumer products, test factors impacting color vision, engineering solar ovens, comparing mold growth, germinating seeds, and much more.



2024 at a Glance



October

Leaders in biotech, data, AI and STEM outreach joined UC Berkeley graduate and postdoc researchers in discussing the role that science communication plays across STEM fields in academia and industry. Dozens of UC Berkeley students and professionals mingled over breakfast and explored one another's various career pathways and research innovations, and left with inspiring connections.

November

Greeted like rock stars, new and returning STEM industry outreach teams brought their expertise and enthusiasm directly into elementary classrooms. A new team from Airmyne successfully piloted a new climate literacy lesson, engaging 4th and 5th graders learning about carbon dioxide and clean air. While a returning team of HVAC engineers led students in learning about electromagnetic motors and how they work.



December

More than 250 8th grade students in Berkeley met with a dozen local scientists and engineers during the Reverse Science Fair, where students had the opportunity to get a glimpse of a typical day in the life of a researcher looks.

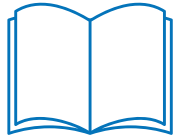
Researchers from astronomy, engineering, biology, and more shared what led them to pursue STEM careers, how they selected hypotheses, and what answers they hope to discover in the future.

Addressing the National Need for Strengthening STEM Education

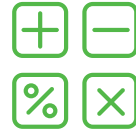
The need for students to feel a sense of belonging in science and engineering at the elementary level is more evident than ever. Nationally, K-3 teachers spend about:



minutes daily on reading instruction



minutes daily on math instruction



minutes daily on science instruction

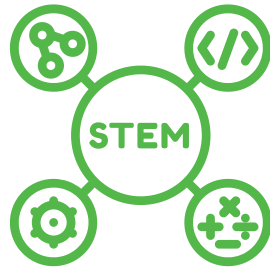


National Science Teachers Association and others recommend 60 minutes per day in elementary grades.

Research indicates that the deprioritization of science can be counterproductive. Studies show students perform better on math and reading tests when they have a broad range of general knowledge, including science and social studies, to draw upon.

The CRS Response to the STEM Learning Opportunity Gap

Supporting teachers to increase time for science & build students' STEM identities



Introduce students to a variety of STEM career paths



Providing STEM role models and mentors & STEM learning opportunities

In Spring 2024, CRS teacher members indicated CRS support had these impacts on student learning:

95%
Connected science lessons with their lives and the world

95%
Discussed their own observations and ideas

94%
are highly engaged in science and engineering lessons

97%
Grew more interested in science

Taking Action to Close STEM Opportunity Gaps

A recent analysis from the Beyond100K national organization explored the primary challenges that today's teachers face in providing foundational STEM experiences. The results showed that, "Elementary teachers often have not had the opportunity to develop their own STEM identity...or belonging in STEM in their own educational experiences."

The Problem



STEM jobs are on pace to grow at twice the rate of non-STEM jobs through 2032.



People of color make up 27% of the American workforce, but 11% of the STEM workforce.



1/3rd of California 5th graders test proficient in science. Only 1/5th of students from underrepresented groups.

Our Strategies for Transforming STEM Opportunities

Empower & support teachers to effectively lead high quality, authentic learning



Engage STEM professionals as role models and mentors who bring the message "You belong!"

Embed literacy and math in science because curiosity fuels deep learning and critical thinking



Build connections with partners to expand reach and amplify impact

CRS Helps Support Growing STEM Identities in 2024

In contrast to the statewide trends, teachers active in our network are working to effectively teach more science.

Nurturing a dynamic network connecting **2,000** educators with **200+** partner organizations, impacting learning for **45,000** TK-8 students

Engaging **400+** educators in **60+** professional learning workshop & collaboration sessions

Mobilizing and placing **1,000+** STEM professionals to lead lessons and serve as mentors, reaching **16,000+** students

Empowering Teachers

Our Strategic Approach

Well-supported teachers can pave pathways for equity and opportunity for their young learners. But their needs are not all the same. CRS provides customized support to meet the unique needs of each teacher, school and district we serve. Our innovative and evidence-based approach empowers educators to strengthen science teaching and learning. From timely information bulletins, to in-class scientist visits, to curated professional development, we offer teachers opportunities to collaborate, explore, and rekindle their own excitement about the process of science.

In 2024, CRS' efforts focused on providing training and lesson resources on climate change and sustainability, cultivating a science culture in school communities, and bringing joyful math and science learning experiences to life for students. More than 400 educators took part in professional learning, ranging from one-time workshops to year-long collaborations, building strong connections between lesson topics and students' own lived experiences.

"Sometimes teachers can get stuck in a rut with everyday routines. A Scientist Ambassador is truly a special event not only for students but teachers too. They remind us how students are eager and excited about learning Science. Students are animated and eager; even the shy language learners are involved in every step!"

-2nd grade teacher, West Contra Costa



Joyful Math and Science Elementary Peer Coach with their first cohort of teachers trained.

Our Action Highlights

- **Joyful Math and Science** – CRS expanded the cohort of Peer Coaches that successfully trained and assisted teachers eager to begin integrating math and science into hands-on lessons for their students.
- **Champions of Discovery** – 34 educators and nearly 1,000 students earned recognitions for excellence by completing monthly challenges, such as: exploring science phenomena, conducting science outdoors, collecting data, and meeting science role models.
- **Climate Institutes** – Gathered 50 teachers from 5 school districts to learn mapping and data tools to design science explorations centered on local air quality and extreme precipitation issues.
- **Catalysts for Science** – CRS convened a cohort of teachers to serve as catalysts for science at their schools, deepening the connection of CRS support.
- **School-Wide PDs** – Over the course of 2024, CRS provided customized professional development in Oakland, Berkeley, and San Leandro. From one-time workshops to monthly professional learning collaborations, teachers dove into best practices on bringing a sense of belonging and action to climate literacy lessons through storytelling, experiments, and more.

Engaging STEM Professionals

Our Strategic Approach

Scientists, engineers, and others working in STEM fields are powerful partners for teachers and inspirational role models for children. CRS provides the training and logistical support STEM professionals from university and industry need in order to be effective, and to fit outreach in their demanding professional lives.

Through our various TK-8 in-class programs, Bay Area Scientists Inspiring Students and Storytime with Scientist, and school wide Days of Science STEM events, professionals share about their own research and career pathways, dispel stereotypes, and lead students and teachers to experience joyful science moments that have lasting impact.

In 2024, CRS mobilized more than 1,000 scientists, engineers and other STEM professionals to share their stories and expertise with more than 16,000 elementary and middle school students. They led authentic hands-on investigations that connect with students' interests, and inspire students to imagine their own pathways in STEM.

"The students loved having [a scientist] come in to talk to them about being a scientist."

"I think the kids were most shocked when they showed them pictures of scientists who looked like normal people. Most of the students had a cartoon mad scientist vision of what a scientist looks like and this was so important for them to see that a scientist can be anyone!"

-BASIS Volunteer



UC Berkeley scientist answering questions about germs with students.

Our Action Highlights

- **Days of Science Events** – UC Berkeley undergrads and Private industry partners inspired thousands of East Bay K-5 students, leading explorations on circuit building, observational sketching, biological adaptation and more.
- **Be a Scientist** – Brought 145 UC Berkeley STEM mentors into every 7th grade science class for a 6-week program in Berkeley, reaching 700 students as they each designed and conducted their own self selected scientific investigation.
- **BASIS Elementary Lessons** – UC Berkeley and Private Industry teams brought joyful science explorations to more than 550 TK-5 classrooms, supporting them to see how physics, biology, engineering, chemistry, and climate science connect with their daily lives.
- **Storytime with a Scientist** – Outreach teams from STEM industry reached 60 TK-2nd grade classrooms with Storytime with a Scientist lessons, reaching more than 1,500 children.
- **School festivals, Kits Cubed, Cal Day** – CRS teamed up to present activity tables for kids and families for Cal Day, Kits Cubed, Scientific Adventures for Girls, and more public events reaching thousands of children and families. Scientist judges and presenters to fairs and festivals provided opportunities for caregivers to see how excited their children are about science.

Connecting Partners, Building Community, & Advocacy

Our Strategic Approach

At the classroom and community level, CRS ensures teachers know about the wide range of offerings from science centers and environmental education partners, and that science educational partners know about teachers' needs so that they can provide effective programming. From lessons and field trips, to grants and professional development, we keep teachers up to date and help our partners highlight new and powerful learning supports and experiences.

CRS convenes partners from science education organizations, museums, outdoor education programs, STEM industry, public agencies, parks, University, and regional and national networks. Together we build capacity to meet the needs of educators, document impact on students, and offer discovery and inspiration opportunities.



Students experimenting with slime at the 2024 Kits Cubed Science Festival.

"OTACA creates a space for teachers to learn, collaborate and thereby compound climate action work that informs, empowers and inspires youth to engage in activism towards more harmony between Humanity and Nature."

-Oakland Teacher, reflecting on their experience with Oakland Teachers Advancing Climate Action (OTACA) collaborative

Our Action Highlights

- **Climate Change and Environmental Justice** – Collaborating with writing teams, educators, and organizations across California in the statewide CCEJP project, CRS completed a new 4th grade curriculum unit on the connections between climate change, power outages and building energy resilience in communities. Our unit, and the full K-12 Seeds to Solutions curriculum, will be publicly available in Spring 2025.
- **CRS Advisory Council**– Educators from the Bay Area's science institutions gathered to share what they're changing, learning, and designing for their program offerings, such as the influence of AI in education.
- **Amplifying Impact** – Conference and convening presentations this year included CRS led **You Belong in STEM** session at the US Department of Education's "You Belong in STEM" initiative; **Joyful Elementary Math & Science that fosters Belonging**, at the national Beyond100K Summit; and **Integrating Elementary Math & Science** at the California Association of Science Educators.
- **Climate Literacy** – Support for convenings of educators, high school students, and partners to explore effective strategies for implementing district climate literacy policies, including support for OTACA (Oakland Teachers Advancing Climate Action).
- **Illuminate STEM Networking Breakfast** – CRS convened industry professionals and UC researchers from across science, biotech, data, AI and engineering fields to discuss the critical role of effective science communication skills in STEM career pathways.

Advisory Council

Betsy Mitchell, Chair

Berkeley Natural History Museums

Denise Abersold

Ellerhorst Elementary School

Sal Alper

Exploratorium

Naomi Asimow

PhD Candidate, UC Berkeley

Leena Bakshi

STEM4REAL

Robert Bergman

UC Berkeley, Chemistry, *Retired*

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PD and Curriculum Specialist

Nancy Blachman

MathDelights

Molly Campbell

Exploratorium

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OUSD Math and Science Coach

Tracy Dordell

Highland Community School, OUSD

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Helen Fitzmaurice

Postdoc, UC Berkeley; OTACA

Tanner Frank

PhD Candidate, UC Berkeley



Roma Groves-Waters

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BSCS Science Learning

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PD Specialist

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Bay Area Science Project

Bruce Simon

CSUEB Institute for STEM Education

Kayli Stowe

PhD Candidate, UC Berkeley

Joanna Totino

Bay Area Science Project, *Retired*

Almetria Vaba

KQED

Diana Velez

The Lawrence

Lisa White

UC Museum of Paleontology

Nancy Wright

Hayward Unified School District

Thank you to these individuals who served on our Advisory Council at some point in 2024.

CRS Team & Leadership

Staff

Teresa Barnett, CRS Executive Director
Corinn Brown, Director, Data & Teacher Services
Tyler Chuck, Associate Director, Education Outreach
Maybelle Miranda, Associate Director, Professional Development
Adriana Threlkeld, Communications Manager
Kobe Nguyen, Program Manager, Outreach
Darlene Yan, Program Manager, Be A Scientist
Betsy Mitchell, Project Coordinator, Be A Scientist
Georgia Tan, Data and Digital Project Assistant
Anna McGaraghan, STEM Industry Partnerships Coordinator
Eric Havel, Professional Development
Kayli Stowe, UCB Campus Coordinator
Naomi Asimow, UCB Campus Coordinator



CRS Staff

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Sonya Heisters, Education Consultant
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Co-founder,
Community Resources for Science,
Exploratorium, (*Retired*)
Susan Kattchee
Assistant Director of Facilities & Environment,
City of Oakland, (*Retired*)
Nicki Norman
Co-founder, Community Resources for Science
Diana Vélez
Professional Development Specialist,
The Lawrence, FOSS

"CRS really is in the teacher's corner!...What I love about working with CRS is how accommodating they are towards teachers and how frequently they ask us simple, open ended questions like "What do you need support with?" They really do want to bring science into the classroom and their approach of relentlessly investigating the barriers and then collaborating with teachers to remove those barriers is certainly paying off!"

-1st grade Teacher, Berkeley

2024 Financials

Statement of Financial Position Dec 31st, 2024

Assets

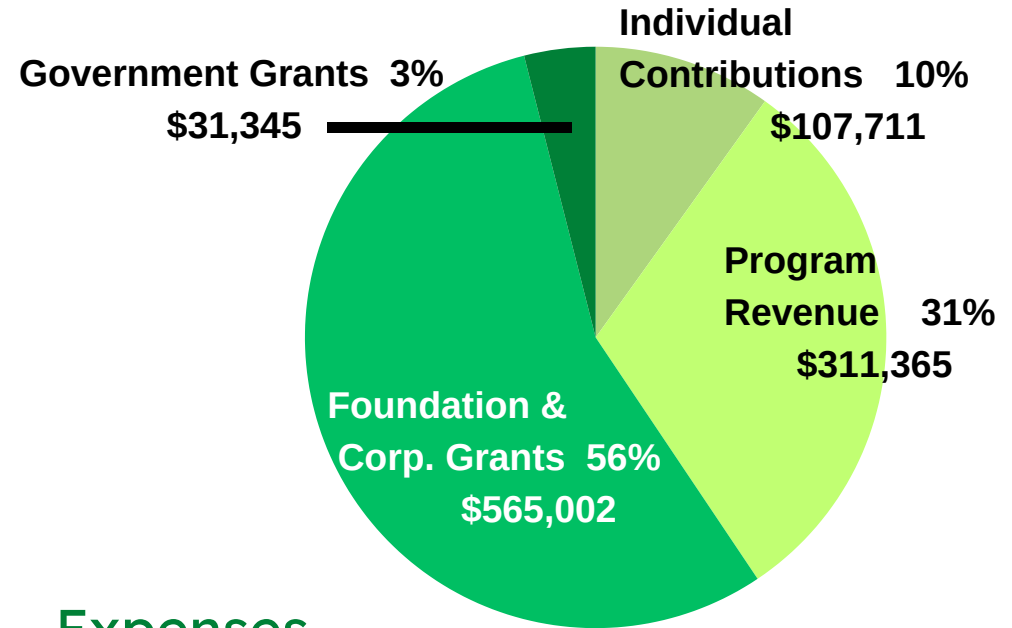
Cash & Cash Equivalents	\$577,843
Prepaid expenses and Deposits	\$8,431
TOTAL ASSETS	\$586,274

Liabilities and Net Assets

Accounts Payable and Accrued Expenses	\$20,993
Accrued Vacation	\$70,452
Total Liabilities	\$91,445
Net Assets	\$494,829
Total Net Assets	\$494,829
TOTAL LIABILITIES & ASSETS	\$586,274

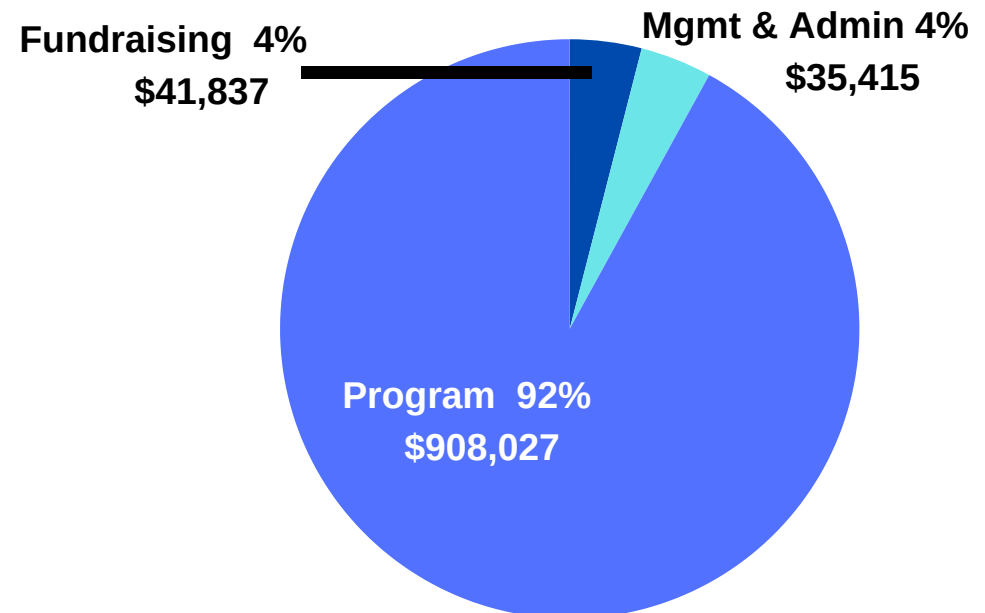
Support and Revenue

TOTAL \$1,015,423



Expenses

TOTAL \$985,279



Our Generous Sponsors and Funders

Thank you to Foundation partners for grant support this year.

Associated Students University of California
Bernard E. & Alba Witkin Charitable Foundation
Beyond100K
Chamberlin Education Foundation
Dean and Margaret Leshar Foundation
Impact100 East Bay
In Dulci Jubilo

Joseph and Mercedes McMicking Foundation
The Barrios Trust
The Crescent Porter Hale Foundation
The Lowell Berry Foundation
The Arthur Rock and Toni Rembe Rock Fund
Nancy P. and Richard K. Robbins Foundation
UC Berkeley Chancellor's Community Partnership Fund

Thank you to these Corporate Foundations,
Industry, and Public Agency Sponsors!



Our Generous Community 2024 Employee Engagement

Thank you to these STEM industry partners and associations whose employees engaged in outreach with CRS and/or participated in community service projects in support of CRS science education programs this year.



Thank you to employee groups at the following companies who directed contributions to CRS:
The Clorox Company Employees
Genentech Employees
Google Employees
Synopsys Employees
Turner Construction Employees

Thank you to these partners for in-kind contributions in 2024:
Bellwether Media
EBMUD
Hands On Bay Area
Holiday House
Nomad Press
Science is Elementary
Science Naturally