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Mission

The mission of Girls 4 Science is to enrich the lives of girls through early exposure to the study of science, technology, engineering and math (STEM) and women of color practicing in STEM fields; handson problem-based learning and mentorship for careers in STEM.

Vision

Girls 4 Science endeavors to create a sustainable pipeline of women of color in STEM careers.

Letter from the **Executive Director**

Dear Friends, Supporters, and Partners,

As we reflect on our 15th year anniversary at Girls 4 Science, I am filled with immense pride and gratitude. Our mission—to empower young women through science, technology, engineering, and mathematics (STEM)—has continued to thrive, thanks to the dedication of our students, mentors, volunteers, and supporters like you.

This year, we welcomed new students into our programs and deepened our impact in communities where access to STEM education is often limited. Through hands-on learning experiences, mentorship, and exposure to groundbreaking scientific fields, we are not only shaping future scientists and engineers but also instilling confidence and curiosity in the next generation of leaders.

None of this would be possible without your unwavering support. Whether through your generous donations, volunteer efforts, or advocacy for our mission, you are helping to break barriers and create pathways for young women in STEM.

Thank you for being a part of this journey. Together, we are building a future where young women are empowered to innovate, lead, and make a lasting impact on the world.

With gratitude,

Jackie Lomax **Executive Director**

2024 by the Numbers

Girls 4 Science fulfills its mission through its Saturday STEM Academy, which provides hands-on experiential learning and mentorship in STEM for girls aged 10-18 years of age from Chicago and its surrounding communities. The Saturday STEM Academy's innovative program model is based on evidence that science exposure and increased science literacy will equip young girls with the knowledge and confidence needed to pursue study in the sciences and careers in STEM.



Ethnicities Represented at Saturday STEM Academy

Black or African American: 250 64.27%

Attendance

Winter Spring $\mathcal{C}\mathcal{O}\mathcal{O}$ Summer N. Fall





STEM Academy



2024 Saturday **STEM** Academy

Winter Session **Food Chemistry**

January 20 – February 24

Food plays a vital role in our lives, and there are many professionals who ensure its safety for consumers. G4S partnered with Ingredion Incorporated to teach our participants about STEM food manufacturing and chemistry.





G4S Alum and Volunteer Mentol Brooklyn Payne provides instruction on proper plating of a petri dish.

GIRLS SICHENCE

G4S field trip to JJC City Center Campus







Itzel Gonzalez (8th grade) reviews microgrid worksheet at Joliet Junior College location.





Christina Smith (11th grade, CHAS) helps restore bird habitat.

Spring Session

Environmental Science

April 13 – May 18

Working alongside Comed, our spring session focused on Solar Power and its role in our lives. The girls learned about the microgrid and built solar rovers.

Summer Session Manufacturing

July 6 – August 10

Over the summer, we explored topics in Manufacturing with Cedar Concepts Corporation. The participants manufactured their own hand soap using surfactants and learned about local manufacturing companies in Chicago.







Students at Malcolm X location create their own cucumber pickles



Monique Puckett, Jen Roberts and G4S JJC students at Morton Arboretum field trip

transferration - Property Ph

Fall Session Horticulture

October 5 – November 9

We teamed up with Morton Arborteum to teach and learn about the cycle and season of plants. During the class session, we dissected beans and created our own cucumber pickles and edible plant cells.

Kandake Rashid (10th grade, left) and Ifeni Akinbusuyi (7th grade,right) build a solar circuit at the Chicago High School for Agricultural Sciences location.

GRLS - SC EN

10

Student Recognition & Awards Ceremony

August 10, 2024

Girls 4 Science alum Kennedy Smith, currently a student at Howard University with a double major in biology and chemistry, was the featured speaker at the Student Awards and Recognition Ceremony held August 10 at Olive white coats, and seven high school seniors Harvey City College of Chicago. Kennedy's message focused on "Empowerment and STEM Achievement."

Girls 4 Science students, families, volunteers and staff gathered to see current students receive their Certificates of Participation, the 2024-2025 Lab Assistants received their each received a \$1,000 Linda McGill-Boasmond scholarship, funded by Cedar **Concepts Corporation.**









Alan Brazil, Kaylen Irving





High School Lab Assistants

In 2022, Girls 4 Science launched its Lab Assistant program for high school students. Volunteer Lab Assistants attend the Staff and Volunteer Training each quarter, participate on monthly Program Committee planning calls, offer feedback to the team related to student input, serve as a Lab Assistant Ambassador at Girls 4 Science outreach events, and assist the Program Coordinators during class with activities and on field trips. The 2024-2025 High School Lab Assistants were recognized at the Student Recognition and Awards program on August 5.

Assistants



Amaris Koroma JJC location



Malcolm X location



Harper DeVries

Camille Pickett CHAS location

Girls 4 Science Alumnae

On Sunday, July 14, Girls 4 Science hosted a social gathering for alumnae and high school students at Americanos Restaurant. Guests used conversation cards to reintroduce themselves to each other. The meet and greet event offered the group peer support as they navigate posthigh school opportunities. Guests were invited to join the G4S Alumni Association and act as ambassadors to spread the word about the Saturday STEM Academy and serve as STEM speakers during the program.

Girls 4 Science high school students and alum at the July 14 social.

Women in STEM Fundraiser **Hilton Contemporary Gallery in Bridgeport** Oct 9, 2024

INTRODUCTION

PURPOSE

MATERIALS

At this year's Women in STEM Fundraiser, we honored Linda McGill-Boasmond, owner and President of Cedar Concepts Corporation and founding Board Chair of Girls 4 Science.

Cedar Concepts Corporation is the first and only African-American womanowned chemical company in the United States. Linda McGill-Boasmond served as the second female and first Black Chair in the history of the Illinois Manufacturers' Association and is a passionate advocate for engaging girls in STEM programs. Linda is also a longtime contributor to Girls 4 Science and funds the Boasmond Scholarships.

Venue & Event Sponsors HILTON CONTEMPORARY

RESEARCH

Joseph & Bessie Feinberg Foundation

BOCEDUR

RESULTS

- All

CONCLUSION

Kandake Rashid (left), 10th Grade Chicago <u>HS for</u> Agricultural Sciences Afua Rashid (right), 12th Grade Chicago HS for Agricultural Sciences Project: Solar Charger



2024 Linda McGill-Boasmond **Scholarship Recipients**



Alesandra Dambrauskas Joliet Junior College Nursing



Addison Denman Olive Harvey College Education



Sydney **Edwards** North Carolina A&T University Music Education





da McGill Boasmond







Symone Edwards Loyola University Chicago Forensic Science

Kamryn Gibson Ball State University

Kaylen Irvin Purdue University

Kulsoom Jafferi DePaul University

GIRDS – Scherberger on the transfer of the tra

Field Trip to Revolution Workshop

On August 3, we took a field trip to Revolution Workshop, a nonprofit social enterprise that provides construction workforce development for unemployed or underemployed people in partnership with area businesses. The girls learned the function of different tools through presentations and demonstrations by staff and women alum of Revolution Workshop and designed a jewelry box. There was also a panel discussion on Women in Construction followed by a Q & A.

SCOENCE.C girls4science.c





Field Trip to Feed My Starving Children

On July 20th, our students took a field trip to Aurora, IL to visit Feed My Starving Children, a nonprofit organization that provides nutritious meals to children in need around the world. G4S students, volunteers, and staff learned first-hand how volunteers measure and hand-pack rice, soy, dried vegetables and a nutritionally complete blend of vitamins and minerals into bags, which are then sealed, boxed, placed on pallets and shipped to Feed Our Starving Children partners around the world.

Lab with UL Solutions

On July 27, Girls 4 Science participants learned about UL Solutions a global safety science leader that helps companies demonstrate safety, enhance sustainability, strengthen security, deliver quality, manage risk and achieve regulatory compliance - including how UL Solutions Product Sustainability teams help manufacturers and brands with their sustainability goals, different methods to divert the amount of waste sent to landfills, and how to design a waste diversion plan for home or classroom.

TUSKEGEE UNIVERSITY

CLEMSON

CHAS location group photo with UL Solutions' Hannah Harrison and Della Lindsay.





Hannah Wood speaks to Christina Smith about her summer recycling job.



Diamond Franklin and Della Lindsay review waste diversion worksheet.



For the Youth By the Youth 2nd **Annual Back to School Bash**

Girls 4 Science hosted an outreach table at the For the Youth By the Youth 2nd Annual Back to School Bash at Nat King Cole Park on Saturday, August 24. Approximately 300 families attended the event. G4S featured promotional information on the Fall Saturday STEM Academy session on Horticulture and a Hydroponics Kit planted with onions and coleus. DIY bird houses were offered as an incentive to families who registered for the Fall Saturday STEM Academy onsite.





Girls Create with Technology Summer Camp

The Girls Create with Technology camp took place June 24-27 at Lewis University. The event engaged 25 middle and high school girls in computer science and STEM activities through a four-day summer camp. Participants learned the basics of coding and robotics and participated in activities in the Thomas "Fly Guy" Likens Virtual Reality Lab. On the last two days of camp, participants worked in teams to program robots that they built with arts and crafts supplies and a computer control board using a block language and JavaScript.





Why **STEM?**

In an ever-changing, increasingly complex world, it is more important than ever that youth are prepared to bring knowledge and skills to solve problems, make sense of information, to make decisions. These are the kinds of skills that students develop in science, technology, engineering, and math—disciplines collectively function as an informed consumer and citizen known as STEM. Science, technology, engineering, and mathematics have always been the foundation for inspirational discovery and transformative technological innovation. STEM education helps students gain the skills required to succeed in today's challenging world, including the ability to think critically and solve complex problems along with soft skills such as cooperation and adaptability.

"STEM education creates critical thinkers, increases science literacy, and enables the next generation of innovators."

STEM education creates critical thinkers, increases science literacy, and enables the next generation of innovators.

and know how to gather and evaluate evidence STEM literacy and STEM skills are increasingly important for all people to succeed in the workplace and in their everyday lives. To simply in a world of increasingly sophisticated technology requires the ability to use digital devices and STEM skills such as evidencebased reasoning.

> STEM employment in the U.S. continues to grow at a faster pace than employment in other occupations, and STEM workers command higher wages than their non-STEM counterparts. STEM degree holders enjoy higher earnings, regardless of whether they work in STEM or non-STEM.

Why **Girls**?

Women comprise 50% of the American There are several measures that can help build population and more than 50% of the college-STEM identity and interest among girls -bound population, yet they remain especially girls of color -- including extraunderrepresented in the STEM fields, curricular and single-sex programs, Black and especially women of color. While nearly as female role models and project-based many women hold undergraduate degrees as instruction. Informal STEM experiences are men, they make up only about 30% of all STEM useful to girls, as they provide unique degree holders. opportunities to engage and connect with science in an inquiry-based manner without the academic requirements of memorization The gender gap in STEM begins with education. In childhood and adolescence, girls' and standardized testing. Such programs can interest in STEM is dampened by stereotypes have profound impacts on girls at the time and cultural norms that consistently portray when they are involved, and these impacts ideal scientists, engineers and technology relate directly to their confidence, attitudes, innovators as male. Girls participate in high and future plans.

level math and science courses at similar rates as males as they move into high school, and then a gender gap in participation starts as "These impacts relate girls take fewer of the more advanced STEM directly to their courses as they get closer to college. This gap widens the longer girls are in school and larger confidence, attitudes, gaps exist between students of different racial and future plans." and ethnic backgrounds or family income.



The Girls 4 Science Saturday STEM Academy's innovative program model is based on evidence that science exposure and increased science literacy will equip young girls with the knowledge and confidence needed to pursue study in the sciences and careers in STEM.

Early exposure to STEM fields, specifically in an all-girls environment with hands-on, problem-based learning, can combat the negative stereotypes and attitudes that contribute to the under-representation of women in many STEM fields. This is especially true for girls of color. That's why Girls 4 Science targets girls aged 10-18 years, primarily from low- and moderateincome communities. Increasing the opportunities for science exposure for girls will affect change in multiple areas including self-esteem, post-secondary study and increased employment opportunities.

"Early exposure to STEM fields can combat the negative stereotypes and attitudes that contribute to the under-representation of women in many STEM fields.

Why Girls 4 Science?

The Girls 4 Science Saturday STEM Academy employs strategies that have proven successful in increasing girls' interest in, positive attitudes toward, and identification with STEM. The evidence-based aspects of the program include:

- Single-sex program.
- confidence and collegiality.



• Science exploration through project-based instruction with emphasis on creativity, problem-solving, hands-on, small group experiential learning and teamwork, which fosters a growth mindset, self-

• Field trips to corporations, organizations, cultural institutions and other sites that provide opportunities to link the concepts learned in the STEM curriculum to real-world applications, and expose participants to a range of STEM industries, career options and working STEM professionals, especially women, to redefine how they see STEM.

• Mentorships to introduce participants to female role models -especially women of color -- who are professionals in STEM fields, to help girls see potential futures and develop resilient STEM identities.

Revenue

Foundations \$253.3K



Total \$344K

Individual

\$29.5K

Corporate

\$60.3K

Financials

General & Administration \$17K

> **Events** \$21.6K

Expenses







2024 Donors

Corporations & Foundations

\$50,000+

Belvedere Cares, Inc Joseph and Bessie Feinberg Foundation

\$25,000-\$49,999 Abbvie The Barack Obama Foundation Protolabs Foundation

\$15,000-\$24,999 Albert Pick Jr. Fund Ecolab Foundation Ingredion Charitable Foundation Old National Bank Foundation

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\$500-\$999

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Double Good Popcorn Fundraisers

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Ava Allen Kadence Baugh Lorelai Brown Serena Claiborne Kamryn Gibson Itzel Gonzalez Green Diamond Lauren Lomax Logan Lomax Raisan O'Connor Camille Pickett Gioia Puckett Afua and Kandake Rashid Alex and April Ray Keia Robinson

\$100-\$249

\$100-\$10

Leona Barnes Kadence Baugh **Kimberly Baugh** Yaqui Benson-Woods **Kristine Bounds** Sheree Claiborne John Cunningham-Elder Veera Datla **Ericka Doss** Paula Escamilla DuWarren Gibson Anna Green Sharon Israel **Jemille Jones** Susan Ferguson Amaris Koroma Mary Koroma Morgan Lechowicz **Guadalupe Marquez** Ksandra Marshall Intisar Muhammad Qahir Muhammad Yasmia Muhammad Jennifer Murphy Dorvel Offord Windy D. Patton-Rickmon **Monique Puckett** Kamau Rashid Aisha Ray **Kevin Robinson Michele Rogers** Nathaniel Schulz Lisa Snyder Lori Spielman **Charlene Venegas Jacqueline Williams**

Our Founder & **Executive Director**

Jackie Lomax

Nonprofit Contribution

Lomax has led Girls 4 Science for 15 years, developing hands-on programs, securing grants and partnerships, and advocating for girls ages 10 to 18.

Biggest Professional Win

In the past five years, Lomax celebrated Girls 4 Science's issuing of \$47,000 in scholarships, including its first \$1,000 scholarship to a high school senior, funded by Cedar Concepts.

Other Contributions

Lomax volunteers in the Roseland community, organizing school supply events and mentoring women re-entering the workforce, including providing resources for their job interviews.

THE ALBERT PICK, JR. FUND



AMGEN

COMCAST

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(BOEING



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